Annual Report

Two Thousand Nineteen

Flagstar®
Bancorp

To Our Shareholders

2019 was a banner year for Flagstar. We made $199 million, or $3.46 adjusted earnings per share.

Unadjusted, earnings came in at $218 million or $3.80 per share. Our performance made 2019 one of the most successful years in our company's history with all three of our business lines—banking, mortgage, and servicing—delivering earnings growth that surpassed results from 2018. Our shareholders saw the benefit with a 45 percent increase in our stock price, the best stock performance of any bank in the mid-size category in 2019.

$2.2	3rd	$23.3	5th
Billion in Market Capitalization	Largest Savings Bank Nationwide	Billion in Assets	Largest Bank Mortgage Originator

Our banking segment excelled throughout the year with warehouse lending, commercial real estate, and consumer lending alternately taking center stage. In total, we added $4.7 billion in high-quality earning assets to our balance sheet and closed 2019 as a $23.3 billion-dollar bank.

These assets, and the interest income they generate, have transformed Flagstar from a bank historically dependent on cyclical fee income from the mortgage business, to one where fee income and interest income are almost evenly matched—49 percent interest income versus 51 percent fee income in the fourth quarter 2019. This is a testament to our concerted efforts to build profitable, sustainable, diversified sources of revenue.

Deposit growth was strong in 2019, with average balances increasing $3.9 billion year over year, largely due to the full-year benefit of the 52 branches we acquired at the end of 2018 and the deposits generated by our subservicing business.

In mortgage, we saw our disciplined approach pay off as mortgage revenues climbed to $341 million in 2019 compared to $236 million in 2018. The investments we made in people and technology, together with acquisitions and strategic team lift-outs to grow our retail mortgage business, continue to reap benefits.

In servicing, we hit and surpassed the one-million mark in the number of loans we service, and we're off and running to the next million. This is a business that keeps growing—delivering steady fee income and providing low-cost deposits to support our growth. At the end of the year, we strengthened our standing in default servicing by bringing this important operation in-house, thus giving us full control over the life cycle of every loan.

In 2019 we saw a steady rise in noninterest expenses. Acquisition costs, investments in growing businesses, balance sheet clean-up, and discretionary expenses all played a role in the increase. We know we can do better and are committed to improving our efficiency ratio over time.

We closed 2019 with low delinquencies and ample capital to fund our growth and return some of our good fortune to our shareholders. Early in the year, we initiated a dividend program and announced a $50 million share repurchase program. A year later, we rewarded our shareholders with an increase in the dividend. This speaks volumes about the strength of our company, the diversity of our earnings, and the success of our business model.

Our Communities

In 2019, we continued our tradition of involvement and investment in our communities, contributing $2.5 million to nonprofits through the Flagstar Foundation, with a special focus on our new Midwest banking markets. To welcome them to the Flagstar family and signal our commitment to our new communities, we donated over $500,000 to support the good work of almost 100 nonprofits in these markets.

Our community reinvestment team had a productive year as it continued to dedicate resources to homeownership, small business development, neighborhood revitalization, down payment assistance, financial literacy, homebuyer education, and myriad other initiatives to help develop and stabilize communities. Besides our investment in dollars, our employees donated almost 12,900 hours of their time and talents in community service in 2019.

Top Workplaces Award
2017-2019 National and Local Best and Brightest Company to Work For

BISA Diversity & Inclusion Award 2019

Fannie Mae Star Performer Servicing Award
Fourth Consecutive Year

Diversity and Inclusion

We built on the successes of 2018 to further embed diversity and inclusion into our corporate culture. Specifically, we refined our metrics for D&I activities, expanded the number of awareness sessions, held our first D&I symposium, added new employee resource groups, and took other steps to make D&I part of daily life at Flagstar. In 2019, the Bank Insurance & Securities Association recognized Flagstar for its "outstanding leadership, innovation, and results in diversity management."

Our financial results in 2019 again demonstrated the strength of our business model to perform in any interest rate environment. The interest rate cuts in 2019 that put pressure on margins in banking created a favorable market for mortgages. Other years, the strength of our banking and servicing segments carried us through challenges in mortgage originations. Whatever the economic scenario, we have the levers to pull to deliver strong, consistent results to our shareholders.

In fact, with a stock repurchase, a dividend announcement, a dividend increase, and a 45 percent increase in our stock price, 2019 was in many ways the year of the shareholder at Flagstar. We thank our board of directors whose invaluable guidance and counsel has contributed so much to our success. We thank our shareholders for their patience and support as we built the new Flagstar. And we thank our employees who do the heavy lifting every day to make our successes possible.

As we go to print, the world around us is changing with COVID-19 bringing once unthinkable events to our doorsteps. Our employees, our customers, our shareholders, and yes, our country, all have needs and expectations. As we seek to balance those, we will look to the bedrock of all our values at Flagstar—we will do the right thing.

Alessandro P. DiNello
President and Chief Executive Officer

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

FORM 10-K

(Mark One)

☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE FISCAL YEAR ENDED DECEMBER 31, 2019

OR

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Commission file number: **001-16577**

Flagstar Bancorp, Inc.
(Exact name of registrant as specified in its charter)

Michigan	**38-3150651**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
5151 Corporate Drive, Troy, Michigan	**48098-2639**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: **(248) 312-2000**
Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol	Name of each exchange on which
Common Stock, par value $0.01 per	**FBC**	**New York Stock Exchange**

Securities registered pursuant to Section 12(g) of the Act: **None**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No

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

Large Accelerated Filer	☒	Accelerated Filer	☐	Smaller Reporting Company	☐
Non-Accelerated Filer	☐	Emerging growth company	☐		

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒

The estimated aggregate market value of the voting common stock held by non-affiliates of the registrant, computed by reference to the closing sale price ($33.14 per share) as reported on the New York Stock Exchange on June 30, 2019, was approximately $2 billion. The registrant does not have any non-voting common equity shares.

As of February 27, 2020, 56,657,508 shares of the registrant's common stock, $0.01 par value, were issued and outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's Proxy Statement relating to the 2020 Annual Meeting of Stockholders are incorporated by reference into Part III of this Report on Form 10-K.

PART I

PART II

PART III

PART IV

GLOSSARY OF ABBREVIATIONS AND ACRONYMS

The following list of abbreviations and acronyms are provided as a tool for the reader and may be used throughout this Report, including the Consolidated Financial Statements and Notes:

Term	Definition	Term	Definition
AFS	Available for Sale	GNMA	Government National Mortgage Association
Agencies	Federal National Mortgage Association, Federal Home Loan Mortgage Corporation, and Government National Mortgage Association, Collectively	HELOAN	Home Equity Loans
ALCO	Asset Liability Committee	HELOC	Home Equity Lines of Credit
ALLL	Allowance for Loan & Lease Losses	HFI	Held for Investment
AOCI	Accumulated Other Comprehensive Income (Loss)	HOLA	Home Owners Loan Act
ASR	Accelerated Share Repurchase	Home Equity	Second Mortgages, HELOANs, HELOCs
ASU	Accounting Standards Update	HPI	Housing Price Index
Basel III	Basel Committee on Banking Supervision Third Basel Accord	H.R.1.	House of Representatives 1 - Tax Cuts and Jobs Act
BSA	Bank Secrecy Act	HTM	Held to Maturity
C&I	Commercial and Industrial	LHFI	Loans Held-for-Investment
CAMELS	Capital, Asset Quality, Management, Earnings, Liquidity and Sensitivity	LHFS	Loans Held-for-Sale
CDARS	Certificates of Deposit Account Registry Service	LIBOR	London Interbank Offered Rate
CD	Certificates of Deposit	LTV	Loan-to-Value Ratio
CECL	Current Expected Credit Losses	Management	Flagstar Bancorp's Management
CET1	Common Equity Tier 1	MBIA	MBIA Insurance Corporation
CLTV	Combined Loan to Value	MBS	Mortgage-Backed Securities
Common Stock	Common Shares	MD&A	Management's Discussion and Analysis
CRE	Commercial Real Estate	MP Thrift	MP Thrift Investments, L.P.
CFPB	Consumer Financial Protection Bureau	MSR	Mortgage Servicing Rights
DCB	Desert Community Bank	N/A	Not Applicable
Deposit Beta	The change in the annualized cost of our deposits, divided by the change in the Federal Reserve discount rate	NASDAQ	National Association of Securities Dealers Automated Quotations
DIF	Deposit Insurance Fund	NYSE	New York Stock Exchange
DOJ	United States Department of Justice	OCC	Office of the Comptroller of the Currency
DOJ Liability	2012 settlement Agreement with the Department of Justice	OCI	Other Comprehensive Income (Loss)
DTA	Deferred Tax Asset	OTTI	Other-Than-Temporary-Impairment
EVE	Economic Value of Equity	QTL	Qualified Thrift Lending
ExLTIP	Executive Long-Term Incentive Program	Regulatory Agencies	Board of Governors of the Federal Reserve, Office of the Comptroller of the Currency, U.S. Department of the Treasury, Consumer Financial Protection Bureau, Federal Deposit Insurance Corporation, Securities and Exchange Commission
Fannie Mae	Federal National Mortgage Association		
FASB	Financial Accounting Standards Board	REO	Real estate owned and other nonperforming assets, net
FBC	Flagstar Bancorp	RMBS	Residential Mortgage-Backed Securities
FDIC	Federal Deposit Insurance Corporation	RSU	Restricted Stock Unit
Federal Reserve	Board of Governors of the Federal Reserve System	RWA	Risk Weighted Assets
FHA	Federal Housing Administration	SEC	Securities and Exchange Commission
FHFA	Federal Housing Finance Agency	SOFR	Secured Overnight Financing Rate
FHLB	Federal Home Loan Bank	SFR	Single Family Residence
FICO	Fair Isaac Corporation	TARP	Troubled Asset Relief Program
FOAL	Fall Out Adjusted Locks	TARP preferred	TARP Fixed Rate Cumulative Perpetual Preferred Stock, Series C
FRB	Federal Reserve Bank	TDR	Trouble Debt Restructuring
Freddie Mac	Federal Home Loan Mortgage Corporation	TILA	Truth in Lending Act
FTE	Full Time Equivalent	UPB	Unpaid Principal Balance
GAAP	Generally Accepted Accounting Principles	U.S. Treasury	United States Department of Treasury
Ginnie Mae	Government National Mortgage Association	VIE	Variable Interest Entity
GLBA	Gramm-Leach Bliley Act	XBRL	eXtensible Business Reporting Language

FORWARD-LOOKING STATEMENTS

Certain statements in this Form 10-K, including but not limited to statements included within the Management's Discussion and Analysis of Financial Condition and Results of Operations, are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, as amended. In addition, we may make forward-looking statements in our other documents filed with or furnished to the Securities and Exchange Commission (SEC), and our management may make forward-looking statements orally to analysts, investors, representatives of the media, and others.

Generally, forward-looking statements are not based on historical facts but instead represent management's current beliefs and expectations regarding future events and are subject to significant risks and uncertainties. Such statements may be identified by words such as believe, expect, anticipate, intend, plan, estimate, may increase, may fluctuate, and similar expressions or future or conditional verbs such as will, should, would, and could. Our actual results and capital and other financial conditions may differ materially from those described in the forward-looking statements depending upon a variety of factors, including without limitation the precautionary statements included within each individual business' discussion and analysis of our results of operations and the risk factors listed and described in Item 1A. to Part I, Risk Factors.

Other than as required under United States securities laws, we do not undertake to update the forward-looking statements to reflect the impact of circumstances or events that may arise after the date of the forward-looking statements.

PART I

ITEM 1. BUSINESS

Where we say "we," "us," "our," the "Company," "Bancorp" or "Flagstar," we usually mean Flagstar Bancorp, Inc. However, in some cases, a reference will include our wholly-owned subsidiary Flagstar Bank, FSB (the "Bank"). See the Glossary of Abbreviations and Acronyms on page 3 for definitions used throughout this Form 10-K.

Introduction

We are a savings and loan holding company founded in 1993. Our business is primarily conducted through our principal subsidiary, the Bank, a federally chartered savings bank founded in 1987. We provide commercial and consumer banking services and we are the 5th largest bank mortgage originator in the nation and the 6th largest sub-servicer of mortgage loans nationwide. At December 31, 2019, we had 4,453 full-time equivalent employees. Our common stock is listed on the NYSE under the symbol "FBC."

Our relationship-based business model leverages the capabilities of our full service bank and our national mortgage platform to create and build financial solutions for our customers. At December 31, 2019, we operated 160 full service banking branches that offer a full set of banking products to consumer, commercial, and government customers. Our banking footprint spans throughout Michigan, Indiana, California, Wisconsin, Ohio and contiguous states.

We originate mortgages through a wholesale network of brokers and correspondents in all 50 states, and our own loan officers from 88 retail locations in 27 states and two call centers, which include our direct-to-consumer mortgage lending team. Flagstar is also a leading national servicer of mortgage loans and provides complementary ancillary offerings including MSR lending, servicing advance lending and recapture services.

Operating Segments

Our operations are conducted through our three operating segments: Community Banking, Mortgage Originations and Mortgage Servicing. For further information, see MD&A - Operating Segments and Note 21 - Segment Information.

Competition

We face substantial competition in attracting deposits and generating loans. Our most direct competition for deposits has historically come from other savings banks, commercial banks and credit unions in our banking footprint. Money market funds, full-service securities brokerage firms, and financial technology companies also compete with us for these funds. We compete for deposits by offering a broad range of high quality customized banking services at competitive rates. From a lending perspective, there are many institutions including commercial banks, national mortgage lenders, local savings banks, credit unions, and commercial lenders offering consumer and commercial loans. We compete by offering competitive interest rates, fees, and other loan terms through efficient and customized service.

Subsidiaries

We conduct business primarily through our wholly-owned bank subsidiary. In addition, the Bank has wholly-owned subsidiaries through which we conduct non-bank business or which are inactive. The Bank and its wholly owned subsidiaries comprised nearly all of our total assets at December 31, 2019. For further information, see Note 1 - Description of Business, Basis of Presentation, and Summary of Significant Accounting Standards, Note 7 - Variable Interest Entities and Note 22 - Holding Company Only Financial Statements.

Regulation and Supervision

The Bank is a federally chartered savings bank, subject to federal regulation and oversight by the OCC. We are also subject to regulation and examination by the FDIC, which insures the deposits of the Bank to the extent permitted by law and the requirements established by the Federal Reserve. The Bank is also subject to the supervision of the CFPB which regulates the offering and provision of consumer financial products or services under the federal consumer financial laws. The OCC, FDIC and the CFPB may take regulatory enforcement actions if we do not operate in accordance with applicable regulations, policies and directives. Proceedings may be instituted against us, or any "institution-affiliated party," such as a director, officer, employee, agent or controlling person, who engages in unsafe and unsound practices, including violations of applicable laws and regulations. The FDIC has additional authority to terminate insurance of accounts, if after notice and hearing, we are found to have engaged in unsafe and unsound practices, including violations of applicable laws and regulations. The federal system of regulation and supervision establishes a comprehensive framework of activities in which to operate and is intended primarily for the protection of depositors and the FDIC's Deposit Insurance Fund rather than our shareholders.

As a savings and loan holding company, we are required to comply with the rules and regulations of the Federal Reserve. We are required to file certain reports and we are subject to examination by, and the enforcement authority of, the Federal Reserve. Under the federal securities laws, we are also subject to the rules and regulations of the Securities and Exchange Commission.

Any change to laws and regulations, whether by the FDIC, OCC, CFPB, SEC, the Federal Reserve, or Congress, could have a material adverse impact on our operations.

Holding Company Regulation

Acquisition, Activities and Change in Control. Flagstar Bancorp, Inc. is a unitary savings and loan holding company. We may only conduct, or acquire control of companies engaged in, activities permissible for a unitary savings and loan holding company pursuant to the relevant provisions of the HOLA and relevant regulations. Further, we generally are required to obtain Federal Reserve approval before acquiring direct or indirect ownership or control of any voting shares of another bank, bank holding company, savings associations or savings and loan holding company if, we would own or control more than 5 percent of the outstanding shares of any class of voting securities of that entity. Additionally, we are prohibited from acquiring control of a depository institution that is not federally insured or retaining control for more than one year after the date that institution becomes uninsured.

We may not be acquired unless the transaction is approved by the Federal Reserve. In addition, the GLBA generally restricts a company from acquiring us if that company is engaged directly or indirectly in activities that are not permissible for a savings and loan holding company or financial holding company.

Volcker Rule. Section 619 of the Dodd-Frank Act required the federal financial regulatory agencies to adopt rules that prohibit banking entities, including federal savings associations and their and affiliates, from engaging in proprietary trading and investing in and/or sponsoring certain "covered funds." In 2013, the agencies adopted rules to implement section 619. These rules, collectively with section 619, are commonly referred to as the "Volcker Rule." Compliance with the Volcker Rule generally has been required since July 21, 2015. Pursuant to the requirements of the Volcker Rule, we have established a standard compliance program based on the size and complexity of our operations and we believe we are in compliance with the requirements.

Capital Requirements. The Bank and Flagstar are currently subject to the regulatory capital framework and guidelines reached by Basel III as adopted by the OCC and Federal Reserve. The OCC and Federal Reserve have risk-based capital adequacy guidelines intended to measure capital adequacy with regard to a banking organization’s balance sheet, including off-balance sheet exposures such as unused portions of loan commitments, letters of credit, and recourse arrangements.

Failure to meet minimum capital requirements can initiate certain mandatory, and possibly additional discretionary actions by regulators that could have a material effect on the Consolidated Financial Statements. On January 1, 2015, the Basel III rules became effective and included transition provisions through 2018. In preparation for the new capital simplification rules, the Basel III implementation phase-in has been halted, as the agencies issued a final rule that will maintain the capital rules’ 2017 transition provisions for several regulatory capital deductions and certain other requirements that are subject to multi-year phase-in schedules in the regulatory capital rules. For additional information, see Note 18 - Regulatory Capital.

Source of Strength. The Dodd-Frank Act codified the Federal Reserve’s "source of strength" doctrine and extended it to savings and loan holding companies. Under the Dodd-Frank Act, the prudential regulatory agencies are required to promulgate joint rules requiring savings and loan holding companies, such as us, to serve as a source of financial strength for any depository institution subsidiary by maintaining the ability to provide financial assistance in the event that it suffers financial distress.

Collins Amendment. The Collins Amendment to the Dodd Frank Act established minimum Tier 1 leverage and risk-based capital requirements for insured depository institutions, depository institution holding companies, and non-bank financial companies that are supervised by the Federal Reserve. The minimum Tier 1 leverage and risk-based capital requirements are determined by the minimum ratios established by the federal banking agencies that apply to insured depository institutions under the prompt corrective action regulations. The amendment states that certain hybrid securities, such as trust preferred securities, may be included in Tier 1 capital for bank holding companies that had total assets below $15 billion as of December 31, 2009. As we were below $15 billion in assets as of December 31, 2009, the trust preferred securities classified as long term debt on our balance sheet are included as Tier 1 capital while they are outstanding, unless we complete an acquisition of a depository institution holding company and we report total assets greater than $15 billion at the end of the quarter in which the acquisition occurs. At our present size, with total assets of $23.3 billion at December 31, 2019, an acquisition of a depository holding company would likely cause our trust preferred securities totaling $247 million at December 31, 2019 to no longer be included in Tier 1 capital and therefore to be included in Tier 2 capital.

Banking Regulation

FDIC Insurance and Assessment. The FDIC insures the deposits of the Bank and such insurance is backed by the full faith and credit of the U.S. government through the DIF. The FDIC maintains the DIF by assessing each financial institution an insurance premium. The FDIC defined deposit insurance assessment base for an insured depository institution is equal to the average consolidated total assets during the assessment period, minus average tangible equity.

Affiliate Transaction Restrictions. The Bank is subject to the affiliate and insider transaction rules applicable to member banks of the Federal Reserve as well as additional limitations imposed by the OCC. These provisions prohibit or limit the Bank from extending credit to, or entering into certain transactions with principal stockholders, directors and executive officers of the banking institution and certain of its affiliates. The Dodd-Frank Act imposed further restrictions on transactions with certain affiliates and extension of credit to executive officers, directors and principal stockholders.

Limitation on Capital Distributions. The OCC and FRB regulate all capital distributions made by the Bank, directly or indirectly, to the holding company, including dividend payments. An application to the OCC by the Bank may be required based on a number of factors including whether the institution qualifies as an eligible association under the OCC rules and regulations, if the institution would not be at least adequately capitalized following the distribution or if the total amount of all capital distributions (including each proposed capital distribution) for the applicable calendar year exceeds net income for that year to date plus the retained net income for the preceding two years. In addition, as a subsidiary of a savings and loan holding company, a 30-day notice from the Bank must be provided to the FRB prior to declaring or paying any dividend to the holding company. Additional restrictions on dividends apply if the Bank fails the QTL test. As of December 31, 2019, the bank is in compliance with the QTL test.

Bank Secrecy Act and Anti-Money Laundering

The Bank is subject to the BSA and other anti-money laundering laws and regulations, including the USA PATRIOT Act. The BSA requires all financial institutions to, among other things, establish a risk-based system of internal controls reasonably designed to prevent money laundering and the financing of terrorism. The BSA includes various record keeping and reporting requirements such as cash transaction and suspicious activity reporting as well as due diligence requirements. The Bank is also required to comply with the U.S. Treasury's Office of Foreign Assets Control imposed economic sanctions that affect transactions with designated foreign countries, nationals, individuals, entities and others.

The Economic Growth, Regulatory Relief and Consumer Protection Act of 2018

The Economic Growth, Regulatory Relief, and Consumer Protection Act ("Economic Growth Act") repealed or modified several provisions of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 ("Dodd-Frank Act"). Certain key aspects of the Economic Growth Act that have the potential to affect the Company's business and results of operations include:

- Raising the total asset threshold from $50 billion to $250 billion at which bank holding companies are required to conduct periodic company-run stress tests mandated by the Dodd-Frank Act.
- Clarifying the definition of high volatility commercial real estate loans to ease the regulatory burden associated with the identification of loans that meet qualifying criteria.
- Providing that certain reciprocal deposits shall not be considered brokered deposits, subject to certain limitations.
- Entitling federal savings associations, such as the Bank, with less than $20 billion in total assets as of December 31, 2017, an option to elect to operate as covered savings associations (similar to a national bank) without changing their charter.

Consumer Protection Laws and Regulations

The Bank is subject to a number of federal consumer protection laws and regulations. These include, among others, the Truth in Lending Act, the Truth in Savings Act, the Equal Credit Opportunity Act, the Fair Housing Act, the Fair Credit Reporting Act, the Service members Civil Relief Act, the Expedited Funds Availability Act, the Community Reinvestment Act, the Real Estate Settlement Procedures Act, electronic funds transfer laws, redlining laws, predatory lending laws, laws prohibiting unfair, deceptive or abusive acts or practices in connection with the offer, or sale of consumer financial products or services, and the GLBA and California Consumer Protection Act regarding customer privacy and data security.

The Bank is subject to supervision by the CFPB, which has responsibility for enforcing federal consumer financial laws. The CFPB has broad rule-making authority to administer and carry out the provisions of the Dodd-Frank Act with respect to financial institutions that offer covered financial products and services to consumers, including prohibitions against unfair, deceptive abusive acts or practices in connection with any transaction with a consumer for a consumer financial product or service, or the offering of a consumer financial product or service including regulations related to the origination and servicing of residential mortgages. The Bank is subject to the CFPB's supervisory, examination and enforcement authority. As a result, we could incur increased costs, potential litigation or be materially limited or restricted in our business, product offerings or services in the future.

Due to regulatory focus on compliance with consumer protection laws and regulations, portions of our lending operations which most directly deal with consumers, including mortgage and consumer lending, may pose particular challenges. Further, the CFPB continues to propose new rules and to amend existing rules. While we are not aware of any material compliance issues related to our mortgage and consumer lending practices, the focus of regulators and the changes to regulations may increase our compliance risks. Despite the supervision and oversight we exercise in these areas, failure to comply with these regulations could result in the Bank being liable for damages to individual borrowers or other imposed penalties.

Additionally, the Equal Credit Opportunity Act and the Fair Housing Act prohibit financial institutions from engaging in discriminatory lending practices. The DOJ, CFPB, and other agencies are responsible for enforcing these laws and regulations. Private parties may also have the ability to challenge an institution's performance under fair lending laws in class action litigation. A successful challenge to the Bank's performance under the fair lending laws and regulations could adversely impact the Bank's rating under the Community Reinvestment Act and result in a wide variety of sanctions or penalties or limit certain revenue channels.

Incentive Compensation

The U.S. bank regulatory agencies issued comprehensive guidance on incentive compensation policies intended to ensure that the incentive compensation policies of U.S. banks do not undermine safety and soundness by encouraging excessive risk-taking. The U.S. bank regulatory agencies review, as part of the regular, risk-focused examination process, the incentive compensation arrangements of U.S. banks that are not "large, complex banking organizations." These reviews are tailored to each bank based on the scope and complexity of the bank's activities and the prevalence of incentive compensation arrangements.

Additional Information

Our executive offices are located at 5151 Corporate Drive, Troy, Michigan 48098, and our telephone number is (248) 312-2000. Our stock is traded on the NYSE under the symbol "FBC."

We make our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act available free of charge on our website at www.flagstar.com, under "Investor Relations," as soon as reasonably practicable after we electronically file or furnish such material with the SEC. These reports are also available without charge on the SEC website at www.sec.gov.

ITEM 1A. RISK FACTORS

Our financial condition and results of operations may be adversely affected by various factors, many of which are beyond our control. In addition to the factors identified elsewhere in this Report, we believe the most significant risk factors affecting our business are set forth below.

Market, Interest Rate, Credit and Liquidity Risk

Economic and general conditions in the markets in which we operate may adversely affect our business.

Our business and results of operations are affected by economic and market conditions, political uncertainty and social conditions, factors impacting the level and volatility of short-term and long-term interest rates, inflation, home prices, unemployment and under-employment levels, risks associated with an outbreak of a widespread epidemic or pandemic of disease (or widespread fear thereof), bankruptcies, household income, consumer spending, fluctuations in both debt and equity capital markets and currencies, liquidity of the financial markets, the availability and cost of capital and credit, investor sentiment and confidence in the financial markets, and the sustainability of economic growth. Deterioration of any of these conditions could adversely affect our business segments, the level of credit risk we have assumed, our capital levels, liquidity, and our results of operations.

Domestic and international fiscal and monetary policies also affect our business. Central bank actions, particularly those of the Federal Reserve, can affect the value of financial instruments and other assets, such as investment securities and MSRs, and their policies can affect our borrowers, potentially increasing the risk that they may fail to repay their loans. Changes in fiscal and monetary policies are beyond our control and difficult to predict but could have an adverse impact on our capital requirements and the cost of running our business.

We are asset sensitive, which means changes in interest rates could adversely affect our financial condition and results of operations including our net interest margin, mortgage related assets, and our investment portfolio.

Our results of operations and financial condition could be significantly affected by changes in interest rates and the yield curve. Our financial results depend substantially on net interest income, which is the difference between the interest income that we earn on interest-earning assets and the interest expense we pay on interest-bearing liabilities. Net interest income represented 47 percent of our total revenue for the full year ended December 31, 2019.

Changes in interest rates may affect the expected average life of our mortgage LHFI and mortgage backed securities and, to a lesser extent, our commercial loans. Decreases in interest rates can trigger an increase in prepayments of our loans and mortgage backed securities as borrowers refinance to reduce their own borrowing costs. Conversely, increases in interest rates may decrease loan refinance activity which can negatively impact our mortgage business.

The fair value of our fixed-rate financial instruments, including certain LHFI, LHFS, and investment securities is affected by changes in interest rates. If interest rates increase, the fair value of our fixed-rate financial instruments will generally decline and, therefore, have a negative effect on our financial results. We use derivatives to provide a level of protection against certain interest rate risks, but no hedging strategy will offset this risk completely.

Additionally, the fair value of our MSRs is highly sensitive to changes in interest rates and changes in market implied interest rate volatility. Decreases in interest rates can trigger an increase in actual repayments and market expectation for higher levels of repayments in the future which have a negative impact on MSR fair value. Conversely, higher rates typically drive lower repayments which result in an increase in the MSR fair value. We utilize derivatives to manage the impact of changes in the fair value of the MSRs. Our risk management strategies, which rely on assumptions or projections, may not adequately mitigate the impact of changes in interest rates, interest rate volatility, credit spreads or prepayment speeds, and as a result, the change in the fair value of MSRs may negatively impact earnings.

Rising mortgage rates and adverse changes in mortgage market conditions could reduce mortgage revenue.

In 2019, approximately 45 percent of our revenue was derived from our Mortgage Origination segment which includes activities related to the origination and sale of residential mortgages. The residential real estate mortgage lending business is sensitive to changes in interest rates. Lower interest rates generally increase the volume of mortgage originations, while higher interest rates generally cause that volume to decrease. Therefore, our mortgage performance is typically correlated to fluctuations in interest rates. Historically, mortgage origination volume and sales for the Bank and for other financial institutions have risen and fallen in response to these and other factors. An increase in interest rates and/or a decrease in our mortgage production volume could have a material adverse effect on our operating results. During 2019, average 10 year U.S. Treasury rates, on which we base our pricing of our 30 year mortgages, was 2.14 percent, 77 basis points lower than average rates experienced during 2018. The sustained lower rates experienced throughout 2019 positively impacted the mortgage market including loan origination volume and refinancing activity, which may not persist.

In addition to being affected by interest rates, the secondary mortgage markets are also subject to investor demand for residential mortgage loans and investor yield requirements for these loans. These conditions may fluctuate or worsen in the future. Adverse market conditions, including increased volatility and reduced market demand, could result in greater risk in retaining mortgage loans pending their sale to investors. A prolonged period of secondary market illiquidity may result in a reduction of our loan mortgage production volume and could have a material adverse effect on our financial condition and results of operations.

Our mortgage origination business is also subject to the cyclical and seasonal trends of the real estate market. The cyclical nature of our industry could lead to periods of strong growth in the mortgage and real estate markets followed by periods of sharp declines and losses in such markets. Seasonal trends have historically reflected the general patterns of residential and commercial real estate sales, which typically peak in the spring and summer seasons. One of the primary influences on our mortgage business is the aggregate demand for mortgage loans, which is affected by prevailing interest rates, housing supply and demand, residential construction trends, and overall economic conditions. If we are unable to respond to the cyclical nature of our industry by appropriately adjusting our operations or relying on the strength of our other product offerings during cyclical downturns, our business, financial condition and results of operations could be adversely affected.

We are highly dependent on the Agencies to buy mortgage loans that we originate. Changes in these entities, changes in the manor or volume of loans they purchase or their current roles could adversely affect our business, financial condition and results of operations.

We generate mortgage revenues primarily from gains on the sale of single-family residential loans pursuant to programs currently offered by Fannie Mae, Freddie Mac, Ginnie Mae and other investors. These entities account for a substantial portion of the secondary market in residential mortgage loans. During the year ended December 31, 2019, we sold approximately 63 percent of our mortgage loans to Fannie Mae and Freddie Mac. Any future changes in these programs, our eligibility to participate in such programs, their concentration limits with respect to loans purchased from us, the criteria for loans to be accepted or laws that significantly affect the activity of such entities could, in turn, result in a lower volume of corresponding loan originations or other administrative costs which may materially adversely affect our results of operations or could cause us to take other actions that would be materially detrimental.

Fannie Mae and Freddie Mac remain in conservatorship and a path forward for them to emerge from conservatorship is unclear. Their roles could be reduced, modified or eliminated as a result of regulatory actions and the nature of their guarantees could be limited or eliminated relative to historical measurements. The elimination or modification of the traditional roles of Fannie Mae or Freddie Mac could create additional competition in the market and significantly and adversely affect our business, financial condition and results of operations.

Changes in the servicing, origination, or underwriting guidelines or criteria required by the Agencies could adversely affect our business, financial condition and results of operations.

We are required to follow specific guidelines or criteria that impact the way that we originate, underwrite, or service. Guidelines include credit standards for mortgage loans, our staffing levels and other servicing practices, the servicing and ancillary fees that we may charge, modification standards and procedures and the amount of non-reimbursable advances.

We cannot negotiate these terms with the Agencies and they are subject to change at any time. A significant change in these guidelines which decreases the fees we charge or requires us to expend additional resources in providing mortgage services could decrease our revenues or increase our costs, which would adversely affect our business, financial condition and results of operations.

In addition, changes in the nature or extent of the guarantees provided by Fannie Mae and Freddie Mac or the insurance provided by the FHA could also have broad adverse market implications. The fees that we are required to pay to the Agencies for these guarantees have changed significantly over time and any future increases in these fees would adversely affect our business, financial condition and results of operations.

Uncertainty about the future of LIBOR may adversely affect our business.

On July 27, 2017, the United Kingdom Financial Conduct Authority, which oversees LIBOR, formally announced that it could not assure the continued existence of LIBOR in its current form beyond the end of 2021, and that an orderly transition process to one or more alternative benchmarks should begin. In June 2017, the Alternative Reference Rates Committee, a steering committee comprised of large U.S. financial institutions organized by the Federal Reserve, announced that it had selected a modified version of the unpublished Broad Treasuries Financing Rate as the preferred alternative reference rate for U.S. dollar obligations. This rate, now referred to as the Secured Overnight Financing Rate (SOFR), is based on actual transactions in certain portions of overnight repurchase agreement markets for certain U.S. Treasury obligations, and was first published during the first half of 2018.

It is unclear whether, or in what form, LIBOR will continue to exist after 2021. If LIBOR ceases to exist or if the methods of calculating LIBOR change from current methods for any reason, revenue and expenses associated with interest rates and underlying valuation assumptions on our loans, deposits, obligations, derivatives, and other financial instruments tied to LIBOR rates and models that utilize LIBOR curves may be adversely affected. Additionally, whether or not SOFR attains market traction as a replacement to LIBOR remains in question and it remains uncertain at this time what the impact of a possible transition to SOFR or other alternative reference rates may have on our business, financial result and operations.

To effectively manage our MSR concentration risk we may have to sell our MSRs when market conditions are not optimal or hold MSRs at a level which is punitive to our Common Equity Tier 1 capital (CET1) under Basel III.

We are subject to capital standards requirements, including requirements of the Dodd-Frank Act and those developed by the Bank's regulators based on the Basel Committee on Banking Supervision, commonly referred to as Basel III. Basel III established a qualifying criteria for regulatory capital, including limitations on the amount of DTAs and MSRs that may be held without triggering higher capital requirements. Effective January 1, 2020, Basel III (post regulatory simplification) limits the amount of MSRs and DTAs each to 25 percent of CET1. These limitations could cause a reduction in our capital levels and have a negative impact on our overall business and ability to lend.

As of December 31, 2019, we had $291 million in MSRs and a MSR to Common Equity Tier 1 Capital ratio of 19.7 percent. We produced, on average, approximately $56 million of new MSRs per quarter in 2019 and we expect to continue to generate MSRs going forward. Considering the volume of MSRs that we generate, we must continually sell MSRs to manage the concentration of this asset. In 2019, we sold $57 million in MSRs and as of December 31, 2019, we had pending MSR sales with a fair value of $35 million which closed during the first quarter of 2020. In 2019, we sold $12.4 billion of outstanding principal via flow sale arrangements, in which Flagstar assigns the servicing right to a third party investor at the time of sale and the rights, risks, and rewards of holding the MSR asset are never titled in the name of Flagstar. While our established plan to manage our MSR concentration incorporates our production volumes and required sales, no assurance can be given that we will be able to do so. Additionally, to manage our MSR concentration, we may have to sell our MSRs at a price less than their fair value due to market constraints present at the time of sale which could have an adverse effect on our financial condition and results of operations.

Refer to MD&A - *Regulatory Capital Simplification and Note 18 for more detail.*

Our ALLL could be too low to sufficiently cover future credit losses. As of December 31, 2019, our ALLL was $107 million, covering 0.9 percent of total loans held-for-investment. Our estimate of the inherent losses is imperfect and based on management judgment.

Our ALLL, which reflects our estimate of losses inherent in the HFI loan portfolio at December 31, 2019, may not be sufficient to cover actual credit losses. If this allowance is insufficient, future provisions for credit losses could adversely affect our financial condition and results of operations. We attempt to limit the risk that borrowers will fail to repay loans by carefully underwriting our loans, but losses nevertheless occur in the ordinary course of business. Our ALLL is based on historical experience as well as our evaluation of the risks inherent in the loan portfolio at December 31, 2019. The determination of an appropriate level of loan loss allowance is a subjective process that requires significant management judgment, including estimates of loss and the loss emergence period, estimates and judgments about the collectability of our loan portfolio including but not limited to the creditworthiness of our borrowers and the value of real estate or other collateral backing the repayment of loans. New information regarding existing loans, identification of additional problem loans, failure of borrowers and guarantors to perform in accordance with the terms of their loans, and other factors, both within and outside of our control, may require an increase in the ALLL. Moreover, our regulators, as part of their supervisory function, periodically review our ALLL and may recommend or require us to increase the amount of our ALLL, based on their judgment, which may be different from that of our management. Any increase in our loan losses would have an adverse effect on our earnings and financial condition.

The FASB accounting standard update to the measurement of Credit Losses on Financial Instruments will result in a significant change in how we estimate credit losses and may have a material impact on our business, financial condition and results of operations.

In June 2016, the FASB issued an accounting standard update, "Financial Instruments-Credit Losses (Topic 326)", which replaces the current "incurred loss" model for recognizing credit losses with an "expected loss" model referred to as the Current Expected Credit Loss ("CECL") model for periods beginning after December 15, 2019. Under the CECL standard, we will be required to present certain financial assets carried at amortized cost, such as loans held for investment and held-to-maturity debt securities, at the net amount expected to be collected over the life of the loan. The measurement of expected credit losses is based on information about past events, including credit quality, our historical experience, current conditions, and reasonable and supportable macroeconomic forecasts that may affect the collectability of the reported amount. This measurement will take place at the time the financial asset is first added to the balance sheet and at least quarterly thereafter. This differs significantly from the current "incurred loss" model, which delays recognition of estimated losses until it is probable a loss has been incurred and measures those losses over the estimated life of the loan rather than the loss emergence period. Certain CECL factors are outside of our control and may be procyclical and/or create more volatility in the level of our ALL which could impact our results of operations.

Based on our current results and economic forecasts as of December 31, 2019, the estimated impact of CECL on our ALLL, including our reserve for unfunded loan commitments is expected to be a pre-tax increase of approximately 25 to 35 percent. The impact upon adoption of the CECL standard will be recorded in equity and adverse effects will be phased into regulatory capital over a three year transition period based on the December 21, 2018 Final Rule approved by the regulatory agencies modifying regulatory capital rules. Any future changes to our allowance for credit losses and the reserve for unfunded commitments after January 1, 2020 will be recorded in our provision for credit losses.

CECL requires management judgment that is supported by new models and more data elements, including macroeconomic forecasts, than the previous allowance standard. This is expected to increase the complexity and associated risk, particularly in times of economic uncertainty or other unforeseen circumstances, which could impact our results of operations and may place stress on our internal controls over financial reporting.

Concentration of loans held-for-investment in certain geographic locations and markets may increase the magnitude of potential losses should defaults occur.

Our residential mortgage loan portfolio is geographically concentrated in certain states, including California and Michigan, which comprise approximately 52 percent of the portfolio. In addition, our commercial loan portfolio has a concentration of Michigan lending relationships. Approximately 39 percent of our CRE loans are collateralized by properties in Michigan and 33 percent of our C&I borrowers are located in Michigan. These concentrations have made, and will continue to make, our loan portfolio susceptible to downturns in these local economies and the real estate and mortgage markets in these areas. Adverse conditions that are beyond our control may affect these areas, including unemployment, inflation, recession, natural disasters, declining property values, municipal bankruptcies and other factors which could increase both the probability and severity of defaults in our loan portfolio, reduce our ability to generate new loans and negatively affect our financial results.

Commercial loans, excluding our warehouse loans, generally expose us to a greater risk of nonpayment and loss than residential real estate loans due to the more complex nature of underwriting. Such loans typically involve larger loan balances to single borrowers or groups of related borrowers compared to residential real estate loans. At December 31, 2019, our largest CRE and C&I borrowers had outstanding loans of $70 million and $72 million, respectively. Further, we have commitments up to $100 million in our CRE and C&I portfolios. As such, a default by one of our larger borrowers could result in a significant loss relative to our ALLL. Additionally, secured loans, including residential and commercial real estate, may experience changes in the underlying collateral value due to adverse market conditions which could result in increased charge-offs in the event of a loan default.

Our home builder finance portfolio reached $989 million in outstanding loans at December 31, 2019. The home builder lending portfolio contains secured and unsecured loans, within our CRE and C&I portfolios, and our lending platform originates loans throughout the U.S. with regional offices in Houston, Phoenix and Denver. Our home builder lending business may be impacted by overall economic conditions in the areas builders operate as well as new home construction rates and trends.

At December 31, 2019, our adjustable-rate warehouse lines of credit granted to other mortgage lenders was $4.8 billion, of which $2.8 billion was outstanding. There may be risks associated with the mortgage lenders that borrow from the Bank, including credit risk, inadequate underwriting, and potential fraud against the Bank. At December 31, 2019, our largest borrower had an outstanding balance of $100 million. A default by one of our larger warehouse borrowers could result in a large loss relative to our size. Additionally, adverse changes to industry competition, mortgage demand and the interest rate environment may have a negative impact on warehouse lending.

Liquidity risk may affect our ability to meet obligations and impact our ability to grow our business.

We require substantial liquidity to repay our customers' deposits, fulfill loan demand, meet borrowing obligations, and fund our operations under both normal and unforeseen circumstances which may cause liquidity stress. Our liquidity could be impaired by our inability to access the capital markets, or unforeseen outflows of deposits. Our access to and cost of liquidity, is dependent on various factors including, but not limited to, declining financial results, balance sheet and financial leverage, disruptions in the capital markets, counterparty availability, interest rate fluctuations, general economic conditions, and legal, regulatory, accounting and tax environments governing funding transactions. A material deterioration in these factors could result in a downgrade of our credit or servicer standing with counterparties, resulting in higher cash outflows which could require us to raise capital or obtain additional access to liquidity. If we are restricted from accessing certain funding sources by our regulators, are unable to arrange for new financing on acceptable terms, or if we default on any of the covenants imposed upon us by our borrowing facilities, then we may have to limit our growth, reduce the number of loans we are able to originate or take actions that could have other negative effects on our operations.

We are a holding company and are, therefore, dependent on the Bank for funding of obligations.

As a holding company with no significant assets other than the capital stock of the Bank and cash on hand, our ability to service our debt, including interest payments on our senior notes and trust preferred securities, pay dividends, repurchase shares of our common stock, pay for certain services we purchase from the Bank and cover operating expenses, depend upon available cash on hand and the receipt of dividends from the Bank. The holding company had cash and cash equivalents of $233 million at December 31, 2019, or approximately 4.5 years of future anticipated cash outflows, dividend payments, share repurchases and debt service coverage when excluding the redemption of $250 million of senior notes which mature on July 15, 2021. Operating expenses, which include costs paid to the Bank, totaled $28 million for the year ended December 31, 2019. The declaration and payment of dividends by the Bank on all classes of its capital stock is subject to the discretion of the Bank's Board of Directors and to applicable regulatory and legal limitations. If the Bank, does not, or cannot, make sufficient dividend payments to us, we may not be able to service or repay our debt when it comes due, which could have a material adverse effect on our financial condition and results of operations or could cause us to take other actions which could be materially detrimental to our shareholders.

Regulatory Risk

We depend upon having FDIC insurance to raise deposit funding at reasonable rates. Future changes in deposit insurance premiums and special FDIC assessments could adversely affect our earnings.

The Dodd-Frank Act required the FDIC to substantially revise its regulations for determining the amount of an institution's deposit insurance premiums. Consequently, the FDIC has defined the deposit insurance assessment base for an insured depository institution as average consolidated total assets during the assessment period, minus average Tier 1 Capital. Our assessment rate is determined by use of a scorecard that combines our CAMELS ratings with certain other financial information. Changes in the level and mix of these financial components in the scorecard may result in a higher assessment rate. The FDIC may determine that we present a higher risk to the DIF than other banks due to various factors. These factors include significant risks relating to interest rates, loan portfolio and geographic concentration, concentration of high credit risk loans, increased loan losses, regulatory compliance, existing and future litigation and other factors. As a result, we could be subject to higher deposit insurance premiums and special assessments in the future that could adversely affect our earnings.

Non-compliance with laws and regulations could result in fines, sanctions and/or operating restrictions.

We are subject to government legislation and regulation, including but not limited to the USA PATRIOT and Bank Secrecy Acts, which require financial institutions to develop programs to detect money laundering, terrorist financing, and other financial crimes. If detected, financial institutions are obligated to report such activity to the Financial Crimes Enforcement Network, a bureau of the United States Department of the Treasury. These regulations require financial institutions to establish procedures for identifying and verifying the identity of customers seeking to establish and maintain a relationship with a financial institution. Failure to comply with these regulations could result in fines, sanctions or restrictions that could have a material adverse effect on our strategic initiatives and operating results, and could require us to make changes to our operations and the customers that we serve.

Current laws and applicable regulations are subject to frequent change and, in certain instances, state and federal law may conflict. Any new laws and regulations could make compliance more difficult or expensive or otherwise adversely affect our business. If our risk management and compliance programs prove to be ineffective, incomplete or inaccurate, we could suffer unexpected losses, which could materially adversely affect our results of operations, our financial condition and/or our reputation. As part of our federal regulators' enforcement authority, significant civil or criminal monetary penalties, consent orders, or other regulatory actions can be assessed against the Bank. Such actions could require us to make changes to our operations, including the customers that we serve, and may have an adverse impact on our operating results.

Operational Risk

A failure of our information technology systems could cause operational losses and damage to our reputation.

Our businesses are increasingly dependent on our ability to process, record and monitor a large number of complex transactions and data efficiently and accurately. If our internal information technology systems fail, we may be unable to conduct business for a period of time, which may impact our financial results if that interruption is sustained. In addition, our reputation with our customers or business partners may suffer, which could have a further, long-term impact on our financial results.

Our reliance on third parties to provide key components of our business infrastructure could cause operational losses or business interruptions.

We rely on third-party service providers to leverage subject matter expertise and industry best practice, provide enhanced products and services, and reduce costs. Although there are benefits in entering into third-party relationships with vendors and others, there are risks associated with such activities. The risks associated with the vendor activity are not passed to the third-party but remain our responsibility. Our Vendor Management department provides oversight related to the overall risk management process associated with third-party relationships. Management is accountable for the review and evaluation of all new and existing third-party relationships and is responsible for ensuring that adequate controls are in place to protect us and our customers from the risks associated with vendor relationships.

Increased risk could occur based on poor planning, oversight, control, and inferior performance or service on the part of the third-party, and may result in legal costs, regulatory fines or loss of business. While we have implemented a vendor management program to actively manage the risks associated with the use of third-party service providers, any problems caused by third-party service providers could result in regulatory noncompliance, adversely affect our ability to deliver products and services to our customers and to conduct our business. Replacing a third-party service provider could also take a long period of time and result in increased costs.

Because we conduct part of our business over the Internet and outsource a significant number of our critical functions to third parties, our operations depend on our third-party service providers to maintain and operate their own technology systems. To the extent these third parties' systems fail, despite our monitoring and contingency plans, we may be unable to conduct business or provide certain services, and we may face financial and reputational losses as a result.

We face operational risks due to the high volume and the high dollar value of transactions we process.

We rely on the ability of our employees and systems to process a wide variety of transactions. Many of the transactions we process may be of high dollar value, such as those related to mortgage lending and warehouse advances. In 2019, we originated a total of $32.7 billion in residential mortgage loans and processed $55 billion of warehouse lending advances. We face operational risk from, but not limited to, the risk of fraud by employees or persons outside our company, the execution of unauthorized transactions, errors relating to transaction processing and technology, breaches of our internal control systems or failures of those of our suppliers or counterparties, compliance failures, cyber-attacks, technology failures, system failures, vendor failures, or unforeseen problems related to system implementations or upgrades, business continuation and disaster recovery issues, and other external events. This risk of loss also includes the potential legal actions that could arise as a result of an operational deficiency or as a result of noncompliance with applicable regulatory standards, adverse business decisions or their implementation, and customer attrition due to potential negative publicity. The occurrence of any of these events could result in a financial loss, regulatory action or damage to our reputation.

We may lose market share to our competitors if we are not able to respond to technological change and introduce new products and services.

Financial products and services have become increasingly technologically depended. We may not be able to respond to technological innovations as quickly as our competitors do. Certain of our competitors are making significantly greater investments and allocating significantly more in financial resources toward technological innovations and digital offerings than we historically have. Our ability to meet the needs of our customers and introduce competitive products in a cost-efficient manner depends on our responsiveness to technological advances, investment in new technology as it becomes available, and obtaining and maintaining related essential personnel. Furthermore, the introduction of new technologies and products by financial technology companies and platforms may adversely affect our ability to maintain our customer base, obtain new customers or successfully grow our business. The failure to respond to the product demands of our customers, due to cost, proficiency or otherwise, could have a material adverse impact on our business and therefore on our financial condition and results of operations.

We collect, store and transfer our customers' personally identifiable information. Any cybersecurity attack or other compromise to the security of that information could adversely impact our business and financial condition.

Cybersecurity related attacks are attempted on an ongoing basis which pose a risk of data breaches relative to the processing of transactions that contain customers' personally identifiable information. As a part of conducting business, we receive, transmit and store a large volume of personally identifiable information and other user data either on our network or in the cloud.

Cybersecurity risks for banking institutions have increased significantly in recent years due to new technologies, the reliance on technology to conduct financial transactions and the increased sophistication of organized crime and hackers. A cybersecurity attack, information security breach, phishing or other social engineering could adversely impact our ability to conduct business due to the potential costs for remediation, protection and litigation and reputational damage with customers, business partners and investors. There are myriad federal, state, local and international laws regarding privacy and the storing, sharing, use, disclosure and protection of personally identifiable information and user data. We have policies and processes in place that are intended to meet the requirements of those laws, including security systems to prevent unauthorized access to that information. Nevertheless, those processes and systems may be inadequate. Also, to the extent we rely upon third parties to handle personally identifiable data on our behalf, we may be responsible if such data is compromised or subject to a cybersecurity attack while in the custody and control of those third parties.

Privacy laws are continually evolving and many state and local jurisdictions have laws that differ from federal law or privacy policies, further some of those policies or laws may conflict. For example, California's Consumer Privacy Act (CCPA), which went into effect in January 2020, provides consumers with the right to know what personal data is being collected, know whether their personal data is sold or disclosed and to whom and opt out of the sale of their personal data, among other rights. If we fail to comply with applicable privacy policies or federal, state, local or international laws and regulations or experience any compromise of security that results in the unauthorized release of personally identifiable information or other user data, those events could damage the reputation of our business, and discourage potential users from utilizing our products and services. In addition, insurance may not cover the cost of mitigating identity theft concerns, and may be subject to fines or legal proceedings by governmental agencies or consumers. Any of these events could adversely affect our business and financial condition.

We may be terminated as a servicer or subservicer 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.

Servicing revenue makes up approximately 15 percent of our total revenue and contributed approximately $3.8 billion in average custodial deposits during 2019. At December 31, 2019, we had relationships with 7 owners of MSRs, excluding ourselves, three for which we act as servicer and four for which we act as subservicer for the mortgage loans they own. Due to the limited number of relationships, discontinuation of existing agreements with those third parties or adverse changes in contractual terms could have a significant negative impact to our mortgage servicing revenue. The terms and conditions in which a master servicer may terminate subservicing contracts are broad and could be exercised at the discretion of the master servicer without requiring cause. Additionally, the master servicer directs the oversight of custodial deposits associated with serviced loans and, to the extent allowable, could choose to transfer the oversight of the Bank's custodial deposits to another depository institution. Further, as servicer or subservicer of loans, we have certain contractual obligations, including foreclosing on defaulted mortgage loans or, to the extent applicable, considering alternatives to foreclosure. If we commit a material breach of our obligations as servicer, we may be subject to termination if the breach is not cured within a specified period of time following notice, causing us to lose servicing income.

We may be required to repurchase mortgage loans, pay fees or indemnify buyers against losses.

When mortgage loans are sold by us, we make customary representations and warranties to purchasers, guarantors and insurers, including the Agencies, about the mortgage loans, and the manner in which they were originated. Whole loan sale agreements may require us to repurchase or substitute mortgage loans, or indemnify buyers against losses, in the event we breach these representations or warranties. In addition, we may be required to repurchase mortgage loans as a result of early payment default of the borrower or we may be required to pay fees. We may also be subject to litigation relating to these representations and warranties which may result in significant costs. With respect to loans that are originated through our broker or correspondent channels, the remedies we have available against the originating broker or correspondent, if any, may not be as broad as the remedies available to purchasers, guarantors and insurers of mortgage loans against us. We also face further risk that the originating broker or correspondent, if any, may not have the financial capacity to perform remedies that otherwise may be available. Therefore, if a purchaser, guarantor or insurer enforces its remedies against us, we may not be able to recover losses from the originating broker or correspondent. If repurchase and indemnity demands increase and such demands are valid claims, our liquidity, results of operations and financial condition may also be adversely affected.

For certain investors and/or certain transactions, we may be contractually obligated to repurchase a mortgage loan or reimburse the investor for credit or other losses incurred on the loan as a remedy for servicing errors with respect to the loan. If we have increased repurchase obligations because of claims for which we did not satisfy our obligations, or increased loss severity on such repurchases, we may have a significant reduction to noninterest income or an increase to noninterest expense. We may incur significant costs if we are required to, or if we elect to, re-execute or re-file documents or take other action in our capacity as a servicer in connection with pending or completed foreclosures. We may incur litigation costs if the validity of a foreclosure action is challenged by a borrower. Any of these actions may harm our reputation or negatively affect our servicing business and, as a result, our profitability.

Our representation and warranty reserve, which is based on an estimate of probable future losses, was $5 million at December 31, 2019 with a pipeline of $8 million. The pipeline represents the UPB for loans the Agencies identified as potentially needing to be repurchased and the estimated probable loss associated with these loans is included in the R&W reserve. While we believe the level of the reserve to be appropriate, the reserve may not be adequate to cover losses for loans that we have sold or securitized for which we may be subsequently required to repurchase, pay fines or fees, or indemnify purchasers and insurers because of violations of customary representations and warranties and the pipeline could increase substantially without warning. Our regulators, as part of their supervisory function, may review our representation and warranty reserve for losses. Our regulators may recommend or require us to increase our reserve, based on their judgment, which may differ from that of our management.

We utilize third party mortgage originators which subjects us to strategic, reputation, compliance and operational risk.

In 2019, approximately 79 percent of our residential first mortgage volume dependent upon the use of third party mortgage originators, i.e. mortgage brokers and correspondent lenders, who are not our employees. These third parties originate mortgages or provide services to many different banks and other entities. Accordingly, they may have relationships with, or loyalties to, such banks and other parties that are different from those they have with or to us. Failure to maintain good relations with such third party mortgage originators could have a negative impact on our market share which would negatively impact our results of operations.

We rely on third party mortgage originators to originate and document the mortgage loans we purchase or originate. While we perform due diligence on the mortgage companies with whom we do business and review the loan files and loan documents we purchase to attempt to detect any irregularities or legal noncompliance, we have less control over these originators than employees of the Bank.

Due to regulatory scrutiny, our third party mortgage originators could choose or be required to either reduce the scope of their business or exit the mortgage origination business altogether. The TILA-RESPA Integrated Disclosure Rule issued by the CFPB establishes comprehensive mortgage disclosure requirements for lenders and settlement agents in connection with most closed-end consumer credit transactions secured by real property. The rule requires certain disclosures to be provided to consumers in connection with applying for and closing on a mortgage loan. The rule also mandates the use of specific disclosure forms, timing of communicating information to borrowers and certain record keeping requirements. The ongoing administrative burden and the system requirements associated with complying with these rules or potential changes to these rules could impact our mortgage volume and increase costs. In addition, these arrangements with third party mortgage originators and the fees payable by us to such third parties could be subject to regulatory scrutiny and restrictions in the future.

The Equal Credit Opportunity Act and the Fair Housing Act, prohibit discriminatory lending practices by lenders, including financial institutions. Mortgage and consumer lending practices raise compliance risks resulting from the detailed and complex nature of mortgage and consumer lending laws and regulations imposed by federal regulatory agencies, and the relatively independent and diverse operating channels in which loans are originated. As we originate loans through various channels, we, and our third party mortgage originators, are especially impacted by these laws and regulations and are required to implement appropriate policies and procedures to help ensure compliance with fair lending laws and regulations and to avoid lending practices that result in the disparate treatment of or disparate impact to borrowers across our various locations under multiple channels. Failure to comply with these laws and regulations, by us or our third party mortgage originators, could result in the Bank being liable for damages to individual borrowers or other imposed penalties.

New lines of business, products or services may subject us to unknown risks.

From time to time, we may seek to implement new lines of business or offer new products and services within existing lines of business. There may be substantial risks and uncertainties associated with these efforts, particularly in instances where the markets are not fully developed or where there is a conflict between state and federal law. In developing and marketing new lines of business and/or new products and services, we may invest significant time and resources. Initial timetables for the introduction and development of new lines of business and/or new products or services may not be achieved, and price and profitability targets may not prove feasible, which could in turn have a material negative effect on our operating results. New lines of business and/or new products or services also could subject us to additional or conflicting legal or regulatory requirements, increased scrutiny by our regulators and other legal risks.

General Risk Factors

MP Thrift, an entity managed and controlled by MatlinPatterson, owns 36.4 percent (20,600,352 shares) of our common stock. Future issuance of Flagstar's common stock in the public market, or as a result of actions taken by MP Thrift, could adversely affect the trading price of Flagstar's common stock.

As of December 31, 2019, MP Thrift owned 36.4 percent of the Company's common stock. MP Thrift itself is indirectly owned by investment funds that are affiliates of MatlinPatterson Global Opportunities Partners III LP, a fund that was initially formed in 2007. Sales of a substantial number of shares of our common stock by existing shareholders, or the perception that sales may occur, could cause the market price of our common stock to decline. Further, a large quantity of our shares introduced into the market, either at once or over time, could increase the supply of our common stock, thereby putting pressure on our stock price. Pricing pressure could be further exacerbated by low trading volumes and market conditions, both of which may impact the time it may take for pricing to rationalize. Pursuant to the Investment Agreement between Flagstar and MP Thrift, we have granted MP Thrift registration rights for the resale of the shares of our common stock and have filed a shelf registration statement to facilitate potential future sales of shares by them. Sales of a substantial number of shares of our common stock, or the perception that such sales may occur, also may make it more difficult for us to raise additional capital by selling equity securities in the future, at a time and price that we deem appropriate.

We are subject to various legal or regulatory investigations and proceedings.

At any given time, we are involved with a number of legal and regulatory examinations as a part of the routine reviews conducted by regulators and other parties which may involve consumer protection, employment, tort, and numerous other laws and regulations. Proceedings or actions brought against us may result in judgments, settlements, fines, injunctions, business improvement orders, consent orders, supervisory agreements, restrictions on our business activities, or other results adverse to us, which could materially and negatively affect our business. If such claims and other matters are not resolved in a manner favorable to us, they may result in significant financial liability and/or adversely affect the market perception of us and our products and services, as well as impact customer demand for those products and services. Some of the laws and regulations to which we are subject may provide a private right of action that a consumer or class of consumers may pursue to enforce these laws and regulations. We have been, and may be in the future, subject to stockholder class and derivative actions, which could seek significant damages or other relief. Any financial liability or reputational damage could have a material adverse effect on our business, which, in turn, could have a material adverse effect on our financial condition and results of operations. Claims asserted against us can be highly complicated and slow to develop, making the outcome of such proceedings difficult to predict or estimate early in the process. As a participant in the financial services industry, it is likely that we will be exposed to a high level of litigation and regulatory scrutiny relating to our business and operations.

Although we establish accruals for legal proceedings when information related to the loss contingencies represented by those matters indicates both that a loss is probable and that the amount of loss can be reasonably estimated, we do not have accruals for all legal proceedings where we face a risk of loss. Due to the inherent subjectivity of the assessments and unpredictability of the outcome of legal and regulatory proceedings, amounts accrued may not represent the ultimate loss to us from the legal and regulatory proceedings in question. As a result, our ultimate losses may be significantly higher than the amounts accrued for legal loss contingencies. For further information, see Note 19 - Legal Proceedings, Contingencies and Commitments.

We may be required to pay interest on escrow in accordance with certain state laws in spite of the Federal preemption under the National Bank Act

In 2018, the Ninth Circuit Federal Court of Appeals held that California state law requiring mortgage servicers to pay interest on certain mortgage escrow accounts was not, as a matter of law, preempted by the National Bank Act (*Lusnak v. Bank of America*). This ruling goes against the position that regulators, national banks and other federally-chartered financial institutions have taken regarding the preemption of state-law mortgage escrow interest requirements. The opinion issued by the Ninth Circuit Federal Court of Appeals is legal precedent only in certain parts of the western United States. We are currently defending similar litigation in California Federal Court, arguing that the *Lusnak* case was wrongly decided, our situation can be distinguished from *Lusnak* as a matter of law, and California's interest on escrow law should be preempted as a matter of fact. If the Ninth's Circuit's holding is more broadly adopted by other Federal Circuits, including those covering states that currently have or in the future may enact statutes requiring the payment of interest on escrow balances or if we would be required to retroactively credit interest on escrow funds, the Company's earnings could be adversely affected.

Loss of certain personnel, including key members of the Corporation's management team, could adversely affect the Corporation.

We are and will continue to be dependent upon our management team and other key personnel. Losing the services of one or more key members of our management team or other key personnel could adversely affect our operations.

Other Risk Factors

The above description of risk factors is not exhaustive. Other risk factors are described elsewhere herein as well as in other reports and documents that we file with or furnish to the SEC. Other factors that could also cause results to differ from our expectations may not be described herein or in any such report or document.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Flagstar's headquarters is located in Troy, Michigan at 5151 Corporate Drive and we operate a regional office in Jackson, Michigan. We own both the headquarters and regional office buildings.

At December 31, 2019, we operated 160 bank branches in the following states:

	Owned	Leased	Total	Free-Standing Office Building	In-Store Banking Center	Buildings with Other Tenants	Total
Michigan	87	27	114	90	2	22	114
Indiana	27	6	33	31	—	2	33
California	8	—	8	8	—	—	8
Wisconsin	3	1	4	3	—	1	4
Ohio	1	—	1	1	—	—	1
Total	126	34	160	133	2	25	160

We also have 88 retail mortgage locations, 4 wholesale lending offices, and 12 commercial lending offices. These locations are primarily leased and located in 27 states.

ITEM 3. LEGAL PROCEEDINGS

From time to time, the Company is party to legal proceedings incident to its business. For further information, see Note 19 - Legal Proceedings, Contingencies and Commitments.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR THE REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

Our common stock trades on the NYSE under the trading symbol FBC. At December 31, 2019, there were 56,631,236 shares of our common stock outstanding held by 17,194 stockholders of record.

Dividends

On January 28, 2020, the Company announced that its Board increased the quarterly common stock dividend from $0.04 to $0.05, effective with the dividend to be paid March 16, 2020. The Company's dividends are subject to the Boards' approval on a quarterly basis.

Sale of Unregistered Securities

The Company made no unregistered sales of our equity securities during the quarter ended December 31, 2019.

Issuer Purchases of Equity Securities

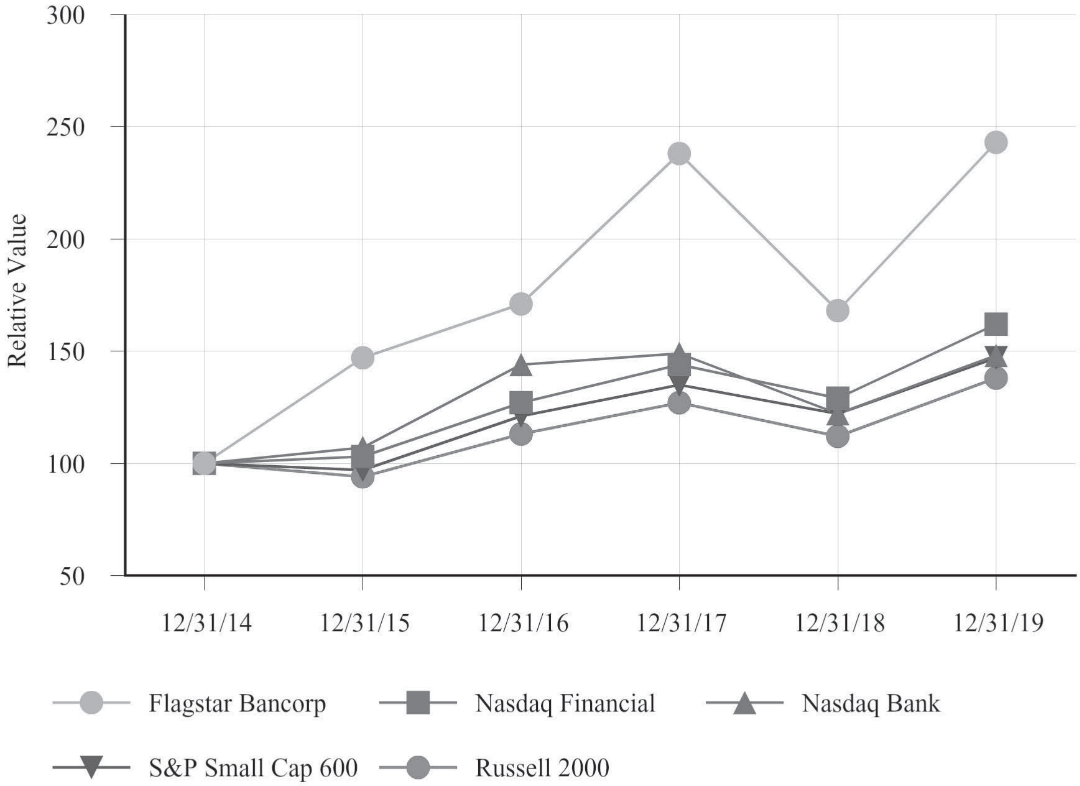
The Company made no purchases of unregistered securities during the quarter ended December 31, 2019.

Equity Compensation Plan Information

For information with respect to securities to be issued under our equity compensation plans, see Part III, Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters, which information is hereby incorporated by reference.

Performance Graph

CUMULATIVE TOTAL STOCKHOLDER RETURN
COMPARED WITH PERFORMANCE OF SELECTED INDICES
DECEMBER 31, 2014 THROUGH DECEMBER 31, 2019



	Flagstar Bancorp	Nasdaq Financial	Nasdaq Bank	S&P Small Cap 600	Russell 2000
December 31, 2014	100	100	100	100	100
December 31, 2015	147	103	107	97	94
December 31, 2016	171	127	144	121	113
December 31, 2017	238	144	149	135	127
December 31, 2018	168	129	122	122	112
December 31, 2019	243	162	148	147	138

ITEM 6. SELECTED FINANCIAL DATA

	December 31,				
	2019 (1)	2018 (2)	2017 (3)	2016 (4)	2015
Summary of Consolidated Statements of Operations					
Net interest income	$ 562	$ 497	$ 390	$ 323	$ 287
Provision (benefit) for loan losses	18	(8)	6	(8)	(19)
Noninterest income	610	439	470	487	470
Noninterest expense	888	712	643	560	536
Provision for income taxes	48	45	148	87	82
Net income from continuing operations	$ 218	$ 187	$ 63	$ 171	$ 158
Income per share:					
Basic	$ 3.85	$ 3.26	$ 1.11	$ 2.71	$ 2.27
Diluted	$ 3.80	$ 3.21	$ 1.09	$ 2.66	$ 2.24
Weighted average shares outstanding:					
Basic	56,584,238	57,520,289	57,093,868	56,569,307	56,426,977
Diluted	57,238,978	58,322,950	58,178,343	57,597,667	57,164,523

(1) Noninterest income includes $25 million ($0.35 per diluted share) of pre-tax benefit due to the reduction of the DOJ liability.
(2) Net interest income includes $29 million ($0.41 per diluted share) of pre-tax hedging gains reclassified from AOCI. Noninterest expense includes $15 million ($0.22 per diluted share) of pre-tax acquisition-related expenses related to the Wells Fargo branch acquisition.
(3) Provision for income taxes includes $80 million ($1.38 per diluted share) non-cash charge resulting from the revaluation of the Company's net deferred tax asset (DTA) at a lower statutory rate as a result of the Tax Cuts and Jobs Act.
(4) Noninterest income includes $24 million ($0.28 per diluted share) of pre-tax benefit due to the reduction of the DOJ settlement liability.

	December 31,				
	2019	2018	2017	2016	2015
	(In millions, except per share data and percentages)				
Summary of Consolidated Statements of Financial Condition					
Total assets	$ 23,266	$ 18,531	$ 16,912	$ 14,053	$ 13,715
Loans receivable, net	18,016	13,221	12,165	9,465	9,226
Total deposits	15,146	12,380	8,934	8,800	7,935
Total short-term and long-term Federal Home Loan Bank advances	4,815	3,394	5,665	2,980	3,541
Long-term debt	496	495	494	493	247
Stockholders' equity (1)	1,788	1,570	1,399	1,336	1,529
Book value per common share	31.57	27.19	24.40	23.50	22.33
Tangible book value per share (2)	28.57	23.90	24.04	23.50	22.33
Number of common shares outstanding	56,631,236	57,749,464	57,321,228	56,824,802	56,483,258

(1) Includes preferred stock totaling $267 million for the year ended December 31, 2015.
(2) Excludes goodwill and intangibles of $170 million, $190 million, and $21 million for the years ended December 31, 2019, December 31, 2018, and December 31, 2017 respectively. See Non-GAAP Financial Measures for further information.

	At or For the Years Ended December 31,				
	2019	2018	2017	2016	2015
	(In millions, except share data and percentages)				
Average Balances:					
Average interest-earning assets	$ 18,453	$ 16,136	$ 14,130	$ 12,164	$ 10,436
Average interest paying liabilities	$ 13,130	$ 13,124	$ 11,848	$ 9,757	$ 8,305
Average stockholders' equity	$ 1,695	$ 1,488	$ 1,433	$ 1,464	$ 1,486
Selected Ratios:					
Interest rate spread (1)	2.52%	2.81%	2.56%	2.45%	2.58%
Adjusted interest rate spread (1)(2)	2.52%	2.58%	2.56%	2.45%	2.58%
Net interest margin	3.05%	3.07%	2.75%	2.64%	2.74%
Adjusted net interest margin (2)	3.05%	2.89%	2.75%	2.64%	2.74%
Return on average assets	1.05%	1.04%	0.40%	1.23%	1.32%
Adjusted return on average assets (2)(3)	0.96%	0.98%	0.90%	1.11%	1.32%
Return on average equity	12.84%	12.58%	4.40%	11.69%	10.63%
Return on average common equity	12.84%	12.58%	4.40%	13.00%	10.49%
Return on average tangible common equity (3)	15.15%	13.46%	4.44%	11.68%	10.63%
Adjusted return on average tangible common equity (2) (3)	13.87%	12.67%	10.07%	10.59%	10.63%
Common equity-to-assets ratio	7.68%	8.47%	8.27%	9.50%	9.20%
Equity/assets ratio (average for the period)	8.20%	8.28%	9.05%	10.52%	12.43%
Efficiency ratio	75.8%	76.0%	74.8%	69.2%	70.9%
Bancorp Tier 1 leverage (to adjusted avg. total assets) (4)	7.57%	8.29%	8.51%	8.88%	11.51%
Bank Tier 1 leverage (to adjusted avg. total assets) (4)	7.71%	8.67%	9.04%	10.52%	11.79%
Effective tax provision rate (5)	18.1%	19.4%	70.1%	33.7%	34.2%
Dividend payout ratio	4.2%	—%	—%	—%	—%

(1) Interest rate spread is the difference between the yield earned on average interest-earning assets for the period and the rate of interest paid on average interest-bearing liabilities.
(2) Includes $29 million of pre-tax hedging gains reclassified from AOCI.
(3) Excludes goodwill, intangible assets net of amortization and Non-GAAP adjustments for DOJ, hedge gain reclassified from AOCI and acquisition costs. See Non-GAAP Reconciliation for further information.
(4) Basel III transitional.
(5) The year ended December 31, 2017 includes an $80 million, non-cash charge to the provision for income taxes resulting from the revaluation of the Company's net deferred tax asset (DTA) at a lower statutory rate as a result of the Tax Cuts and Jobs Act.

	At or For the Years Ended December 31,				
	2019	2018	2017	2016	2015
	(In millions, except share data and percentages)				
Selected Statistics:					
Mortgage rate lock commitments (fallout-adjusted) (1)	$ 32,322	$ 30,308	$ 32,527	$ 29,372	$ 25,511
Mortgage loans originated	$ 32,720	$ 32,465	$ 34,408	$ 32,417	$ 29,368
Mortgage loans sold and securitized	$ 30,330	$ 32,076	$ 32,493	$ 32,033	$ 26,307
Number of bank branches	160	160	99	99	99
Number of FTE employees	4,453	3,938	3,525	2,886	2,713

(1) Fallout-adjusted mortgage rate lock commitments are adjusted by a percentage of mortgage loans in the pipeline that are not expected to close based on previous historical experience, the level of interest rates and other factors.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following is Management's Discussion and Analysis of the financial condition and results of operations of Flagstar Bancorp, Inc. for the year ended December 31, 2019. This should be read in conjunction with our Consolidated Financial Statements and related notes filed with this report in Part II, Item 8. Financial Statements and Supplementary Data.

Results of Operations

The following table summarizes our results of operations for the periods indicated:

	For the Years Ended December 31,				
	2019	2018	2017	Change 2019 vs. 2018	Change 2018 vs. 2017
	(Dollars in millions)				
Net interest income	$ 562	$ 497	$ 390	$ 65	$ 107
Provision (benefit) for loan losses	18	(8)	6	26	(14)
Total noninterest income	610	439	470	171	(31)
Total noninterest expense	888	712	643	176	69
Provision for income taxes	48	45	148	3	(103)
Net income	$ 218	$ 187	$ 63	$ 31	$ 124
Adjusted net income (1)	$ 199	$ 176	$ 143	$ 23	$ 33
Income per share:					
Basic	$ 3.85	$ 3.26	$ 1.11	$ 0.59	$ 2.15
Diluted	$ 3.80	$ 3.21	$ 1.09	$ 0.59	$ 2.12
Adjusted diluted (1)	$ 3.46	$ 3.02	$ 2.47	$ 0.44	$ 0.55

(1) For further information, see MD&A - Use of Non-GAAP Financial Measures.

Overview

The year ended December 31, 2019 resulted in net income of $218 million, or $3.80 per diluted share, and adjusted net income of $199 million or $3.46 per diluted share when excluding the DOJ benefit. These results compare to 2018 net income of $187 million, or $3.21 per diluted share, and adjusted net income of $176 million, or $3.02 per diluted share, when excluding acquisition expenses of $13 million and the related hedging gains of $24 million, both net of taxes. All three of our operating segments reported improved results in 2019 with well-balanced revenue streams driving 47 percent of our revenues in net interest income and 53 percent in non-interest income.

On an adjusted basis, 2019 annual net income grew 13 percent compared to the prior year driven by an increase in gain on sale of $135 million as a result of a $2 billion increase in fall out adjusted locks along with a 37 basis point increase in margin which was supported by our continued focus on price discipline, combined with efforts to optimize channel mix, volume and margin. We also grew our interest earning assets by $2.3 billion, or 14 percent, in 2019 with growth in our commercial held for investment portfolio of $2.2 billion or 43 percent and growth in our consumer and loans held-for-sale portfolio of $2.3 billion. This loan growth was supported by the low cost deposits acquired through our 2018 branch acquisitions which drove a $1.5 billion increase in average total retail deposits. This growth resulted in 13 percent higher net interest income despite margin compression caused by the Federal Reserve three rate cuts during the year ended December 31, 2019 impacting our asset sensitive position as a result of 2018 branch acquisitions. We also continued to grow our subservicing business, increasing the number of loans serviced or sub-serviced by 239,673 or 28 percent during the 12 months ended December 31, 2019, ending the fourth quarter of 2019 at 1.1 million accounts. This growth drove a 70 percent increase in the mortgage servicing segment revenue which resulted in 2019 being profitable with segment net income of $25 million as compared to a loss of $6 million in 2018. The servicing business also generates custodial deposits which are used to support loan growth or as an alternative funding source, which have increased $2.4 billion for the twelve months ended December 31, 2019 compared to the twelve months ended December 31, 2018.

Net Interest Income

The following table presents details on our net interest margin and net interest income on a consolidated basis:

	For the Years Ended December 31,								
	2019			2018			2017		
	Average Balance	Interest	Average Yield/ Rate	Average Balance	Interest	Average Yield/ Rate	Average Balance	Interest	Average Yield/ Rate
	(Dollars in millions)								
Interest-Earning Assets									
Loans held-for-sale	$ 3,952	$ 170	4.30%	$ 4,196	$ 190	4.52 %	$ 4,146	$ 165	3.99%
Loans held-for-investment									
Residential first mortgage	3,173	115	3.61%	2,949	105	3.56 %	2,549	85	3.35%
Home equity	871	46	5.31%	690	36	5.21 %	471	24	5.06%
Other	566	36	6.33%	111	6	5.73 %	26	1	4.51%
Total Consumer loans	4,610	197	4.26%	3,750	147	3.93 %	3,046	110	3.62%
Commercial Real Estate	2,502	136	5.38%	2,063	109	5.23 %	1,579	68	4.25%
Commercial and Industrial	1,708	88	5.10%	1,288	69	5.32 %	981	47	4.73%
Warehouse Lending	2,112	107	4.99%	1,318	69	5.14 %	890	43	4.73%
Total Commercial loans	6,322	331	5.17%	4,669	247	5.23 %	3,450	158	4.51%
Total loans held-for-investment (1)	10,932	528	4.79%	8,419	394	4.65 %	6,496	268	4.09%
Loans with government guarantees	553	15	2.66%	303	11	3.53 %	290	13	4.30%
Investment securities	2,845	77	2.71%	3,094	86	2.76 %	3,121	80	2.57%
Interest-earning deposits	171	4	2.35%	124	2	1.83 %	77	1	1.15%
Total interest-earning assets	$ 18,453	$ 794	4.28%	$ 16,136	$ 683	4.21 %	$ 14,130	$ 527	3.71%
Other assets	2,221			1,844			1,716		
Total assets	$ 20,674			$ 17,980			$ 15,846		
Interest-Bearing Liabilities									
Retail deposits									
Demand deposits	$ 1,345	$ 11	0.77%	$ 764	$ 7	0.93 %	$ 514	$ 1	0.19%
Savings deposits	3,220	36	1.13%	3,300	29	0.87 %	3,829	29	0.76%
Money market deposits	736	2	0.32%	288	2	0.49 %	255	1	0.50%
Certificates of deposit	2,536	59	2.31%	2,015	34	1.70 %	1,187	14	1.18%
Total retail deposits	7,837	108	1.37%	6,367	72	1.12 %	5,785	45	0.78%
Government deposits	1,186	17	1.46%	1,149	14	1.23 %	957	6	0.67%
Wholesale deposits and other	554	13	2.36%	401	8	2.02 %	23	—	1.35%
Total interest-bearing deposits	9,577	138	1.44%	7,917	94	1.18 %	6,765	51	0.77%
Short-term FHLB advances and other	2,633	59	2.23%	3,521	68	1.93 %	3,356	37	1.09%
Long-term FHLB advances	425	7	1.59%	1,192	(4)	(0.32)%	1,234	24	1.92%
Less: Swap gain reclassified out of OCI (5)	—	—		—	29		—	—	
Adjusted long-term FHLB advances (5)		7	1.59%		25	2.12 %		24	1.92%
Other long-term debt	495	28	5.65%	494	28	5.56 %	493	25	5.08%
Adjusted total interest-bearing liabilities (5)	$ 13,130	$ 232	1.76%	$ 13,124	$ 215	1.63 %	$ 11,848	$ 137	1.15%
Noninterest-bearing deposits									
Retail deposits and other	1,291			1,066			698		
Custodial deposits	3,839			1,792			1,444		
Total non-interest bearing deposits (2)	5,130			2,858			2,142		
Other liabilities	719			510			423		
Stockholders' equity	1,695			1,488			1,433		
Total liabilities and stockholders' equity	$ 20,674			$ 17,980			$ 15,846		
Net interest-earning assets	$ 5,323			$ 3,012			$ 2,282		
Adjusted net interest income (5)		$ 562			$ 468			$ 390	
Adjusted interest rate spread (3)(5)			2.52%			2.58 %			2.56%
Adjusted net interest margin (4)(5)			3.05%			2.89 %			2.75%
Ratio of average interest-earning assets to interest-bearing liabilities			140.5%			122.9 %			119.3%
Total average deposits	$ 14,708			$ 10,775			$ 8,907		

(1) Includes nonaccrual loans, for further information relating to nonaccrual loans, see Note 1 - Description of Business, Basis of Presentation, and Summary of Significant Accounting Policies.
(2) Includes noninterest-bearing custodial deposits that arise due to the servicing of loans for others.
(3) Interest rate spread is the difference between rates of interest earned on interest earning assets and rates of interest paid on interest-bearing liabilities.
(4) Net interest margin is net interest income divided by average interest earning assets.
(5) The year ended December 31, 2018, excludes $29 million of hedging gains reclassified from AOCI in conjunction with the payment of long-term FHLB advances. See Non-GAAP Financial Measures for further information.

The following tables present the dollar amount of changes in interest income and interest expense for the components of interest-earning assets and interest-bearing liabilities. The table distinguishes between the changes related to average outstanding balances (changes in volume while holding the initial rate constant) and the changes related to average interest rates (changes in average rates while holding the initial balance constant). The rate/volume variances are allocated to rate.

	For the Years Ended December 31,					
	2019 Versus 2018 Increase (Decrease) Due to:			2018 Versus 2017 Increase (Decrease) Due to:		
	Rate	Volume	Total	Rate	Volume	Total
	(Dollars in millions)			(Dollars in millions)		
Interest-Earning Assets						
Loans held-for-sale	$ (9)	$ (11)	$ (20)	$ 23	$ 2	$ 25
Loans held-for-investment						
Residential first mortgage	2	8	10	8	12	20
Home equity	1	9	10	2	10	12
Other	4	26	30	2	3	5
Total Consumer loans	7	43	50	12	25	37
Commercial Real Estate	4	23	27	24	17	41
Commercial and Industrial	(3)	22	19	9	13	22
Warehouse Lending	(3)	41	38	8	18	26
Total Commercial loans	(2)	86	84	41	48	89
Total loans held-for-investment	5	129	134	53	73	126
Loans with government guarantees	(5)	9	4	(4)	2	(2)
Investment securities	(2)	(7)	(9)	7	(1)	6
Interest-earning deposits	1	1	2	—	1	1
Total interest-earning assets	$ (10)	$ 121	$ 111	$ 79	$ 77	$ 156
Interest-Bearing Liabilities						
Interest-bearing deposits	$ 24	$ 20	$ 44	$ 39	$ 4	$ 43
Short-term FHLB advances and other	8	(17)	(9)	31	—	31
Long-term FHLB advances (1)	(2)	(16)	(18)	3	(2)	1
Other long-term debt	—	—	—	2	1	3
Total interest-bearing liabilities (1)	30	(13)	17	75	3	78
Change in net interest income (1)	$ (40)	$ 134	$ 94	$ 4	$ 74	$ 78

(1) The year ended December 31, 2018, excludes $29 million of hedging gains reclassified from AOCI in conjunction with the payment of long-term FHLB advances. See Non-GAAP Financial Measures for further information.

2019 Compared to 2018

- Net interest income increased $65 million, or $94 million, for the year ended December 31, 2019 when excluding the $29 million hedging gain that occurred in 2018. The increase of 20.1 percent compared to adjusted 2018, was driven by well balanced growth in average interest-earning assets. This growth was supported by a $1.7 billion increase in interest and noninterest-bearing retail deposits which resulted in 35 percent lower FHLB advances.

- Net interest margin expanded 16 basis points to 3.05 percent, as compared to an adjusted rate of 2.89 percent in 2018, despite three rate cuts in the second half of the year. This margin expansion was primarily attributable to a reduction in funding costs driven by growth in retail deposits resulting from the branch acquisition executed in late 2018 and higher custodial balances from the growth in serviced and subserviced loans.

- Average interest-earnings assets increased $2.3 billion due to growth in the LHFI portfolio, partially offset by a decrease in LHFS average balances. Average commercial loans increased $1.7 billion driven by balanced growth across the CRE, C&I and warehouse portfolios. The consumer loan portfolio increased $0.9 billion, as we continue to add high-quality non-auto indirect loans and HELOCs to the portfolio. The LHFS portfolio decreased $0.2 billion as we managed the LHFS portfolio lower in the first half of the year to facilitate higher returning asset growth.

- Average interest-bearing liabilities were flat, due to a $1.7 billion increase in average interest-bearing deposits driven by deposits acquired in branch acquisitions that closed in 2018, partially offset by $1.7 billion reduction in FHLB advances. Asset growth was further supported by $2.0 billion higher custodial average balances as we continue to successfully grow our subservicing business.

2018 Compared to 2017

- For the year ended December 31, 2018, net interest income increased $107 million, or $78 million when excluding a $29 million hedging gain, compared to the same period in 2017. The increase was primarily driven by growth in average interest earning assets, led by increases in our higher yielding commercial loan portfolio, and a 14 basis point increase in net interest margin.

- Our net interest margin for the year ended December 31, 2018 was 2.89 percent, compared to 2.75 percent for the year ended December 31, 2017. The increase in net interest margin was primarily due to growth in our commercial loan portfolio, partially offset by higher average rates on deposits. Loans-held-for-investment saw a 56 basis point increase in average yield, primarily due to higher yields on our commercial loans, driven by increases in LIBOR rates during 2018. In comparison, our interest bearing deposit costs increased 41 basis points, representing a deposit beta of 41 percent, which is the change in the annualized rate of our deposits divided by the change in the Federal Reserve discount rate. The average yield on our LHFI portfolio, influenced by our variable rate commercial loan portfolio, was more responsive to changes in market rates than our deposit costs. Deposit costs increased due to higher rates and an increase in use of wholesale deposits. Wholesale deposits, which experienced a rate increase of 61 basis points, were primarily utilized as an additional funding source prior to the acquisition of the deposits from Wells Fargo.

- Average interest-earnings assets increased $2.0 billion for the year ended December 31, 2018, compared to the same period in 2017, primarily due to growth in the LHFI portfolio. Average commercial loans increased $1.2 billion with broad based growth across CRE, C&I, and the warehouse loan portfolios. We continued to grow CRE and C&I loans, and the acquisition of the warehouse lending business in the first quarter of 2018 increased average warehouse loans $493 million during the year. The consumer loan portfolio increased $704 million, primarily due to the addition of residential first mortgages and HELOCs to the LHFI portfolio.

- Average interest-bearing liabilities increased $1.3 billion for the year ended December 31, 2018, compared to the full year in 2017, primarily due to a $1.2 billion increase in interest bearing deposits. The increase in average deposits is primarily attributable to the California branch acquisition, which impacted the full year average by $478 million, and one month of deposits from our Q4 2018 branch acquisition, which impacted the full year average by $147 million. Average wholesale deposits increased $378 million, primarily to provide additional funding prior to the acquisition of the Wells Fargo deposits.

Provision (Benefit) for Loan Losses

2019 Compared to 2018

The provision for loan losses was $18 million for the year ended December 31, 2019, compared to a benefit of $8 million for the year ended December 31, 2018. The $26 million increase is primarily due to strong credit quality evidenced by low levels of delinquency and charge-offs which was more than offset by the Live Well loan net charge-off, which was fully resolved in the third quarter 2019.

2018 Compared to 2017

The provision for loan losses was a benefit of $8 million for the year ended December 31, 2018, compared to a provision of $6 million for the year ended December 31, 2017. The improvement in the provision reflected our continued strong credit quality with consistently low levels of charge-offs, low delinquencies, and growth of the portfolio in areas we believed to pose lower levels of credit risk.

For further information, see MD&A - Credit Risk.

Noninterest Income

The following tables provide information on our noninterest income along with other mortgage metrics:

	For the Years Ended December 31,		
	2019	2018	2017
	(Dollars in millions)		
Net gain on loan sales	$ 335	$ 200	$ 268
Loan fees and charges	100	87	82
Net return on mortgage servicing rights	6	36	22
Loan administration income	30	23	21
Deposit fees and charges	38	21	18
Other noninterest income	101	72	59
Total noninterest income	$ 610	$ 439	$ 470

	For the Years Ended December 31,		
	2019	2018	2017
	(Dollars in millions)		
Mortgage rate lock commitments (fallout-adjusted) (1)	$ 32,322	$ 30,308	$ 32,527
Mortgage loans originated	$ 32,720	$ 32,465	$ 34,408
Net margin on mortgage rate lock commitments (fallout-adjusted) (1) (2)	1.03%	0.65%	0.82%
Net margin on loans sold and securitized	1.10%	0.62%	0.83%

(1) Fallout adjusted refers to mortgage rate lock commitments adjusted by a percentage of mortgage loans in the pipeline that are not expected to close based on previous historical experience and interest rates.

(2) Gain on sale margin is based on net gain on loan sales (excludes net gain on loan sales of $2 million, $2 million, and $2 million from loans transferred from HFI for the years ended December 31, 2019, December 31, 2018 and December 31, 2017, respectively) to fallout-adjusted mortgage rate lock commitments.

2019 Compared to 2018

Total noninterest income increased $171 million during the year ended December 31, 2019 from the year ended December 31, 2018, primarily due to the following:

- Net gain on loan sales increased $135 million, driven by a 2.0 billion higher fallout-adjusted locks and a 38 basis point improvement in gain on sale margin. The favorable market conditions drove an estimated increase in the origination market of approximately 30 percent, which was the catalyst behind a 7 percent increase in fallout-adjusted locks during the same time period. The gain on sale margin expansion resulted from a focus on price discipline, combined with efforts to optimize volume and margin coupled with improved mortgage market conditions.

- Other noninterest income increased $29 million, primarily due to the DOJ liability fair value adjustment of $25 million in the second quarter of 2019, along with higher fee-based income generated on our commercial loan portfolio.

- Deposit fees and charges increased $17 million, driven by growth in our customer and deposit base as a result of our 2018 branch acquisitions.

- Net loan fees and charges increased $13 million, primarily due to higher subservicing ancillary fees driven by an increase of approximately 425,000 loans being serviced or subserviced and shift in channel mix from correspondent to retail which generates higher fee income.

- Loan administration income increased $7 million, primarily due to growth in the average number of subserviced loans, partially offset by higher charges on custodial deposits from an increase in serviced and subserviced accounts and refinance activity.

- Net return on MSRs, including the impact of hedges, decreased $30 million.

2018 Compared to 2017

Total noninterest income decreased $31.0 million during the year ended December 31, 2018 from the year ended December 31, 2017, primarily due to the following:

- Net gain on loan sales decreased $68 million. Lower mortgage origination volume and pricing competition experienced in the mortgage market throughout 2018 impacted both net gain on loan sale margin, which decreased 17 basis points, and fall-out adjusted lock volume which decreased $2.2 billion. The full year 2018 saw the benefit of our 2017 delegated correspondent lending and retail lending related acquisitions, which provided a boost to fall-out adjusted lock volume in those channels. The lower margin was primarily driven by secondary margin compression and a shift in channel mix toward the lower margin, but lower cost delegated correspondent channel, partially offset by an improvement in securitization performance. Our total fall-out adjusted lock volume decreased 6.8 percent, despite the 8.3 percent decline in the overall mortgage origination market experienced during 2018.

- Net return on MSRs, including the impact of hedges, increased $14 million, primarily due to higher net return from the MSR asset resulting from lower prepayments and stronger valuations, along with a higher average MSR balance.

- Other noninterest income increased $13 million, primarily due to higher FHLB stock dividend income attributable to an increase in FHLB stock holdings and a supplemental dividend from the FHLB received in the first quarter of 2018, higher rental income within the equipment finance operating lease portfolio, an increase in investment and insurance income and a gain from the sale of our wealth management business.

Noninterest Expense

The following table sets forth the components of our noninterest expense:

	For the Years Ended December 31,				
	2019	2018	Branch Acquisition Expenses	Adjusted 2018 (1)	2017
	(Dollars in millions)				
Compensation and benefits	$ 377	$ 318	$ 3	$ 315	$ 299
Occupancy and equipment	161	127	3	124	103
Commissions	111	80	—	80	72
Loan processing expense	80	59	—	59	57
Legal and professional expense	27	28	3	25	30
Federal insurance premiums	20	22	—	22	16
Intangible asset amortization	15	5	—	5	—
Other noninterest expense	97	73	6	67	66
Total noninterest expense (1)	$ 888	$ 712	$ 15	$ 697	$ 643

(1) See Non-GAAP Financial Measures for further information.

	For the Years Ended December 31,		
	2019	2018	2017
Efficiency ratio	75.8%	76.0%	74.8%
Average number FTE	4,157	3,655	3,303

2019 Compared to 2018

Total noninterest expense increased $176 million during the year ended December 31, 2019, compared to the year ended December 31, 2018. Excluding the $15 million 2018 expenses directly related to the branch acquisitions, adjusted noninterest expense increased $191 million, primarily due to the following:

- Compensation and benefits expense increased $62 million, primarily due to higher average FTE driven by our 2018 banking acquisitions and integration of default servicing during the fourth quarter of 2019, including an additional 400 and 170 FTE respectively.

- Occupancy and equipment and other noninterest expense increased $37 million and $30 million, respectively, primarily due growth in our community banking business as a result of acquisitions, growth in our servicing business and a shift toward our retail mortgage origination channel which results in higher commission expense.
- Commission expense increased $31 million, primarily driven from an increase in retail originations supporting higher gain on sale and the achievement of performance hurdles resulting in higher payout rates.
- Loan processing expense increased $21 million, primarily due to an increase in retail originations supporting higher fee-based income and higher subservicing expenses resulting from growth in our subservicing business.
- Intangible asset amortization increased $10 million, due to intangible assets associated with our 2018 acquisitions.

2018 Compared to 2017

Total noninterest expense increased $69 million during the year ended December 31, 2018 from the year ended December 31, 2017, primarily due to the following:

- Compensation and benefits expense increased $16 million, primarily due to a higher headcount resulting from acquisitions and growth in our community bank, partially offset by cost management and lower incentive compensation.
- Occupancy and equipment increased $21 million, primarily due to a higher average depreciable asset base resulting from technology upgrades and software, along with increases in vendor services to support business growth.
- Commission expense increased $8 million, primarily due to an increase in originations in the higher commission earning retail channel, driven from the acquisition of Opes in 2017.
- Legal and professional expense decreased $5 million, primarily due to fewer significant legal matters in 2018 and higher acquisition related expenses in 2017.
- FDIC insurance premiums increased $6 million, primarily driven by growth in our total assets.
- Intangible asset amortization increased to $5 million, primarily due to the amortization of the intangible assets associated with our 2018 banking acquisitions.
- Other noninterest expense increased $1 million, primarily due to increases in advertising expense to raise brand awareness and charitable contributions, primarily offset by a reduction in the value of a contingent consideration.

Provision for Income Taxes

2019 Compared to 2018

Our provision for income taxes for the year ended December 31, 2019 was $48 million, compared to a provision of $45 million for the year ended December 31, 2018. The Company's effective tax rate for the year ended December 31, 2019 was 18.1 percent. Our effective tax rate differs from the combined federal and state statutory rate primarily due to a change in our valuation allowance for net deferred tax assets at the state level, tax exempt earnings, tax credits and benefits from stock based compensation.

2018 Compared to 2017

Our provision for income taxes for the year ended December 31, 2018 was $45 million, compared to a provision of $148 million for the year ended December 31, 2017. The increase in the provision for income taxes is primarily due to the change related to the revaluation of deferred tax assets during the fourth quarter of 2017 due to the passage of new tax legislation. The Company's effective tax rate for the year ended December 31, 2018 was 19.4 percent. Our effective tax rate differs from the combined federal and state statutory rate primarily due to the change in our valuation allowance for net deferred tax assets, tax exempt earnings and stock based compensation.

For further information, see Note 17 - Income Taxes.

Fourth Quarter Results

The following table sets forth selected quarterly data:

	Three Months Ended		
	December 31, 2019	**September 30, 2019**	**December 31, 2018**
	(Unaudited)	(Unaudited)	(Unaudited)
		(Dollars in millions)	
Net interest income	$ 152	$ 146	$ 152
Provision (benefit) for loan losses	—	1	(5)
Noninterest income	162	171	98
Noninterest expense	245	238	189
Provision for income taxes	11	15	12
Net income	58	63	54
Adjusted net income (1)	$ 58	$ 63	$ 42
Income per share:			
Basic	$ 1.01	$ 1.12	$ 0.94
Diluted	$ 1.00	$ 1.11	$ 0.93
Adjusted diluted (1)	$ 1.00	$ 1.11	$ 0.72

(1) For further information, see MD&A - Use of Non-GAAP Financial Measures.

Fourth Quarter 2019 compared to Third Quarter 2019

Net income for the three months ended December 31, 2019 was $58 million, or $1.00 per diluted share, as compared to $63 million, or $1.11 per diluted share, for the three months ended September 30, 2019. The $5 million decrease in net income was primarily due to the following:

- Net interest income rose $6 million, or 4 percent, reflecting a 9 percent increase in average earning assets, fueled by growth in loans held-for-sale, warehouse and commercial real estate loans.

- Noninterest income decreased $9 million, or 5 percent, to $162 million in the fourth quarter 2019, as compared to $171 million for the third quarter 2019, primarily due to lower net gain on loan sales. In the fourth quarter of 2019 loan sale margin expanded 3 basis points to 1.23 percent, as compared to 1.20 percent for the third quarter 2019 however, fallout-adjusted locks decreased 11 percent to $8.2 billion, reflecting seasonal factors which were partially offset by the continued strength of the mortgage environment due to the benefit of lower rates or refinancing volume.

- Noninterest expense increased to $245 million for the fourth quarter 2019, as compared to $238 million for the third quarter 2019, primarily reflecting $5 million of higher balance sheet write-downs and discretionary expenses, such as fixed asset write downs, costs related to the secondary offering and a donation to the Flagstar Foundation.

Fourth Quarter 2019 compared to Fourth Quarter 2018

Net income for the three months ended December 31, 2019 was $58 million, or $1.00 per diluted share, as compared to a net income of $42 million, or $0.93 per diluted share, for the three months ended December 31, 2018.

- Net interest income of $152 million in Q4 2019 was consistent with Q4 2018 however, 2018 included the recognition of $29 million hedging gains in conjunction with the Wells Fargo branch acquisition. Excluding hedging gains, net interest income grew $29 million driven by growth in interest earning assets across our warehouse, consumer and commercial loan portfolios.

- Noninterest income increased $64 million, primarily due to higher net gain on loan sales driven by a $2.9 billion increase in FOALs in Q4 2019 compared to Q4 2018 supported by the favorable mortgage environment. Our 1.23 percent gain on sale margin in the fourth quarter 2019 was also more than double the fourth quarter 2018 rate of 0.60 percent driven by a focus on higher margin sales channels and favorable secondary execution.

- Noninterest expense increased $56 million, primarily due to an increase of $20 million in compensation and benefits, $19 million in commissions and $7 million in occupancy and equipment. The compensation and benefits increase was primarily driven by higher FTEs while higher volume and commission rates in our retail mortgage channels drove the commission expense increase. The occupancy and equipment increase was driven by growth in our operations in 2019.

Operating Segments

Our operations are conducted through three operating segments: Community Banking, Mortgage Originations, and Mortgage Servicing. The Other segment includes the remaining reported activities. The operating segments have been determined based on the products and services offered and reflect the manner in which financial information is currently evaluated by management. Each of the operating segments is complementary to each other and because of the interrelationships of the segments, the information presented is not indicative of how the segments would perform if they operated as independent entities.

This section should be read in conjunction with Note 21 - Segment Information.

Community Banking

Our Community Banking segment services commercial, governmental and consumer customers in our banking footprint which spans throughout Michigan, Indiana, California, Wisconsin, Ohio and contiguous states. We also serve home builders, correspondents, and certain other commercial customers on a national basis. The Community Banking segment originates loans, and provides deposit and fee based services to consumer, business, and mortgage lending customers.

Our commercial customers are from a diversified range of industries including financial, insurance, service, manufacturing, home builder finance and distribution. We offer financial products to these customers for use in their normal business operations, as well as providing financing of working capital, capital investments, and equipment. Additionally, our commercial real estate business supports income producing real estate and home builders. Community banking also offers warehouse lines of credit to non-bank mortgage lenders.

Our Community Banking segment has seen continued growth that has been further boosted by strategic acquisitions. Our commercial loan portfolio has grown 43 percent in the last twelve months, to $7 billion, at December 31, 2019, boosted by growth and strong demand in our warehouse lending business, along with continued growth in our CRE and C&I portfolios. Average deposits for the year ended December 31, 2019 have increased to $10.3 billion, compared to $8.9 billion, for the year ended December 31, 2018. This increase was driven by our branch acquisitions in December of 2018.

Community Banking	For the Years Ended December 31,		
	2019	2018	2017
	(Dollars in millions)		
Summary of Operations			
Net interest income	$ 449	$ 314	$ 238
Provision for loan losses	20	2	4
Net interest income after provision for loan losses	429	312	234
Net (loss) gain on loan sales	(29)	(12)	(10)
Loan fees and charges	(1)	(1)	—
Loan administration (expense) income	(5)	(3)	—
Other noninterest income	64	44	31
Total noninterest income	29	28	21
Compensation and benefits	100	70	62
Commissions	2	2	—
Loan processing expense	7	5	5
Other noninterest expense	167	103	87
Total noninterest expense	276	180	154
Income before indirect overhead allocations and income taxes	182	160	101
Indirect overhead allocation	(41)	(39)	(41)
Provision for income taxes	30	25	21
Net income	$ 111	$ 96	$ 39
Key Metrics			
Efficiency Ratio	57.4%	52.5%	59.5%
Return on average assets	1.0%	1.1%	0.6%
Average number of FTE employees	1,316	861	688

2019 compared to 2018

The Community Banking segment reported net income of $111 million for the year ended December 31, 2019, compared to net income of $96 million for the year ended December 31, 2018. The $15 million increase was primarily due to $135 million higher net interest income, primarily driven by $2.5 billion higher interest earning assets supported by the low cost deposits acquired through our 2018 banking acquisitions. Partially offsetting higher net interest income was an $18 million increase in provision for loan loss primarily due to the $29 million net charge off of the Live Well loan, partially offset by a reduction in the allowance balance due to continued low levels of delinquency and charge-offs in our consumer portfolio. Other noninterest income increased $20 million driven by higher deposit fees as result of our expanded customer base partially offset by unfavorable gain on sale related to purchasing a higher volume of loans from the Mortgage Originations segment. Growth in our business activities and average FTEs caused our operating costs to increase $96 million, primarily due to increases in compensation and benefits, occupancy and equipment and core deposit intangibles.

2018 compared to 2017

The Community Banking segment reported net income of $96 million for the year ended December 31, 2018 compared to net income of $39 million for the year ended December 31, 2017. The $57 million increase was primarily due to $76 million higher net interest income, primarily driven by a $1.2 billion increase in average commercial loans due to organic growth in our CRE and C&I portfolios and enhanced by the acquisition of the warehouse business acquisition during 2018. Through this growth the loan portfolios have retained high credit quality, resulting in $2.0 million lower provision year over year. Noninterest income also increased $7 million, primarily from higher deposit fees driven by the branch acquisition, as well as the sale of our wealth management business. To support our investments relating to growth, acquisitions, and the diversification of our product offerings such as non-auto indirect lending, our operating costs increased $26 million, primarily due to increases in compensation and benefits, occupancy and equipment and FDIC premiums.

Mortgage Originations

We are a leading national originator of residential first mortgages. Our Mortgage Origination segment originates and acquires one-to-four family residential mortgage loans primarily to sell, or in some instances, to hold in our LHFI portfolio in the Community Banking segment. We may hold certain mortgage loans we originate, including jumbo loans or non-conforming loans, in our LHFI portfolio which will generate interest income in the Community Banking segment. The Community Banking segment purchases these loans from the Mortgage Origination segment which results in the recognition of a gain on loan sales by the Mortgage Origination segment and a loss on loan sales in the Community Banking segment. We utilize multiple distribution channels to originate or acquire mortgage loans on a national scale.

	For the Years Ended December 31,		
Mortgage Originations	**2019**	**2018**	**2017**
	(Dollars in millions)		
Summary of Operations			
Net interest income	$ 106	$ 128	$ 129
Provision for loan losses	2	2	4
Net interest income after provision for loan losses	104	126	125
Net gain on loan sales	364	212	278
Loan fees and charges	69	63	67
Loan administration (expense) income	(22)	(14)	(18)
Net return on mortgage servicing rights	6	36	22
Other noninterest income	10	16	21
Total noninterest income	427	313	370
Compensation and benefits	114	105	100
Commissions	109	78	72
Loan processing expense	35	25	26
Other noninterest expense	88	58	65
Total noninterest expense	346	266	263
Income before indirect overhead allocations and income taxes	185	173	232
Indirect overhead allocation	(42)	(68)	(63)
Provision for income taxes	29	22	59
Net income	$ 114	$ 83	$ 110
Key Metrics			
Mortgage rate lock commitments (fallout-adjusted) (1)	$ 30,000	$ 30,308	$ 32,527
Efficiency Ratio	65.2%	60.4%	52.7%
Return on average assets	2.1%	1.5%	2.0%
Average number of FTE employees	1,506	1,517	1,440

(1) Fallout-adjusted refers to mortgage rate lock commitments which are adjusted by a percentage of mortgage loans in the pipeline that are not expected to close based on previous historical experience and the level of interest rates.

2019 compared to 2018

The Mortgage Originations segment reported net income of $114 million for the year ended December 31, 2019, compared to $83 million for the year ended December 31, 2018. The $31 million increase was primarily due to $2 billion higher fallout-adjusted rate lock resulting in a $152 million increase in net gain on loan sales and higher gain on loan sale margin. The volume increase was primarily due to positive overall mortgage market volume and increased refinancing activity driven by lower interest rates. Net gain on loan sale margin increased primarily due to a higher retail mix and favorable secondary execution. Higher net gain on loan sales were partially offset by a $22 million decrease in net interest income resulting from lower average LHFS balances and a $30 million decrease in net return on MSRs primarily due to increased runoff driven by lower interest rates. Additionally, non-interest expense increased $80 million primarily due to higher variable expenses related to favorable overall mortgage production and higher retail mix.

2018 compared to 2017

The Mortgage Originations segment reported net income of $83 million for the year ended December 31, 2018, compared to $110 million for the year ended December 31, 2017. The $27 million decrease was primarily due to a $66 million decrease in net gain on loan sales driven by a 17 basis point decline in net gain on loan sale margin and $2.2 billion lower fallout-adjusted rate locks. The decrease in volume was primarily driven by overall lower mortgage market volume. Additionally, continued excess operating capacity across the industry and pricing competition continues to put pressure on our mortgage business. Lower margin was primarily driven by secondary margin compression and a shift in channel mix toward the lower margin, but lower cost delegated correspondent channel, partially offset by an improvement in securitization performance. The decrease in net gain on loan sales was partially offset by a $14 million increase in net return on MSRs primarily driven by lower prepayments and stronger valuations, along with a higher average MSR balance.

Mortgage origination distribution channels

Correspondent. In the correspondent channels, an unaffiliated bank or mortgage company completes the loan paperwork and also funds the loan at closing. After the bank or mortgage company has funded the transaction, we purchase the loan at an agreed upon price. We perform a full review of each loan, whether purchased in bulk or not, purchasing only those loans that were originated in accordance with our underwriting guidelines. Correspondents apply to the Bank and may be approved for delegated underwriting authority. Delegated correspondents assume the risks associated with the underwriting of the loan and earn more on loans sold compared to non-delegated correspondents. Non-delegated correspondents earn commissions and administrative fees for closing and funding loans which are then underwritten by the Bank. Loans originated through the correspondent lending channel typically result in a lower gain on sale margin but also have lower costs. At December 31, 2019, we had active relationships with more than 550 delegated correspondents and over 600 non-delegated correspondents servicing borrowers in all 50 states.

Broker. In a broker transaction, an unaffiliated mortgage broker completes several steps of the loan origination process including the loan paperwork, but the loans are underwritten by us on a loan-level basis to our underwriting standards and we fund and close the loan in the Bank's name, thereby becoming the lender of record. At December 31, 2019, we had active broker relationships with nearly 900 mortgage brokers servicing borrowers in all 50 states.

Retail. In our distributed retail channel, loans are originated through our nationwide network of stand-alone home loan centers. At December 31, 2019, we maintained almost 90 retail locations in 27 states representing the combined retail branches of Flagstar Bank and its Opes Advisor's mortgage division. In a direct-to-consumer lending transaction, loans are originated through our direct-to-consumer team or from one of our two national call centers, both of which may leverage our existing customer relationships. When loans are originated on a retail basis, most aspects of the lending process are completed internally, including the origination documentation (inclusive of customer disclosures), as well as the funding of the transactions, which typically results in higher internal costs but also higher gain on sale margins.

The following tables disclose residential first mortgage loan originations by channel, type and mix:

	At December 31,				
	2019	2018	2017	2016	2015
	(Dollars in millions)				
Correspondent	$ 21,854	$ 24,093	$ 25,769	$ 24,488	$ 20,543
Broker	4,066	3,967	5,025	5,890	7,335
Retail	6,800	4,405	3,614	2,039	1,490
Total	$ 32,720	$ 32,465	$ 34,408	$ 32,417	$ 29,368
Purchase originations	$ 17,151	$ 22,041	$ 19,357	$ 13,672	$ 13,696
Refinance originations	15,569	10,424	15,051	18,745	15,672
Total	$ 32,720	$ 32,465	$ 34,408	$ 32,417	$ 29,368
Conventional	$ 19,408	$ 15,654	$ 16,962	$ 18,156	$ 17,571
Government	7,210	9,329	8,635	7,859	6,385
Jumbo	6,102	7,482	8,811	6,402	5,412
Total	$ 32,720	$ 32,465	$ 34,408	$ 32,417	$ 29,368

Mortgage Servicing

The Mortgage Servicing segment services loans when we hold the MSR asset, and subservices mortgage loans for others through a scalable servicing platform on a fee for service basis. We may also collect ancillary fees and earn income through the use of noninterest bearing escrows. The loans we service generate custodial deposits which provide a stable funding source which supports interest-earning asset generation in the Community Bank and Mortgage Origination segments. Revenue for serviced and subserviced loans is earned on a contractual fee basis, with the fees varying based on our responsibilities and the delinquency status of the underlying loans. The Mortgage Servicing segment also services residential mortgages for our LHFI portfolio in the Community Banking segment and our own MSR portfolio in the Mortgage Originations segment for which it earns intersegment revenue on a fee per loan basis.

	For the Years Ended December 31,		
Mortgage Servicing	**2019**	**2018**	**2017**
	(Dollars in millions)		
Summary of Operations			
Net interest income	$ 16	$ 7	$ 11
Net interest income after provision for loan losses	16	7	11
Loan fees and charges	32	25	15
Loan administration income	124	69	39
Other noninterest income	—	—	12
Total noninterest income	156	94	66
Compensation and benefits	28	19	16
Loan processing expense	36	26	22
Other noninterest expense	59	44	39
Total noninterest expense	123	89	77
Income before indirect overhead allocations and income taxes	49	12	—
Indirect overhead allocation	(18)	(20)	(23)
Provision (benefit) for income taxes	6	(2)	(8)
Net income (loss)	$ 25	$ (6)	$ (15)
Key Metrics			
Efficiency Ratio	72.0%	87.7 %	100.0 %
Return on average assets	50.4%	(18.0)%	(41.7)%
Average number of residential loans serviced	975,851	562,419	405,568
Average number of FTE employees	480	228	199

2019 compared to 2018

The Mortgage Servicing segment reported a net income of $25 million for the year ended December 31, 2019, compared to a net loss of $6 million for the year ended December 31, 2018. The $31 million increase in net income was primarily driven by a 70 percent increase in the average number of loans serviced or sub-serviced, for the year ended December 31, 2019 compared to the year ended December 31, 2018 as we continue to expand our servicing business. This drove a $62 million increase in noninterest income and a $9 million increase in net interest income after provision for loan losses as a result of higher average custodial balances, partially offset by $34 million higher noninterest expense to support business growth.

2018 compared to 2017

The Mortgage Servicing segment reported a net loss of $6 million for the year ended December 31, 2018, compared to a net loss of $15 million for the year ended December 31, 2017. The improvement was primarily due to growth in our subservicing business, which increased by nearly 400,000 loans or 87 percent, for the year ended December 31, 2018 as compared to the year ended December 31, 2017. The increase in loan servicing volume drove higher noninterest income, including a $19 million increase in loan administration income and a $9 million increase in ancillary fees, offset by a decrease in net interest income, driven by higher interest paid on custodial balances and an increase in noninterest expense to support the growth in volume.

The following table presents residential loans serviced and the number of accounts associated with those loans.

	December 31, 2019		December 31, 2018		December 31, 2017	
	Unpaid Principal Balance (1)	Number of accounts	Unpaid Principal Balance (1)	Number of accounts	Unpaid Principal Balance (1)	Number of accounts
	(Dollars in millions)					
Residential loan servicing						
Subserviced for others (2)	$ 194,638	918,662	$ 146,040	705,149	$ 65,864	309,814
Serviced for others	24,003	105,469	21,592	88,434	25,073	103,137
Serviced for own loan portfolio (3)	9,536	66,526	7,438	57,401	7,013	29,493
Total residential loans serviced	$ 228,177	1,090,657	$ 175,070	850,984	$ 97,950	442,444

(1) UPB, net of write downs, does not include premiums or discounts.
(2) Includes temporary short-term subservicing performed as a result of sales of servicing-released MSRs. Includes repossessed assets.
(3) Includes LHFI (residential first mortgage and home equity), LHFS (residential first mortgage), loans with government guarantees (residential first mortgage), and repossessed assets.

At December 31, 2019, the number of residential loans serviced and the UPB of those loans increased by 240,000 and $53 billion, respectively, compared to December 31, 2018. Loans subserviced for others was the primary driver of the increase in total residential loans serviced which grew by 214,000 loans and $49 billion UPB. We continue to grow our subservicing business by onboarding non-Flagstar originated loans and through the sale of MSRs that were originated by Flagstar where we continue to subservice the underlying loans. We retained subservicing on 93.7 percent of the $16.4 billion UPB of MSRs sold during 2019. Our continued growth in our subservicing business and the strength of our platform has made us the 6th largest subservicer in the nation.

Loans Serviced for Others

The following table presents the characteristics of the mortgage loans serviced for others.

	At December 31,		
	2019	2018	2017
	(Dollars in millions)		
Average UPB per loan	$ 228	$ 244	$ 243
Weighted average service fee (basis points)	39.9	36.0	28.8
Weighted average coupon	4.39%	4.38%	4.05%
Weighted average original maturity (months)	350	352	330
Weighted average age (months)	19	13	11
Average updated FICO score	701	697	728
Average original LTV ratio	86.8%	88.6%	77.7%
Housing Price Index LTV, as recalculated (1)	79.1%	83.1%	73.3%
Delinquencies (UPB):			
30-59 days past due	$ 727	$ 535	$ 250
60-89 days past due	225	153	71
90 days or greater past due	134	126	125
Total past due	$ 1,086	$ 814	$ 446

(1) The HPI LTV is updated from the original LTV based on Metropolitan Statistical Area-level FHFA data as of December 31, 2019.

Loans Subserviced for Others

The following table presents the UPB delinquency characteristics of the mortgage loans subserviced for others.

	At December 31,		
	2019	2018	2017
	(Dollars in millions)		
Delinquency Characteristics (UPB):			
Current	$ 187,937	$ 139,809	$ 63,942
30-59 days past due	3,752	3,745	954.00
60-89 days past due	1,001	866	276
90 days or greater past due	1,948	1,620	692
Total past due	$ 6,701	$ 6,231	$ 1,922
Total subserviced for others	$ 194,638	$ 146,040	$ 65,864

Other

The Other segment includes the treasury functions, which include the impact of interest rate risk management, balance sheet funding activities and the investment securities portfolios, as well as other expenses of a corporate nature, including corporate staff, risk management, and legal expenses. In addition, the Other segment includes revenue and expenses not directly assigned or allocated to the Community Banking, Mortgage Originations or Mortgage Servicing segments.

	For the Years Ended December 31,		
Other	2019	2018	2017
	(Dollars in millions)		
Summary of Operations			
Net interest income	$ (9)	$ 48	$ 12
Provision (benefit) for loan losses	(4)	(12)	(2)
Net interest income after provision (benefit) for loan losses	(5)	60	14
Net gain on loan sales	—	—	—
Loan fees and charges	—	—	—
Loan administration income	(67)	(29)	—
Net return on mortgage servicing rights	—	—	—
Other noninterest income	65	33	13
Total noninterest income	(2)	4	13
Compensation and benefits	135	124	121
Commissions	—	—	—
Loan processing expense	2	3	4
Other noninterest expense	6	50	24
Total noninterest expense	143	177	149
Income before indirect overhead allocations and income taxes	(150)	(113)	(122)
Indirect overhead allocation	101	127	127
Provision (benefit) for income taxes	(17)	—	76
Net income (loss)	$ (32)	$ 14	$ (71)
Key Metrics			
Average number of FTE employees	1,150	1,049	976

2019 compared to 2018

The Other segment reported net loss of $32 million for the year ended December 31, 2019, compared to net income of $14 million for the year ended December 31, 2018. The $46 million decrease in net income was primarily due to a decrease in net interest income as a result of the Bank's overall asset sensitive position and the drop in rates in 2019 relative to the rising rate environment throughout 2018. Additionally, the loan loss benefit for the twelve months ended December 31, 2018 was $8 million driven by ALLL estimate changes not allocated to any other segment.

2018 compared to 2017

The Other segment reported net income of $14 million for the year ended December 31, 2018, compared to net loss of $71 million for the year ended December 31, 2017. The increase in net income was primarily due to the charge to the provision for income taxes during the fourth quarter of 2017 of approximately $80 million, resulting from the new tax legislation that required revaluation of our DTAs at a lower corporate statutory rate. In addition, net interest income increased $36 million primarily due to $29 million of hedging gains reclassified from AOCI. Noninterest income also increased $9 million as the result of higher dividend income on FHLB stock and a FHLB stock supplemental dividend which we received in the first quarter of 2018. These increases were partially offset by an increase of $28 million in noninterest expense primarily due to acquisition related expenses from the Wells Fargo branches and additional expenses to support business growth.

RISK MANAGEMENT

Certain risks are inherent in our business and include, but are not limited to, credit, regulatory compliance, legal, reputation, liquidity, market, operational, and strategic. We continually invest in our risk management activities which are focused on ensuring we properly identify, measure and manage such risks across the entire enterprise to maintain safety and soundness and maximize profitability. We hold capital to protect from unexpected losses arising from these risks.

A discussion of risks affecting us can be found in the Risk Factors section included in Item 1A. of this Form 10-K.

Credit Risk

Credit risk is the risk of loss to us arising from an obligor's inability or failure to meet contractual payment or performance terms. We provide loans, extend credit, and enter into financial derivative contracts, all of which have related credit risk. We manage credit risk using a thorough process designed to ensure we make prudent and consistent credit decisions. The process was developed with a focus on utilizing risk-based limits and credit concentrations while emphasizing diversification on a geographic, industry and customer level. The process utilizes documented underwriting guidelines, comprehensive documentation standards, and ongoing portfolio monitoring including the timely review and resolution of credits experiencing deterioration. These activities, along with the management of credit policies and credit officers' delegated authority, are centrally managed by our credit risk team.

We maintain credit limits, in compliance with regulatory requirements. Under the Home Owners Loan Act (HOLA), the Bank may not make a loan or extend credit to a single or related group of borrowers in excess of 15 percent of Tier 1 and Tier 2 capital plus any portion of the allowance for loan losses not included in the Tier 2 capital. This limit was $274 million as of December 31, 2019. We maintain a more conservative maximum internal Bank credit limit than required by HOLA, of $100 million to any one borrower/obligor relationship, with the exception of warehouse borrower/obligor relationships; warehouse borrower/obligor relationships have a higher internal Bank limit of $125 million as all advances are fully collateralized by residential mortgage loans and we have a history of very low loss levels. We have a tracking and reporting process to monitor lending concentration levels and all credit exposures to a single or related borrower that exceed $50 million must be approved by the Board of Directors.

Our commercial loan portfolio has been built on our relationship-based lending strategy. We provide financing and banking products to our commercial customers in our core banking footprint and will follow those established customer relationships to meet their financing needs in areas outside of our footprint. We have also formed relationship lending on a national scale through our home builder finance and warehouse lending businesses. At December 31, 2019, we had $7.2 billion in our commercial loan portfolio with our home builder finance and warehouse lending businesses accounting for 52 percent of the total. Of the remaining commercial loans in our portfolio, the majority of CRE and C&I loans were with customers who have established relationships within our core banking footprint.

Credit risk within the commercial loan portfolio is managed using concentration limits based on line of business, industry, geography, and product type. This is managed through the use of strict underwriting guidelines detailed in credit policies, ongoing loan level reviews, monitoring of the concentration limits and continuous portfolio risk management reporting. The commercial credit policy outlines the risks and underwriting requirements and provides a framework for all credit and lending activities. Our commercial loan credit policies consider maturity and amortization terms, maximum LTVs, minimum debt service coverage ratios, construction loan monitoring procedures, appraisal requirements, pro-forma analysis requirements and thresholds for product specific advance rates.

We typically originate loans on a recourse basis with full or partial guarantees. On a limited basis, we may approve loans without recourse if sufficient consideration is provided in the loan structure. Non-recourse loans primarily have low LTVs, strong cash flow coverage or other mitigating factors supporting the lack of a guaranty. These guidelines also require an appraisal of pledged collateral prior to closing and on an as-needed basis when market conditions justify. We contract with a variety of independent licensed professional firms to conduct appraisals that are in compliance with our internal commercial credit and appraisal policies and regulatory requirements.

For our commercial real estate portfolio, including owner and nonowner-occupied and home builder finance lending, we obtain independent appraisals as part of our underwriting and monitoring process. These appraisals are reviewed by an internal appraisal group that is independent from our sales and credit teams.

The home builder finance group is a national relationship-based lending platform that focuses on markets with strong housing fundamentals and higher population growth potential. The team primarily originates construction and development loans. We generally lend in metropolitan areas or counties where verifiable market statistics and data are readily available to support underwriting and ongoing monitoring. We also evaluate the jurisdictions & laws, demographic trends (age, population and income), housing characteristics and economic indicators (unemployment, economic growth, household income trends) for the geographies where our borrowers primarily operate. We engage independent licensed professionals to supply market studies and feasibility reports, environmental assessments and project site inspections to complement the procedures we perform internally. Further, we perform ongoing monitoring of the projects including periodic inspections of collateral and annual portfolio and individual credit reviews.

The consumer loan portfolio has been built on strong underwriting criteria and within concentration limits intended to diversify our risk profile. We have built our consumer loan portfolio by adding high quality first mortgage loans to our balance sheet making up 64 percent of our total consumer loan portfolio. We have also grown our home equity loans and lines of credit as well as our other consumer loan portfolio. We have also grown our home equity loans and lines of credit as well as our other consumer loan portfolio.

Loans held-for-investment

The following table summarizes loans held-for-investment by category:

	At December 31,		
	2019	2018	2017
	(Dollars in millions)		
Consumer loans			
Residential first mortgage	$ 3,154	$ 2,999	$ 2,754
Home equity (1)	1,024	731	664
Other	729	314	25
Total consumer loans	4,907	4,044	3,443
Commercial loans			
Commercial real estate	2,828	2,152	1,932
Commercial and industrial	1,634	1,433	1,196
Warehouse lending	2,760	1,459	1,142
Total commercial loans	7,222	5,044	4,270
Total loans held-for-investment	$ 12,129	$ 9,088	$ 7,713

(1) Includes second mortgages, HELOCs, and HELOANs.

We continue to strengthen our Community Banking segment by growing interest earning assets. Our commercial loan portfolio has grown $2.2 billion, or 43 percent, since December 31, 2018, led by a $1.3 billion increase in our warehouse loans. Our consumer loan portfolio has increased $863 million, or 21.3 percent, since December 31, 2018, led by a $415 million increase in other consumer loans primarily driven by our non-auto indirect lending portfolio.

The following table provides a comparison of activity in our LHFI portfolio:

	For the Years Ended December 31,		
	2019	2018	2017
	(Dollars in millions)		
Balance, beginning of year	$ 9,088	$ 7,713	$ 6,065
Loans originated and purchased	3,268	2,113	2,170
Change in lines of credit	6,381	3,973	2,982
Loan amortization / prepayments	(6,480)	(4,425)	(3,373)
All other activity	(128)	(286)	(131)
Balance, end of year	$ 12,129	$ 9,088	$ 7,713

Residential first mortgage loans. We originate or purchase various types of conforming and non-conforming fixed and adjustable rate loans underwritten using Fannie Mae and Freddie Mac guidelines for the purpose of purchasing or refinancing owner occupied and second home properties. We typically hold certain mortgage loans in LHFI that do not qualify for sale to the Agencies or that have an attractive yield and risk profile. The LTV requirements on our residential first mortgage loans vary depending on occupancy, property type, loan amount, and FICO scores. Loans with LTVs exceeding 80 percent are required to obtain mortgage insurance.

The following table presents our total residential first mortgage LHFI by major category:

	At December 31,	
	2019	2018
	(Dollars in millions)	
Estimated LTVs (1)		
Less than 80% and refreshed FICO scores (2):		
Equal to or greater than 660	$ 2,263	$ 2,462
Less than 660	93	54
80% and greater and refreshed FICO scores (2):		
Equal to or greater than 660	683	448
Less than 660	111	29
U.S. government guaranteed	4	6
Total	$ 3,154	$ 2,999
Geographic region		
California	$ 1,205	$ 1,238
Michigan	442	314
Texas	214	193
Washington	205	195
Florida	181	195
Illinois	95	103
Colorado	84	72
Arizona	79	72
New York	68	73
Maryland	49	57
Others	532	487
Total	$ 3,154	$ 2,999

(1) LTVs reflect loan balance at the date reported, as a percentage of property values as appraised at loan origination.
(2) FICO scores are updated at least on a quarterly basis or more frequently if available.

The following table presents our total residential first mortgage LHFI as of December 31, 2019, by year of origination:

	2019	2018	2017	2016	2015 and prior	Total
	(Dollars in millions)					
Residential first mortgage loans	$ 896	$ 457	$ 543	$ 465	$ 793	$ 3,154
Percent of total	28.4%	14.5%	17.2%	14.7%	25.1%	100.0%

Home equity. Our home equity portfolio includes HELOANs, second mortgage loans, and HELOCs. These loans require full documentation and are underwritten and priced in an effort to ensure credit quality and loan profitability. Our debt-to-income ratio on HELOANS is capped at 43 percent and for HELOCs is capped at 45 percent. We currently limit the maximum CLTV to 89.99 percent and FICO scores to a minimum of 660. Second mortgage loans/HELOANS are fixed rate loans and are available with terms up to 20 years. HELOC loans are variable-rate loans that contain a 10-year interest only draw period followed by a 20-year amortizing period. At December 31, 2019, HELOCs and HELOANs in a first lien position increased to $172 million compared to $129 million at December 31, 2018.

Other consumer loans. Our other consumer loan portfolio consists of secured and unsecured loans originated through our branches and our indirect lending business. At December 31, 2019, other consumer loans increased to $729 million compared to $314 million at December 31, 2018. This increase is primarily due to growth in our non-auto, boat and recreational vehicle indirect lending business.

Commercial real estate loans. The commercial real estate portfolio contains loans collateralized by diversified property types which are primarily income producing in the normal course of business. The majority of our retail exposure is to neighborhood strip centers and single tenant locations, which include drug stores. Generally, the maximum LTV is 80 percent, or 85 percent for owner-occupied real estate, and debt service coverage of 1.20 to 1.35 times. At December 31, 2019, our average LTV and average debt service coverage for our CRE portfolio was 49 percent and 2.51 times, respectively. Our CRE loans earn interest at a variable rate.

We have established a national home builder finance program and at December 31, 2019, our commercial portfolio contained $2 billion in commitments, with $989 million in outstanding home builder loans. The majority of these loans are collateralized and included in our CRE portfolio while the remaining loans are unsecured and included in our C&I portfolio.

The following table presents our total CRE LHFI by collateral location and collateral type:

	MI	TX	CA	CO	FL	Other	Total	% by collateral type
	(Dollars in millions)							
December 31, 2019								
Home Builder	$ 26	$ 243	$ 114	$ 166	$ 108	$ 203	$ 860	30.4%
Owner occupied	328	4	25	—	14	54	425	15.0%
Retail (2)	188	—	6	4	—	119	317	11.2%
Multi family	153	51	15	4	3	134	360	12.7%
Office	166	18	16	—	2	54	256	9.1%
Hotel/motel	112	17	24	—	—	45	198	7.0%
Senior Living facility	57	26		—	—	50	133	4.7%
Industrial	51	—	12	—	1	12	76	2.7%
Parking Garage/lot	10	9	1	—	1	35	56	2.0%
Single family residence (1)	2	—		—	—	—	2	0.1%
Shopping mall	3	—	14	—	—	—	17	0.6%
Non Profit	1	—	2	1	3	3	10	0.3%
Land - Residential (3)	4	—	4	—	14	6	28	1.0%
All other (4)	12	23	10	2	6	37	90	3.2%
Total	$ 1,113	$ 391	$ 243	$ 177	$ 152	$ 752	$ 2,828	100.0%
Percent by state	39.4%	13.8%	8.6%	8.6%	5.4%	26.6%	100.0%	

(1) Includes home builder loans secured by SFR 1-4 properties whether under construction or completed.
(2) Includes multipurpose retail space, neighborhood centers, strip centers and single-use retail space

(3) Includes home builder loans secured by land. Land residential includes development and unimproved vacant land.
(4) All other primarily includes: parking garage, mini-storage facilities, data centers, movie theater, etc.

Commercial and industrial loans. Commercial and industrial LHFI facilities typically include lines of credit and term loans and leases to businesses for use in normal business operations to finance working capital, equipment and capital purchases, acquisitions and expansion projects. We lend to customers with a history of profitability and a long-term business model. Generally, leverage conforms to industry standards and the minimum debt service coverage is 1.2. The majority of our C&I loans earn interest at a variable rate.

The following table presents our total C&I LHFI by borrower's geographic location and industry type:

	MI	OH	NY	FL	CT	LA	IN	WI	CA	TX	Other	Total	% by industry
December 31, 2019													
Financial & Insurance	$ 32	$ 22	$ 73	$ 71	$ 5	$ 16	$ 15	$ 5	$ 20	$ 32	$ 110	$ 401	24.6%
Services	100	2	—	2	43	17	9	—	41	28	94	336	20.6%
Manufacturing	165	29	—	—	—	—	1	8	6	13	65	287	17.5%
Distribution	131	2	—	—	—	—	2	—	11	—	16	162	9.9%
Rental & Leasing	82	17	—	—	—	—	—	—	—	—	36	135	8.3%
Home Builder Finance	—	3	2	—	—	27	—	—	16	76	4	128	7.9%
Government & Education	32	—	—	—	21	—	22	—	6	—	—	81	4.9%
Healthcare	2	1	1	1	—	—	1	19	14	8	30	77	4.7%
Servicing Advances	—	—	—	—	—	—	—	—	—	—	19	19	1.2%
Commodities	3	—	—	—	—	—	1	—	—	—	4	8	0.5%
Total	$ 547	$ 76	$ 76	$ 74	$ 69	$ 60	$ 51	$ 32	$ 114	$ 157	$ 378	$1,634	100.0%
Percent by state	33.5%	4.7%	4.6%	4.6%	4.2%	3.7%	3.2%	2.0%	7.0%	9.5%	23.1%	100.0%	

Warehouse lending. We have a national platform with relationship managers across the country. We offer warehouse lines of credit to other mortgage lenders which allow the lender to fund the closing of residential mortgage loans. Each extension, advance, or draw-down on the line is fully collateralized by residential mortgage loans and is paid off when the lender sells the loan to an outside investor or, in some instances, to the Bank.

Underlying mortgage loans are predominantly originated using the Agencies' underwriting standards. The guideline for debt to tangible net worth is 15 to 1. The aggregate committed amount of adjustable-rate warehouse lines of credit granted to other mortgage lenders at December 31, 2019 was $4.8 billion, of which $2.8 billion was outstanding, compared to $3.8 billion at December 31, 2018, of which $1.5 billion was outstanding.

Loan Principal Payments

The following tables set forth the expected repayment of our LHFI, both as fixed rate and adjustable-rate loans:

	December 31, 2019			
	Within 1 Year	1 Year to 5 Years	Over 5 Years	Totals (1)
	(Dollars in millions)			
Fixed Rate Loans				
Residential first mortgage	$ 11	$ 50	$ 334	$ 395
Home Equity	7	33	87	127
Other consumer	31	137	539	707
Commercial real estate	29	103	—	132
Commercial and industrial	51	206	91	348
Total fixed rate loans	$ 129	$ 529	$ 1,051	$ 1,709
Adjustable Rate Loans				
Residential first mortgage	$ 60	$ 263	$ 2,409	$ 2,732
Home Equity	13	61	800	874
Commercial real estate	878	1,826	—	2,704
Commercial and industrial	445	842	—	1,287
Warehouse lending	2,880	—	—	2,880
Total adjustable rate loans	$ 4,276	$ 2,992	$ 3,209	$ 10,477

(1) UPB, net of write downs, does not include premiums or discounts.

Credit Quality

Trends in certain credit quality characteristics in our loan portfolios, remain strong and are a result of our focus on effectively managing credit risk through our careful underwriting standards and processes. The credit quality of our loan portfolios is demonstrated by low delinquency levels, minimal charge-offs and low levels of nonperforming loans.

For all loan categories within the consumer and commercial loan portfolio, loans are placed on nonaccrual status when any portion of principal or interest is 90 days past due (or nonperforming), or earlier when we become aware of information indicating that collection of principal and interest is in doubt. While it is the goal of management to collect on loans, we attempt to work out a satisfactory repayment schedule or modification with past due borrowers and will undertake foreclosure proceedings if the delinquency is not satisfactorily resolved. Our practices regarding past due loans are designed to both assist borrowers in meeting their contractual obligations and minimize losses incurred by the Bank. When a loan is placed on nonaccrual status, the accrued interest income is reversed. Loans return to accrual status when principal and interest become current and are anticipated to be fully collectible.

Nonperforming Assets

The following table sets forth certain information about our nonperforming assets:

	At December 31,				
	2019	2018	2017	2016	2015
	(Dollars in millions)				
LHFI					
Consumer Loans					
Residential first mortgages	$ 13	$ 11	$ 12	$ 18	$ 27
Home equity	2	1	1	4	2
Other Consumer	1	—	—	—	—
Commercial Loans					
Commercial real estate	—	—	—	—	—
Commercial and industrial	—	—	—	—	2
Total nonperforming LHFI	$ 16	$ 12	$ 13	$ 22	$ 31
TDRs					
Consumer Loans					
Residential first mortgages	8	8	12	11	27
Home equity	2	2	4	7	8
Total nonperforming TDRs	10	10	16	18	35
Total nonperforming LHFI and TDRs (1)	26	22	29	40	66
Real estate and other nonperforming assets, net	10	7	8	14	17
LHFS	5	10	9	6	12
Total nonperforming assets	$ 41	$ 39	$ 46	$ 60	$ 95
Nonperforming assets to total assets (2)	0.15%	0.16 %	0.22 %	0.39 %	0.61 %
Nonperforming LHFI and TDRs to LHFI	0.21%	0.24 %	0.38 %	0.67 %	1.05 %
Nonperforming assets to LHFI and repossessed assets (2)	0.30%	0.32 %	0.48 %	0.90 %	1.32 %

(1) Includes less than 90 days past due performing loans placed on nonaccrual. Interest is not being accrued on these loans.
(2) Ratio excludes LHFS.

At December 31, 2019, we had $41 million of nonperforming assets compared to $39 million of nonperforming assets at December 31, 2018.

Delinquencies

The following table sets forth our performing LHFI which are past due 30-89 days:

	For the Years Ended December 31,		
	2019	2018	2017
	(Dollars in millions)		
Performing loans past due 30-89:			
Consumer loans			
Residential first mortgage	$ 9	$ 6	$ 4
Home equity	1	1	1
Other	4	—	—
Total consumer loans	14	7	5
Total performing loans past due 30-89 days	$ 14	$ 7	$ 5

As a result of our continued focus on growing our loan portfolio with high quality loans, early stage delinquencies remained low as loans 30 to 89 days past due were $14 million and $7 million at December 31, 2019 and December 31, 2018, respectively.

Troubled debt restructurings (held-for-investment)

Troubled debt restructurings ("TDRs") are modified loans in which a borrower demonstrates financial difficulties and for which a concession has been granted as a result. Nonperforming TDRs are included in nonaccrual loans. TDRs remain in nonperforming status until a borrower has made at least six consecutive months of payments. Performing TDRs are not considered to be nonaccrual so long as we believe that all contractual principal and interest due under the restructured terms will be collected.

The following table sets forth a summary of TDRs by performing status:

	For the Years Ended December 31,		
	2019	2018	2017
	(Dollars in millions)		
Performing TDRs			
Residential first mortgage	$ 20	$ 22	$ 19
Home equity	18	22	24
Total performing TDRs	38	44	43
Nonperforming TDRs			
Nonperforming TDRs	3	3	5
Nonperforming TDRs at inception but performing for less than six months	7	7	11
Total nonperforming TDRs	10	10	16
Total TDRs	$ 48	$ 54	$ 59
ALLL on consumer TDR loans	$ 8	$ 10	$ 13

At December 31, 2019, our total TDR loans decreased to $48 million compared to $54 million at December 31, 2018, primarily due to principal payments and payoffs out-pacing new additions. Of our total TDR loans, 79 percent were in performing status at December 31, 2019. For further information, see Note 4 - Loans Held-for-Investment.

Allowance for Loan Losses

The ALLL represents management's estimate of probable losses that are inherent in our LHFI portfolio but which have not yet been realized. For further information, see Note 1 - Description of Business, Basis of Presentation, and Summary of Significant Accounting Standards and Note 4 - Loans Held-for-Investment.

The ALLL was $107 million and $128 million at December 31, 2019 and 2018, respectively. The decrease from December 31, 2018 was primarily driven by continued strong credit quality, including low levels of net charge-offs and delinquencies, potentially offset by growth in the LHFI portfolio.

The ALLL as a percentage of LHFI decreased to 0.9 percent as of December 31, 2019 from 1.4 percent as of December 31, 2018. This decrease is attributable to loan growth of $3.0 billion UPB, consisting of high credit quality assets in both the consumer and commercial loan portfolios, including growth in our lower risk, fully collateralized warehouse portfolio, in addition to sustained low level of charge-offs and delinquencies. At December 31, 2019, both our consumer loan portfolio and our commercial loan portfolio had a 0.9 percent allowance coverage.

The following table sets forth certain information regarding the allocation of our ALLL to each loan category:

	December 31, 2019			
	Investment Loan Portfolio	Percent of Portfolio	Allowance Amount	Allowance as a Percentage of Loan Portfolio
	(Dollars in millions)			
Consumer loans				
Residential first mortgage	$ 3,145	26.0%	$ 22	0.7%
Home equity	1,021	8.4%	14	1.4%
Other consumer	729	6.0%	6	0.8%
Total consumer loans	4,895	40.4%	42	0.9%
Commercial loans				
Commercial real estate	2,828	23.3%	38	1.3%
Commercial and industrial	1,634	13.5%	22	1.3%
Warehouse lending	2,760	22.8%	5	0.2%
Total commercial loans	7,222	59.6%	65	0.9%
Total loans held-for-investment (1)	$ 12,117	100.0%	$ 107	0.9%

(1) Excludes loans carried under the fair value option.

The following tables set forth certain information regarding our ALLL and the ALLL allocation over the past five years:

	At December 31,									
	2019		2018		2017		2016		2015	
	Allowance Amount	Allowance to Total Loans	Allowance Amount	Allowance to Total Loans	Allowance Amount	Allowance to Total Loans	Allowance Amount	Allowance to Total Loans	Allowance Amount	Allowance to Total Loans
	(Dollars in millions)									
Consumer loans										
Residential first mortgage	$ 22	0.2%	$ 38	0.4%	$ 47	0.6%	$ 65	1.1%	$ 116	1.9%
Home equity	14	0.1%	15	0.2%	22	0.3%	24	0.4%	32	0.5%
Other consumer	6	0.1%	3	—%	1	—%	1	—%	2	—%
Total consumer loans	42	0.4%	56	0.6%	70	0.9%	90	1.5%	150	2.4%
Commercial loans										
Commercial real estate	38	0.3%	48	0.5%	45	0.6%	28	0.5%	18	0.3%
Commercial and industrial	22	0.2%	18	0.2%	19	0.2%	17	0.3%	13	0.2%
Warehouse lending	5	—%	6	0.1%	6	0.1%	7	0.1%	6	0.1%
Total commercial loans	65	0.5%	72	0.8%	70	0.9%	52	0.9%	37	0.6%
Total loans held-for-investment (1)	$ 107	0.9%	$ 128	1.4%	$ 140	1.8%	$ 142	2.4%	$ 187	3.0%

(1) Excludes loans carried under the fair value option.

The following table presents changes in our ALLL:

	For the Years Ended December 31,				
	2019	2018	2017	2016	2015
	(Dollars in millions)				
Beginning balance	$ 128	$ 140	$ 142	$ 187	$ 297
Provision (benefit) for loan losses (1)	18	(8)	6	(15)	(19)
Charge-offs					
Consumer loans					
Residential first mortgage	(3)	(4)	(8)	(29)	(87)
Home equity	(2)	(2)	(3)	(4)	(7)
Other consumer	(7)	(2)	(2)	(3)	(4)
Total consumer loans	(12)	(8)	(13)	(36)	(98)
Commercial loans					
Commercial real estate	—	—	(1)	—	—
Commercial and industrial	(31)	—	—	—	(3)
Warehouse lending	—	—	—	—	—
Total commercial loans	(31)	—	(1)	—	(3)
Total charge offs	(43)	(8)	(14)	(36)	(101)
Recoveries					
Consumer loans					
Residential first mortgage	1	2	1	2	3
Home equity	2	1	2	—	2
Other consumer	—	1	1	3	3
Total consumer loans	3	4	4	5	8
Commercial loans					
Commercial real estate	—	—	1	1	2
Commercial and industrial	1	—	1	—	—
Total commercial loans	1	—	2	1	2
Total recoveries	4	4	6	6	10
Charge-offs, net of recoveries	(39)	(4)	(8)	(30)	(91)
Ending balance	$ 107	$ 128	$ 140	$ 142	$ 187
Net charge-off to LHFI ratio (2)	0.32%	0.04%	0.12%	0.52%	1.85%

(1) Does not include $7 million provision expense recorded in the Consolidated Statements of Operations to reserve for repossessed loans with government guarantees at December 31, 2017. There was $1 million provision for loan losses for repossessed loans with government guarantees recorded during the years ended December 31, 2019, 2018, 2016, and 2015.

(2) Excludes loans carried at fair value.

The following table provides information on our charge-offs, net of recoveries:

	For the Years Ended December 31,				
	2019	2018	2017	2016	2015
	(Dollars in millions)				
Charge-offs, net of recoveries	$ 39	$ 4	$ 8	$ 30	$ 91
Charge-offs associated with loans with government guarantees	2	2	4	14	3
Charge-offs associated with the sale or transfer of nonperforming loans and TDRs	—	—	1	8	69
Charge-offs, net of recoveries, adjusted	$ 37	$ 2	$ 3	$ 8	$ 19

Net charge-offs for the year ended December 31, 2019 increased to $39 million compared to $4 million for the year ended December 31, 2018 due to the charge-off of the Live Well commercial loan in the second quarter 2019. As a percentage of average LHFI, net charge-offs for the year ended December 31, 2019 increased to 0.32 percent from 0.04 percent for the year ended December 31, 2018.

Market Risk

Market risk is the risk of reduced earnings and/or declines in the net market value of the balance sheet due to changes in market prices. Our primary market risk is interest rate risk which impacts our net interest income, fee income related to interest sensitive activities such as mortgage origination and servicing income, and loan and deposit demand.

We are subject to interest rate risk due to:

- The maturity or repricing of assets and liabilities at different times or for different amounts
- Differences in short-term and long-term market interest rate changes
- The remaining maturity of various assets or liabilities may shorten or lengthen as interest rates change

Our Asset/Liability Committee ("ALCO"), which is composed of our executive officers and certain members of other management, monitors interest rate risk on an on-going basis in accordance with policies approved by our Board. The ALCO reviews interest rate positions and considers the impact projected interest rate scenarios have on earnings, capital, liquidity, business strategies, and other factors. However, management has the latitude to change interest rate positions within certain limits if, in management's judgment, the change will enhance profitability or minimize risk.

To assess and manage interest rate risk, sensitivity analysis is used to determine the impact on earnings and the net market value of the balance sheet across various interest rate scenarios, balance sheet trends, and strategies.

Net interest income sensitivity

Management uses a simulation model to analyze the sensitivity of net interest income to changes in interest rates across various interest rate scenarios which demonstrates the level of interest rate risk inherent in the existing balance sheet. The analysis holds the current balance sheet values constant and does not take into account management intervention. In addition, we assume certain correlation rates, often referred to as a “deposit beta,” of interest-bearing deposits, wherein the rates paid to customers change relative to changes in benchmark interest rates. The effect on net interest income over a 12 month time horizon due to hypothetical changes in market interest rates is presented in the table below. In this interest rate shock simulation, as of the periods presented, interest rates have been adjusted by instantaneous parallel changes rather than in a ramp simulation which applies interest rate changes over time. All rates, short-term and long-term, are changed by the same amount (e.g. plus or minus 100 basis points) resulting in the shape of the yield curve remaining unchanged. For the scenarios simulated, our established Board policy limit on the change in net interest income, is 7 percent. At December 31, 2019 and December 31, 2018, the results of the simulation were within the Board policy limits.

	December 31, 2019		
Scenario	Net interest Income	$ Change	% Change
	(Dollars in millions)		
100	$592	$34	6.0%
Constant	559	—	—%
(100)	520	(39)	(6.9)%

	December 31, 2018		
Scenario	Net interest Income	$ Change	% Change
	(Dollars in millions)		
100	$491	$13	2.7%
Constant	478	—	—%
(100)	465	(13)	(2.7)%

In the net interest income simulations, our balance sheet exhibits asset sensitivity. When interest rates rise our net interest income increases. Conversely, when interest rates fall our net interest income decreases. At December 31, 2019, the $81 million increase in the net interest income in the constant scenario as compared to December 31, 2018, was primarily driven by growth in our net interest earning assets along with a decrease in our cost of funding.

The net interest income sensitivity analysis has certain limitations and makes various assumptions. Key elements of this interest rate risk exposure assessment include maintaining a static balance sheet and parallel rate shocks. The direction of future interest rates not moving in a parallel manner across the yield curve, how the balance sheet will respond and shift based on a change in future interest rates and how the Company will respond are not included in this analysis and limit the predictive value of these scenarios.

Economic value of equity

Management also utilizes Economic Value of Equity (EVE), a point in time analysis of the economic value of our current balance sheet position, which measures interest rate risk over a longer term. The EVE calculation represents a hypothetical valuation of equity, and is defined as the market value of assets, less the market value of liabilities, adjusted for the market value of off-balance sheet instruments. The assessment of both short-term earnings (Net Interest Income Sensitivity) and long-term valuation (EVE) approaches provides a more comprehensive analysis of interest rate risk exposure than either Net Interest Income Sensitivity or EVE alone.

There are assumptions and inherent limitations in any methodology used to estimate the exposure to changes in market interest rates and as such, sensitivity calculations used in this analysis are hypothetical and should not be considered to be predictive of future results. This analysis evaluates risks to the current balance sheet only and does not incorporate future growth assumptions. Additionally, the analysis assumes interest rate changes are instantaneous and the new rate environment is constant but does not include actions management may undertake to manage risk in response to interest rate changes. Each rate scenario reflects unique prepayment and repricing assumptions. Management derives these assumptions by considering published market prepayment expectations, repricing characteristics, our historical experience, and our asset and liability management strategy. This analysis assumes that changes in interest rates may not affect or could partially affect certain instruments based on their characteristics.

The following table is a summary of the changes in our EVE that are projected to result from hypothetical changes in market interest rates as well as our internal policy limits for changes in our EVE based on the different scenarios. The interest rates, as of the dates presented, are adjusted by instantaneous parallel rate increases and decreases as indicated in the scenarios shown in the table below.

December 31, 2019					December 31, 2018					
Scenario	EVE	EVE%	$ Change	% Change	Scenario	EVE	EVE%	$ Change	% Change	Policy Limits
				(Dollars in millions)						
300	$ 3,147	13.6%	$ 150	5.0 %	300	$ 1,617	8.8%	$ (223)	(12.1)%	22.5%
200	3,152	13.7%	155	5.2 %	200	1,720	9.4%	(120)	(6.5)%	15.0%
100	3,103	13.5%	106	3.5 %	100	1,794	9.8%	(46)	(2.5)%	7.5%
Current	2,997	13.0%	—	— %	Current	1,840	10.0%	—	— %	—%
(100)	2,832	12.3%	(165)	(5.5)%	(100)	1,849	10.1%	9	0.5 %	7.5%

Our balance sheet exhibits asset sensitivity in a rising interest rate scenario. The increase in EVE is the result of the amount of assets that would be expected to reprice exceeding the amount of liabilities repriced in the +200 scenario. At December 31, 2019 and December 31, 2018, for each scenario shown, the percentage change in our EVE is within our internal policy limit.

Derivative financial instruments

As a part of our risk management strategy, we use derivative financial instruments to minimize fluctuation in earnings caused by market risk. We use forward sales commitments to hedge our unclosed mortgage origination pipeline and funded mortgage LHFS. All of our derivatives and mortgage loan production originated for sale are accounted for at fair market value. Changes to mortgage commitments are based on changes in fair value of the underlying loan, which is impacted most significantly by changes in interest rates and changes in the probability that the loan will not fund within the terms of the commitment, referred to as a fallout factor or, inversely, a pull-through rate. Market risk on interest rate lock commitments and mortgage LHFS is managed using corresponding forward sale commitments. The adequacy of these hedging strategies, the ability to fully or partially hedge market risk, rely on various assumptions or projections, including a fallout factor, which is based on a statistical analysis of our actual rate lock fallout history. For further information, see Note 11 - Derivative Financial Instruments and Note 20 - Fair Value Measurements.

Mortgage Servicing Rights (MSRs)

Our MSRs are sensitive to interest rate volatility and are highly susceptible to prepayment risk, basis risk, market volatility and changes in the shape of the yield curve. We utilize derivatives, including interest rate swaps and swaptions, as part of our overall hedging strategy to manage the impact of changes in the fair value of the MSRs, however these risk management strategies do not completely eliminate repricing risk. Our hedging strategies rely on assumptions and projections regarding assets and general market factors, many of which are outside of our control. For further information, see Note 10 - Mortgage Servicing Rights and Note 11 - Derivative Financial Instruments.

	For the Years Ended December 31,		
	2019	2018	2017
	(Dollars in millions)		
Net return (loss) on mortgage servicing rights			
Servicing fees, ancillary income and late fees (1)	$ 96	$ 65	$ 60
Decrease in MSR fair value due to pay-offs, pay-downs, run-off, model changes, and other	(89)	(20)	(31)
Changes in fair value	(76)	2	9
Gain (loss) on MSR derivatives (2)	76	(5)	(8)
Net transaction costs	(1)	(6)	(8)
Total return (loss) included in net return on mortgage servicing rights	$ 6	$ 36	$ 22

Liquidity Risk

Liquidity risk is the risk that we will not have sufficient funds, at a reasonable cost, to meet current and future cash flow needs as they become due. The liquidity of a financial institution reflects its ability to, at a reasonable cost, meet loan requests, to accommodate possible outflows in deposits and to take advantage of interest rate and market opportunities. The ability of a financial institution to meet current financial obligations is a function of the balance sheet structure, the ability to liquidate assets and access to various sources of funds.

Parent Company Liquidity

The Company currently obtains its liquidity primarily from dividends from the Bank. The primary uses of the Company's liquidity are debt service, operating expenses, the repurchase of common stock and the payment of cash dividends, which have been increased to $0.05 per share in the first quarter of 2020. The Company holds $250 million of senior notes which are scheduled to mature in approximately 1.5 years on July 15, 2021. At December 31, 2019, the Company held $233 million of cash at the Bank which covers 4.5 years of future operating cash outflows for debt interest payments, dividend payments and operating expenses.

The OCC and the FRB regulate all capital distributions made by the Bank, directly or indirectly, to the holding company, including dividend payments. Whether an application or notice is required is based on a number of factors including whether the institution qualifies for expedited treatment under the OCC rules and regulations or if the total amount of all capital distributions (including each proposed capital distribution) for the applicable calendar year exceeds net income for that year to date plus the retained net income for the preceding two years, or the Bank would not be at least adequately capitalized following the dividend. Additional restrictions on dividends apply if the Bank fails the QTL test. At December 31, 2019, as reported to the OCC, we passed the QTL test. For the year ended December 31, 2019, we paid dividends of $100 million from the Bank to the Bancorp. At December 31, 2019, the Bank is able to pay dividends without regulatory approval up to approximately $318 million.

Bank Liquidity

Our primary sources of funding are deposits from retail and government customers, custodial deposits related to loans we service and FHLB borrowings. We use the FHLB of Indianapolis as a significant source for funding our residential mortgage origination business due to the flexibility in terms which allows us to borrow or repay borrowings as daily cash needs require. The amount we can borrow, or the value we receive for the assets pledged to our liquidity providers, varies based on the amount and type of pledged collateral, as well as the perceived market value of the assets and the "haircut" of the market value of the assets. That value is sensitive to the pricing and policies of our liquidity providers and can change with little or no notice.

Further, other sources of liquidity include our LHFS portfolio and unencumbered investment securities. We primarily originate agency-eligible LHFS and therefore the majority of new residential first mortgage loan originations are readily convertible to cash, either by selling them as part of our monthly agency sales, RMBS, private party whole loan sales, or by pledging them to the FHLB and borrowing against them. In addition, we have the ability to sell unencumbered investment securities or use them as collateral. At December 31, 2019, we had $2.5 billion available in unencumbered investment securities.

Our primary measure of liquidity is a ratio of ready liquidity to volatile funding, the volatile funds coverage ratio(“VFCR”). The VFCR is a liquidity coverage ratio that is customized to our business and ensures we have adequate coverage to meet our liquidity needs during times of liquidity stress. Volatile funds are the portion of the Bank’s funding identified as being at a higher risk of runoff in times of stress. Ready liquidity consists of cash on reserve at the Federal Reserve and unused borrowing capacity provided by the loan and investments portfolios. The VFCR is calculated, reported, and forecasted daily as part of our liquidity management framework.

Our liquidity position is continuously monitored and adjustments are made to the balance between sources and uses of funds as deemed appropriate. We balance the liquidity of our loan assets to our available funding sources. Our LHFI portfolio is funded with stable core deposits whereas our warehouse loans and LHFS may be funded with FHLB borrowings and custodial deposits. Warehouse loans are typically more liquid than other loan assets, as loans are paid within a short amount of time, when the lender sells the loan to an outside investor or, in some instances, to the Bank. As not all asset categories require the same level of liquidity, our loan-to-deposit ratio shows how we manage our liquidity position, how much liquidity we have and the agility of our balance sheet. The Company's HFI loan-to-deposit ratio was 130.7 percent at December 31, 2019. Excluding warehouse loans, which have draws that typically pay off within a few weeks, and custodial deposits, which represent mortgage escrow accounts on deposit with the Bank, the HFI loan-to-deposit ratio was 102.4 percent at December 31, 2019.

As governed and defined by our Board liquidity policy, we maintain adequate excess liquidity levels appropriate to cover unanticipated liquidity needs. In addition to this liquidity, we also maintain targeted minimum levels of unused borrowing capacity as another cushion against unexpected liquidity needs. Each business day, we forecast 90 days of daily cash needs. This allows us to determine our projected near term daily cash fluctuations and also to plan and adjust, if necessary, future activities. As a result, in an adverse environment, we believe we would be able to make adjustments to operations as required to meet the liquidity needs of our business, including adjusting deposit rates to increase deposits, planning for additional FHLB borrowings, accelerating sales of LHFS (agencies and/or private), selling LHFI or investment securities, borrowing through the use of repurchase agreements, reducing originations, making changes to warehouse funding facilities, or borrowing from the discount window.

Management is not aware of any events that are reasonably likely to have a material adverse effect on our liquidity.

The following table presents primary sources of funding as of the dates indicated:

	December 31, 2019	December 31, 2018	Change
		(Dollars in millions)	
Retail deposits	$ 9,164	$ 8,854	$ 310
Government deposits	1,213	1,202	11
Wholesale deposits	633	583	50
Custodial deposits	4,136	1,741	2,395
Total deposits	15,146	12,380	2,766
Federal Home Loan Bank advances and other short-term debt	4,815	3,394	1,421
Other long-term debt	496	495	1
Total borrowed funds	5,311	3,889	1,422
Total funding	$ 20,457	$ 16,269	$ 4,188

The following table presents certain liquidity sources and borrowing capacity as of the dates indicated:

	December 31, 2019	December 31, 2018	Change
		(Dollars in millions)	
Federal Home Loan Bank advances			
Outstanding Advances	$ 4,345	$ 3,143	$ 1,202
Borrowing capacity			
Line of credit	30	30	—
Collateralized borrowing capacity	2,345	2,810	(465)
Total unused borrowing capacity	2,375	2,840	(465)
FRB discount window			
Collateralized borrowing capacity	758	409	349
Unencumbered investment securities			
Agency - Commercial	1,257	737	520
Agency - Residential	1,180	475	705
Municipal obligations	26	28	(2)
Corporate debt obligations	77	41	36
Other MBS	1	—	1
Total unencumbered investment securities	$ 2,541	$ 1,281	$ 1,260

Deposits

The following table sets forth the composition of our deposits:

	At December 31,							
	2019		2018		2017		Change	
	Balance	% of Deposits	Balance	% of Deposits	Balance	% of Deposits	2019 vs. 2018	2018 vs. 2017
Retail deposits			(Dollars in millions)					
Branch retail deposits								
Savings accounts	$ 3,030	20.0%	$ 2,812	22.7%	$ 931	10.4%	$ 218	$ 1,881
Certificates of deposit/CDARS (1)	2,353	15.5%	2,387	19.3%	3,482	39.0%	$ (34)	(1,095)
Demand deposit accounts	1,318	8.7%	1,297	10.5%	124	1.4%	$ 21	1,173
Money market demand accounts	495	3.3%	628	5.1%	1,491	16.7%	$ (133)	(863)
Total branch retail deposits	7,196	47.5%	7,124	57.5%	6,028	67.5%	72	1,096
Commercial deposits (2)							—	
Demand deposit accounts	1,438	9.5%	1,243	10.0%	288	3.2%	195	955
Savings accounts	342	2.3%	314	2.5%	71	0.8%	28	243
Money market demand accounts	188	1.2%	173	1.4%	69	0.8%	15	104
Certificates of deposit/CDARS (1)	—	—%	—	—%	2	—%	—	(2)
Total commercial deposits	1,968	13.0%	1,730	13.9%	430	4.8%	238	1,300
Total retail deposits	$ 9,164	60.5%	$ 8,854	71.5%	$ 6,458	72.3%	$ 310	$ 2,396
Government deposits							—%	
Savings accounts	$ 495	3.3%	$ 567	4.6%	$ 251	2.8%	$ (72)	$ 316
Demand deposit accounts	360	2.4%	326	2.6%	446	5.0%	34	(120)
Certificates of deposit/CDARS (1)	358	2.4%	309	2.5%	376	4.2%	49	(67)
Total government deposits	1,213	8.0%	1,202	9.7%	1,073	12.0%	11	129
Custodial deposits (3)	4,136	27.3%	1,741	14.1%	45	0.5%	2,395	1,696
Wholesale deposits	633	4.2%	583	4.7%	1,358	15.2%	50	(775)
Total deposits (4)	$ 15,146	100.0%	$ 12,380	100.0%	$ 8,934	100.0%	$ 2,766	$ 3,446

(1) The aggregate amount of certificates of deposit with a minimum denomination of $100,000 was approximately $1.7 billion, $1.9 billion, and $1.4 billion at December 31, 2019, December 31, 2018, and December 31, 2017 respectively.
(2) Includes deposits from commercial and business banking customers.
(3) Represents investor custodial accounts and escrows controlled by us in connection with loans serviced or subserviced for others and that have been placed on deposit with the Bank.

(4) Total exposure to uninsured deposits over $250,000 was approximately $2.8 billion and $2.8 billion at December 31, 2019 and December 31, 2018, respectively.

Total deposits increased $2.8 billion, or 22 percent, at December 31, 2019, compared to December 31, 2018, primarily due to the rise in custodial deposits increasing $2.4 billion, driven by a 168 percent increase in subserviced accounts.

We utilize local governmental agencies and other public units, as an additional source for deposit funding. We are not required to hold collateral against our government deposits from Michigan government entities as allowed by the Michigan Business and Growth Fund. At December 31, 2019, we were required to hold collateral for our government deposits in California that were in excess of $250,000. In Indiana, Wisconsin and Ohio, we may be required to hold collateral against our government deposits based on a variety of factors including, but not limited to, the size of individual deposits and external bank ratings. At December 31, 2019, collateral held on government deposits in these states was de minimis. Government deposit accounts included $358 million of certificates of deposit with maturities typically less than one year and $855 million in checking and savings accounts at December 31, 2019.

Custodial deposits arise due to our servicing or subservicing of loans for others and represent the investor custodial accounts on deposit with the Bank. These deposits require us to credit the MSR owner interest against subservicing income. This cost is a component of net loan administration income.

We participate in the CDARS program, through which certain customer CDs are exchanged for CDs of similar amounts from other participating banks and customers may receive FDIC insurance up to $50 million. This program helps the Bank secure larger deposits and attract and retain customers. At December 31, 2019, we had $133 million of total CDs enrolled in the CDARS program, a decrease of $44 million from December 31, 2018.

FHLB Advances

The FHLB - Indianapolis provides loans, also referred to as advances, on a fully collateralized basis, to savings banks and other member financial institutions. We are required to maintain a minimum amount of qualifying collateral securing FHLB advances. In the event of default, the FHLB advance is similar to a secured borrowing, whereby the FHLB has the right to sell the pledged collateral to settle the fair value of the outstanding advances.

We rely upon advances from the FHLB as a source of funding for the origination or purchase of loans for sale in the secondary market and for providing duration specific short-term and long-term financing. The outstanding balance of FHLB advances fluctuates from time to time depending on our current inventory of mortgage LHFS and the availability of lower cost funding sources. Our current portfolio includes short-term fixed rate advances and long-term fixed rate advances.

We are currently authorized through a resolution of our Board to apply for advances from the FHLB using approved loan types as collateral, which includes residential first mortgage loans, home equity lines of credit, and commercial real estate loans. As of December 31, 2019, our Board has authorized and approved a line of credit with the FHLB of up to $10.0 billion, which is further limited based on our total assets and qualified collateral, as determined by the FHLB. At December 31, 2019, we had $4.3 billion of advances outstanding and an additional $2.5 billion of collateralized borrowing capacity available at the FHLB.

Federal Reserve Discount Window

We have arrangements with the FRB of Chicago to borrow from its discount window. The discount window is a borrowing facility that we may utilize for short-term liquidity needs arising from special or unusual circumstances. The amount we are allowed to borrow is based on the lendable value of the collateral that we provide. To collateralize the line, we pledge investment securities and loans that are eligible based on FRB of Chicago guidelines.

At December 31, 2019, we pledged collateral, which included commercial loans, municipal bonds, and agency bonds, to the Federal Reserve Discount Window amounting to $788 million with a lendable value of $758 million. At December 31, 2018, we pledged collateral to the Federal Reserve Discount Window amounting to $488 million with a lendable value of $409 million. We do not typically utilize this available funding source and at December 31, 2019 and December 31, 2018, we had no borrowings outstanding against this line of credit.

Other Unsecured Borrowings

We have access to overnight federal funds purchased lines with other Federal Reserve member institutions. We utilize this source of funding for short-term liquidity needs, depending on the availability and cost of our other funding sources. At December 31, 2019, we had $0.5 billion of borrowings outstanding under this source of funding. Additional borrowing capacity under this and other sources of funding can vary depending on market conditions.

Debt

As part of our overall capital strategy, we previously raised capital through the issuance of junior subordinated notes to our special purpose trusts formed for the offerings, which issued Tier 1 qualifying preferred stock (trust preferred securities). The trust preferred securities are callable by us at any time. Interest is payable on a quarterly basis; however, we may defer interest payments for up to 20 quarters without default or penalty. At December 31, 2019, we are current on all interest payments.

For further information, see Note 13 - Borrowings.

Contractual Obligations

We have various financial obligations, some of which are contractual obligations, which require future cash payments. For further information on each item, see Note 1 - Description of Business, Basis of Presentation, and Summary of Significant Accounting Standards, Note 9 - Premises and Equipment, Note 12 - Deposit Accounts and Note 13 - Borrowings.

The following table summarizes contractual obligations at December 31, 2019, and the future periods in which the obligations are expected to be settled in cash:

	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years	Total
	(Dollars in millions)				
Deposits without stated maturities	$ 7,665	$ —	$ —	$ —	$ 7,665
Short-term FHLB advances and other borrowings	3,695	—	—	—	3,695
Certificates of deposits	2,312	972	51	10	3,345
Long-term FHLB advances	—	—	350	300	650
Senior notes	—	248	—	—	248
Trust preferred securities	—	—	—	247	247
Operating leases	11	12	4	2	29
DOJ litigation settlement	—	—	—	118	118
Other (1)	20	16	6	1	43
Total	$ 13,703	$ 1,248	$ 411	$ 678	$ 16,040

(1) Includes contracts with vendors and commitments to various limited partnerships that invest in housing projects qualifying for the low income housing tax credit.

Operational Risk

Operational risk is the risk to current or projected financial condition and resilience arising from inadequate or failed internal processes or systems, human errors or misconduct, or adverse external events such as market conditions, fraudulent activities, disasters, and security risks. We continuously strive to adapt our system of internal controls to ensure compliance with laws, rules, and regulations, and to improve the oversight of our operational risk.

We evaluate internal systems, processes, and controls to mitigate loss from cyber-attacks and, to date, have not experienced any material losses. The goal of this framework is to implement effective operational risk techniques and strategies, minimize operational and fraud losses, and enhance our overall performance.

Loans with government guarantees

Substantially all of our loans with government guarantees continue to be insured or guaranteed by the FHA or the U.S. Department of Veterans Affairs. In the event of a government guaranteed loan borrower default, Flagstar has a unilateral option to repurchase loans sold to GNMA that are 90 days past due and recover losses through a claims process from the insurer.

Nonperforming repurchased loans in this portfolio earn interest at a rate based upon the 10-year U.S. Treasury note rate from the time the underlying loan becomes delinquent, which is not paid by the FHA until claimed. Additionally, if the Bank cures the loan, it can be re-sold to GNMA. If not, the Bank can begin the process of collecting the government guarantee by filing a claim in accordance with established guidelines. Certain loans within our portfolio may be subject to indemnifications and insurance limits which expose us to limited credit risk.

During the year ended December 31, 2019, we experienced net charge-offs of $2 million related to loans with government guarantees and have reserved for the remaining risks within other assets and as a component of our ALLL on residential first mortgages. These additional expenses or charges arise due to insurance limits on VA insured loans and FHA property foreclosure and preservation requirements that may result in a loss in excess of all, or part of, the guarantee.

Our loans with government guarantees portfolio totaled $736 million at December 31, 2019, as compared to $392 million at December 31, 2018. The increase is primarily due to new purchases out-pacing loans transferred to LHFS and resold to Ginnie Mae.

For further information, see Note 5 - Loans with Government Guarantees.

Regulatory Risks

Department of Justice Settlement Agreement

On February 24, 2012, the Bank entered into a Settlement Agreement with the DOJ under which we made an initial payment of $15 million and agreed to make future payments totaling $118 million in annual increments of up to $25 million upon meeting all of the following conditions which are evaluated quarterly and include: (a) the reversal of the DTA valuation allowance, which occurred at the end of 2013; (b) the repayment of the Fixed Rate Cumulative Perpetual Preferred Stock, Series C (the "TARP Preferred"), which occurred in July 2016; and (c) the Bank having a Tier 1 Leverage Capital Ratio of 11 percent or greater as filed in the Call Report with the OCC. At December 31, 2019, the Company had a Tier 1 Leverage Capital Ratio of 7.71 percent and the fair value of this liability was $35 million.

No payment would be required until six months after the Bank files its Call Report first reporting that its Tier 1 Leverage Capital Ratio was 11 percent or greater. If all other conditions were then satisfied, an initial annual payment of $25 million would be due at that time. The next annual payment is only made if all conditions continue to be satisfied, otherwise payments are delayed until all such conditions are again met. Further, making such a payment must not violate any material banking regulatory requirement, and the OCC must not object in writing.

The combination of (a) future dividends from the Bank to Bancorp and (b) continued growth in earning assets at the Bank are expected to continue to limit the growth rate of the Bank’s Tier 1 Leverage Capital Ratio, which could have an impact on the timing of expected cash flows under the Settlement Agreement.

Consistent with most mid-size banks, we expect our Tier 1 Leverage Capital Ratio to be impacted by (a) future dividends from the Bank to Bancorp and (b) continued growth in earning assets at the Bank which could have an impact on the timing of expected cash flows under the Settlement Agreement.

Consistent with our business and regulatory requirements, Flagstar shall seek in good faith to fulfill the conditions, and will not undertake any conduct or fail to take any action the purpose of which is to frustrate or delay our ability to fulfill any of the conditions.

Additionally, if the Bank or Bancorp become party to a business combination in which the Bank and Bancorp represent less than 33.3 percent of the resulting company’s assets, annual payments would commence twelve months after the date of that business combination.

The Settlement Agreement meets the definition of a financial instrument for which we elected the fair value option. We consider the assumptions a market participant would make to transfer the liability and evaluate the potential ways we might satisfy the Settlement Agreement and our estimates of the likelihood of these outcomes, which may change over time. The fair value of the liability is subject to significant uncertainty and is impacted by forecasted estimates of the timing of potential payments, which are impacted by estimates of equity, earnings, timing and amount of dividends and growth of the balance sheet and their related impacts on forecasted Tier 1 Leverage Capital Ratio, the likelihood of the Bank or Bancorp being a party to a business combination resulting in terms which would require payments to commence, or any other means by which a payment could be made. For further information on the fair value to the liability, see Note 20 - Fair Value Measurements.

Capital

Management actively reviews and manages our capital position and strategy. We conduct quarterly capital stress tests and capital adequacy assessments which utilize internally defined scenarios. These analyses are designed to help management and the Board better understand the integrated sensitivity of various risk exposures through quantifying the potential financial and capital impacts of hypothetical stressful events and scenarios. We make adjustments to our balance sheet composition taking into consideration potential business risks, regulatory requirements and the flexibility to support future growth. We prudently manage our capital position and work with our regulators to ensure that our capital levels are appropriate considering our risk profile.

The capital standards we are subject to include requirements contemplated by the Dodd-Frank Act as well as guidelines reached by Basel III. These risk-based capital adequacy guidelines are intended to measure capital adequacy with regard to a banking organization’s balance sheet, including off-balance sheet exposures such as unused portions of loan commitments, letters of credit, and recourse arrangements. Our capital ratios are maintained at levels in excess of those considered to be "well-capitalized" by regulators. Tier 1 leverage was 7.57 percent at December 31, 2019 providing a 257 basis point stress buffer above the minimum level needed to be considered “well-capitalized.” Additionally, total risk-based capital to RWA was 11.52 percent at December 31, 2019 providing a 152 basis point stress buffer above the minimum level needed to be considered "well-capitalized".

Dodd-Frank Act Section 171, commonly known as the Collins Amendment, established minimum Tier 1 leverage and risk-based capital requirements for insured depository institutions, depository institution holding companies, and non-bank financial companies that are supervised under the Federal Reserve. Under the amendment, certain hybrid securities, such as trust preferred securities, may be included in Tier 1 capital for bank holding companies that had total assets below $15 billion as of December 31, 2009. As we were below $15 billion in assets as of December 31, 2009, the trust preferred securities classified as long term debt on our balance sheet will be included as Tier 1 capital, unless we complete an acquisition of a depository institution holding company or a depository institution, and if our total assets remain greater than $15 billion in the quarter in which the acquisition occurs. Should that event occur, our trust preferred securities would be included in Tier 2 capital.

Regulatory Capital Simplification

The Bank and Flagstar have been subject to the capital requirements of the Basel III rules since January 1, 2015. On October 27, 2017, the agencies issued a notice of proposed rulemaking (“NPR”) which would simplify certain aspects of the Basel III capital rules. The agencies expect that the capital treatment and transition provisions for items covered by this final rule will change once the simplification proposal is finalized and effective. Specifically, the proposal would increase the individual limit on MSRs and temporary difference DTAs to 25 percent of CET1 and eliminate the aggregate 15 percent CET1 deduction threshold for MSRs and temporary difference DTAs. In response to comments received from bankers and trade associations, the regulators may change these proposed rules prior to issuing them and it is uncertain when the rules will be issued in their final form. We are currently managing our capital in anticipation of the approval of the proposed rule.

For the period presented, the following table sets forth our capital ratios under the current rules and proposed capital simplification rules, as well as our excess capital over well-capitalized minimums under both rules.

Flagstar Bancorp	Actual		Well-Capitalized Under Prompt Corrective Action Provisions		Under Proposed Capital Simplification		Excess Capital Over Well-Capitalized Minimum (1)	
	Amount	Ratio	Amount	Ratio	Amount	Ratio	Current Rule	Capital Simplification Rules
	(Dollars in millions)							
December 31, 2019								
Tier 1 leverage capital (to adjusted avg. total assets)	$ 1,720	7.57%	$ 1,136	5.0%	$ 1,826	8.00%	$ 584	$ 713
Common equity Tier 1 capital (to RWA)	1,480	9.32%	1,033	6.5%	1,586	9.62%	447	565
Tier 1 capital (to RWA)	1,720	10.83%	1,271	8.0%	1,826	11.07%	449	616
Total capital (to RWA)	1,830	11.52%	1,589	10.0%	1,936	11.74%	241	495

(1) Excess capital is the difference between the actual capital ratios under either the current rule or the proposed capital simplification rules and the well-capitalized minimum ratio, multiplied by the relevant asset base.

As presented in the table above, our constraining capital ratio is our total capital to risk weighted assets at 11.52 percent. It would take a $241 million after-tax loss, with the balance sheet remaining constant, for our total risk-based capital ratio to fall below the level considered to be "well-capitalized" and an after-tax loss of $495 million, under the proposed capital simplification rules.

In preparation for the NPR, the Basel III implementation phase-in was halted for the treatment of MSRs and certain DTAs. The agencies issued a final rule that will maintain the capital rules' 2017 transition provisions for several regulatory capital deductions and certain other requirements that are subject to multi-year phase-in schedules in the regulatory capital rules. Specifically, the final rule will maintain the capital rules' 2017 transition provisions at 80 percent for the regulatory capital treatment of the following items: (i) MSRs, (ii) DTAs arising from temporary differences that could not be realized through net operating loss carrybacks, (iii) investments in the capital of unconsolidated financial institutions, and (iv) minority interests. As of December 31, 2019, we had $291 million in MSRs, $42 million in DTAs arising from temporary differences and no material investments in unconsolidated financial institutions or minority interest. This final rule will maintain the 2017 transition provisions for certain items for non-advanced approach banks. For additional information on our capital requirements, see Note 18 - Regulatory Capital.

Use of Non-GAAP Financial Measures

In addition to results presented in accordance with GAAP, this report includes non-GAAP financial measures such as tangible book value per share, tangible common equity to assets ratio, adjusted net income, adjusted diluted earnings per share, adjusted net interest income, adjusted net interest margin and adjusted interest rate spread. We believe these non-GAAP financial measures provide additional information that is useful to investors in helping to understand the underlying performance and trends of the Company.

Non-GAAP financial measures have inherent limitations, which are not required to be uniformly applied and are not audited. Readers should be aware of these limitations and should be cautious with respect to the use of such measures. To mitigate these limitations, we have practices in place to ensure that these measures are calculated using the appropriate GAAP or regulatory components in their entirety and to ensure that our performance is properly reflected to facilitate consistent period-to-period comparisons. Our method of calculating these non-GAAP measures may differ from methods used by other companies. Although we believe the non-GAAP financial measures disclosed in this report enhance investors' understanding of our business and performance, these non-GAAP measures should not be considered in isolation, or as a substitute for those financial measures prepared in accordance with GAAP. Where non-GAAP financial measures are used, the most directly comparable GAAP or regulatory financial measure, as well as the reconciliation to the most directly comparable GAAP or regulatory financial measure, can be found in this report.

Tangible book value per share, tangible common equity to assets ratio, adjusted net income, adjusted diluted earnings per share, adjusted net interest income, adjusted net interest margin, adjusted interest rate spread and adjusted noninterest expense.

The Company believes that tangible book value per share, tangible common equity to assets ratio, adjusted earnings, and adjusted diluted earnings per share provides a meaningful representation of its operating performance on an ongoing basis. Management uses these measures to assess performance of the Company against its peers and evaluate overall performance. The Company believes these non-GAAP financial measures provide useful information for investors, securities analysts and others because it provides a tool to evaluate the Company’s performance on an ongoing basis and compared to its peers.

The following tables provide a reconciliation of non-GAAP financial measures.

	At December 31,				
	2019	2018	2017	2016	2015
	(Dollars in millions)				
Total stockholders' equity	$ 1,788	$ 1,570	$ 1,399	$ 1,336	$ 1,529
Less: Preferred stock	—	—	—	—	267
Less: Goodwill and intangibles	170	190	21	—	—
Tangible book value	$ 1,618	$ 1,380	$ 1,378	$ 1,336	$ 1,262
Number of common shares outstanding	56,631,236	57,749,464	57,321,228	56,824,802	56,483,258
Tangible book value per share	$ 28.57	$ 23.90	$ 24.04	$ 23.50	$ 22.33
Total assets	$ 23,266	$ 18,531	$ 16,912	$ 14,053	$ 13,715
Tangible common equity to assets ratio	6.95%	7.45%	8.15%	9.50%	9.20%

	Three Months Ended			Year Ended				
	December 31, 2019	September 30, 2019	December 31, 2018	December 31, 2019	December 31, 2018	December 31, 2017	December 31, 2016	December 31, 2015
	(Dollars in millions)							
Net income (loss)	$ 58	$ 63	54	$ 218	$ 187	$ 63	$ 171	$ 158
DOJ adjustment	—	—	—	(25)	—	—	(24)	—
Tax impact of DOJ adjustment	—	—	—	5	—	—	8	—
Tax reform impact	—	—	—	—		80	—	—
Recognition of hedging gains	—	—	(29)	—	(29)	—	—	—
Tax impact of hedging gains	—		5	—	5		—	—
Wells Fargo acquisition costs	—	—	14	1	15	—	—	—
Tax impact of Wells Fargo acquisition costs	—	—	(2)	—	(2)	—	—	—
Adjusted net income	$ 58	$ 63	$ 42	$ 199	$ 176	$ 143	$ 155	$ 158
Deferred cumulative preferred stock dividends	—	—	—	—	—	—	(18)	(30)
Adjusted net income applicable to common stockholders	$ 58	$ 63	$ 42	$ 199	$ 176	$ 143	$ 137	$ 128
Weighted average diluted common shares	57,198,734	57,110,796	58,385,354	57,238,978	58,322,950	58,178,343	57,597,667	57,164,523
Diluted earnings per share	$ 1.00	$ 1.11	$ 0.93	$ 3.80	$ 3.21	$ 1.09	$ 2.66	$ 2.24
Adjusted diluted earnings per share	$ 1.00	$ 1.11	$ 0.72	$ 3.46	$ 3.02	$ 2.47	$ 2.38	$ 2.24
Net interest income				$ 562	$ 497	$ 390	$ 323	$ 287
Hedging gains				—	(29)	—	—	—
Adjusted net interest income				$ 562	$ 468	$ 390	$ 323	$ 287
Average interest-earning assets				$ 18,453	$ 16,136	$ 14,130	$ 12,164	$ 10,436
Net interest margin				3.05%	3.07%	2.75%	2.64%	2.74%
Adjusted net interest margin				3.05%	2.89%	2.75%	2.64%	2.74%
Average interest-earning asset yield				4.28%	4.21%	3.71%	3.42%	3.39%
Average interest-bearing liability cost				1.76%	1.40%	1.15%	0.97%	0.82%
Impact from hedging gains				—%	0.23%	—%	—%	—%
Adjusted average interest-bearing liability cost				1.76%	1.63%	1.15%	0.97%	0.82%
Interest rate spread				2.52%	2.81%	2.56%	2.45%	2.58%
Adjusted interest rate spread				2.52%	2.58%	2.56%	2.45%	2.58%
Noninterest expense				$ 888	$ 712	$ 643	$ 560	$ 536
Wells Fargo acquisition costs				—	15	—	—	—
Adjusted noninterest expense				$ 888	$ 697	$ 643	$ 560	$ 536

Accounting and Reporting Developments

Adoption of New Accounting Standards - *Credit Losses*

We will adopt CECL as of January 1, 2020. Our allowance for credit losses under CECL uses relevant available information, from internal and external sources, relating to past events, current conditions, and reasonable and supportable forecasts. We will apply judgment and assign qualitative factors to each loan portfolio segment based on consideration of the following factors: changes in lending policies and procedures, changes in economic and business conditions, changes in the nature and volume of the portfolio, changes in lending management, changes in credit quality statistics, changes in the quality of the loan review system, changes in the value of underlying collateral for collateral-dependent loans, changes in concentrations of credit, and other internal or external factor changes.

The allowance for expected credit losses on non-impaired loans are determined by segmenting the portfolio based upon common risk characteristics. Broadly, our consumer loan portfolio is segmented into Residential First Mortgage, Home

Equity and Other Consumer, which are impacted by lien position, credit quality, and loan structure. Commercial loans are segmented into Commercial Real Estate, Commercial and Industrial, and Warehouse Lending, which are impacted by credit quality and loan structure. The general allowance for all classes is determined through dual risk rating models which use probability of default, loss given default and exposure at default. We expect longer lived loans to be more significantly impacted by CECL than those with shorter lives.

For further information of recently issued accounting pronouncements and their expected impact on our Consolidated Financial Statements, see Note 1 - Description of Business, Basis of Presentation, and Summary of Significant Accounting Standards.

Critical Accounting Estimates

Our Consolidated Financial Statements are prepared in accordance with U.S. GAAP and reflect general practices within our industry. Our significant accounting policies are described in Note 1 - Description of Business, Basis of Presentation, and Summary of Significant Accounting Standards. Some of our significant accounting policies require complex judgments and estimates to determine values of assets and liabilities. The more judgmental, uncertain and complex estimates are further discussed below. These estimates are based on information available to management as of the date of the Consolidated Financial Statements. Accordingly, as this information changes, future financial statements could reflect different estimates or judgments.

Allowance for Loan Losses

The ALLL represents management's estimate of probable credit losses inherent in our LHFI portfolio. The ALLL is sensitive to a variety of internal factors, such as the mix and level of loan balances outstanding, TDR volume, net charge-off experience, as well as external factors, such as, property values, the general health of the economy, unemployment rates, bankruptcy filings, peer data, etc. Management considers these variables and all other available information when establishing the final level of the allowance. These variables and others have the ability to result in actual loan losses that differ from the originally estimated amounts.

The ALLL includes a component related to specifically identify impaired loans (TDR and NPL loans) and a collectively evaluated model-based component. For further discussion on the methodologies used in determining our allowance, see Note 1 - Description of Business, Basis of Presentation, and Summary of Significant Accounting Standards.

Specifically identified component

The specifically identified component of the ALLL related to performing TDR loans is generally measured as the difference between the recorded investment in the specific loan and the present value of the cash flows expected to be collected, discounted at the loan's original effective interest rate. Estimating the timing and amounts of future cash flow projections is highly judgmental and based upon assumptions including default rates, prepayment probability and loss severities. All of these estimates and assumptions require significant management judgment and certain assumptions are highly subjective.

Specifically identified collateral dependent NPL loans are generally measured as the difference between the recorded investment in the impaired loan and the underlying collateral value less estimated costs to sell. These estimates are dependent on third party property valuations which may be influenced by factors such as the current and future level of home prices, the duration of current overall economic conditions, and other macroeconomic and portfolio-specific factors.

Model based component

The model-based component of the ALLL (the "General Allowance") is calculated on our non-impaired consumer and commercial LHFI portfolio by applying average historical loss rates experienced during our identified ten year look back period to outstanding principal balances over an estimated loss emergence period. For portfolios that do not have adequate loss experience and purchased portfolios, we utilize peer loss data in determining the ALLL. We apply judgment to determine the appropriateness of the look back and less emergence periods. The loss emergence period represents the time period between the date at which the loss is estimated to have been incurred and the ultimate realization of that loss (by a charge-off). Estimated loss emergence periods may vary by product and may change over time; management applies judgment in estimating loss emergence periods, using available credit information and trends.

Our ALLL estimate takes other qualitative factors into consideration, such as current economic events that have occurred but may not yet be reflected in the historical loss estimates and model imprecision. These adjustments are determined by analyzing the historical loss experience for each major product segment and its underlying credit characteristics. It is difficult to predict whether historical loss experience is indicative of future loss levels, therefore, management applies judgment in making adjustments deemed necessary based on the following factors: changes in lending policies and procedures, changes in economic and business conditions, changes in the nature and volume of the portfolio, changes in lending management, changes in credit quality statistics, changes in the quality of the loan review system, changes in the value of underlying collateral for collateral-dependent loans, the potential impact of payment recasts, changes in concentrations of credit, and other internal or external factor changes. The application of different inputs into the model calculation and the assumptions used by management to adjust the model calculation are subject to significant management judgment and may result in actual loan losses that differ from the originally estimated amounts.

Fair Value Measurements

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 quoted market prices in an active market, or if market prices are not available, is estimated using models employing techniques such as matrix pricing or discounting expected cash flows.

The significant assumptions used in the models are independently verified against observable market data where possible. Where observable market data is not available, the estimate of fair value becomes more subjective and involves a high degree of judgment. In this circumstance, fair value is estimated based on our judgment regarding the value that market participants would assign to the asset or liability. Therefore, the results cannot be determined with precision and may not be realized in an actual sale or immediate settlement of the asset or liability. Additionally, there are inherent limitations to any valuation technique, and changes in the underlying assumptions used, including discount rates and estimates of future cash flows, could significantly affect the results of current or future values.

A portion of our assets and liabilities are carried at fair value on the Consolidated Statements of Financial Condition. The majority of these assets and liabilities are measured at fair value on a recurring basis, however, certain assets are measured at fair value on a nonrecurring basis based on the fair value of the underlying collateral.

For further information regarding the valuation of our financial instruments, including those that utilize unobservable inputs, see Note 1 - Description of Business, Basis of Presentation, and Summary of Significant Accounting Standards and Note 20 - Fair Value Measurements.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

A discussion regarding our management of market risk is included in "Market Risk" in this report in Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Index to Consolidated Financial Statements

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Flagstar Bancorp, Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated statements of financial condition of Flagstar Bancorp, Inc. and its subsidiaries (the “Company”) as of December 31, 2019 and 2018, and the related consolidated statements of operations, comprehensive income, stockholders’ equity and cash flows for each of the three years in the period ended December 31, 2019, including the related notes (collectively referred to as the “consolidated financial statements”). We also have audited the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management’s Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company’s consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (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 audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements 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 audits 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. 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 audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) 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.

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 (i) relate to accounts or disclosures that are material to the consolidated financial statements and (ii) 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.

Allowance for Loan Losses - Lookback Period and Estimation of the Loss Emergence Period

As described in Notes 1 and 4 to the consolidated financial statements, management establishes an allowance for loan losses for probable losses that have been specifically identified (specific allowance) and for probable losses believed to be inherent in the held-for investment loan portfolio which are collectively evaluated through a model based component (general allowance). The general allowance totaled $94 million as of December 31, 2019. Management establishes the general allowance by segmenting the non-impaired loan portfolio based on common risk characteristics and using a historical loss model which utilizes the Company's loss history by specific product or industry peer loss data for products that are not sufficiently seasoned. The loss model utilizes average historical loss rates experienced during an identified look back period applied to the outstanding principal balances over an estimated loss emergence period. For each reporting period, management evaluates the appropriateness of the lookback period used to calculate the historical loss rates for each portfolio segment. In making this determination management considers the recent performance of the portfolio in comparison to both recent historical periods and the prior ten year period. The loss emergence period represents the time period between the date at which the loss is estimated to have been incurred and the ultimate realization of that loss (by a charge-off). Management estimates the loss emergence period using available credit information and trends.

The principal considerations for our determination that performing procedures relating to the allowance for loan losses - lookback period and estimation of the loss emergence period is a critical audit matter are (i) there was significant judgment by management in determining the lookback period and estimating the loss emergence period, which in turn led to a high degree of auditor judgment and subjectivity in performing procedures relating to the estimate, (ii) there was a high degree of auditor judgment in evaluating audit evidence related to the reasonableness of the lookback period and the loss emergence period, and (iii) the audit effort involved the use of professionals with specialized skill or knowledge to assist in evaluating audit evidence from these procedures.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the Company's estimation of the allowance for loan losses, including controls over the determination of the lookback period and estimation of the loss emergence period. These procedures also included, among others, testing management's process for estimating the allowance for loan losses. This included evaluating the appropriateness of the historical loss model, evaluating the reasonableness of the lookback period and loss emergence period, and testing the completeness and accuracy of data provided by management. The procedures included the involvement of professionals with specialized skill and knowledge to assist in evaluating the reasonableness of the loss emergence period for each portfolio segment. Evaluating the lookback period for each portfolio segment involved evaluating whether it was reasonable for each portfolio segment considering current and historical macroeconomic trends as well as portfolio characteristics and portfolio performance trends.

Valuation of the Department of Justice Liability

As described in Notes 1, 19, and 20 to the consolidated financial statements, the Company has a settlement agreement with the Department of Justice (DOJ) representing the obligation to make future additional payments establishing a legally enforceable contract with a stipulated payment plan, which management has determined meets the definition of a financial liability. Management has elected the fair value option to account for the DOJ liability and determined the estimated fair value to be $35 million as of December 31, 2019. As described in Note 19, the fair value of the liability is subject to significant uncertainty and is impacted by forecasted estimates of the timing of potential payments, some of which are impacted by inputs including estimates of equity, earnings, timing and amount of dividends, and growth of the balance sheet and their related impacts on the forecasted Tier 1 Leverage Capital Ratio, discount rate, the likelihood and types of potential business combinations, or any other means by which a payment could be made. The significant unobservable inputs used in the fair value measurement of the

DOJ liability are the discount rate, asset growth rate, return on assets, dividend rate, and the potential ways the Company might be required to begin making DOJ liability payments and their estimates of the likelihood of these outcomes.

The principal considerations for our determination that performing procedures relating to the valuation of the DOJ liability is a critical audit matter are (i) there was significant judgment by management in determining the fair value of the DOJ liability, which in turn led to a high degree of auditor judgment and subjectivity in performing procedures relating to the estimate and (ii) there was a high degree of auditor judgment in evaluating audit evidence related to the reasonableness of the discount rate, asset growth rate, return on assets, dividend rate, and the potential ways the Company might be required to begin making DOJ liability payments and the estimates of the likelihood of these outcomes used in the fair value estimate.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of the Company's controls relating to the valuation of the DOJ liability. These procedures also included, among others, testing management's process for determining the valuation of the DOJ liability. This included evaluating the appropriateness of the valuation method, the reasonableness of the discount rate, asset growth rate, return on assets, dividend rate, the potential ways the Company might be required to begin making DOJ liability payments and the estimates of the likelihood of these outcomes.

Valuation of Mortgage Servicing Rights

As described in Notes 1, 10, and 20 to the consolidated financial statements, the Company purchases and originates mortgage loans for sale to the secondary market. If the Company retains the right to service the loan at the time of sale, a mortgage servicing right (MSR) is recognized and recorded at fair value, where fair value represents the price that would be received to sell an asset in an orderly transaction between market participants at the measurement date. MSRs represented $291 million or 89% of the Company's total level 3 assets at fair value as of December 31, 2019. To determine the fair value of MSRs, management uses a valuation model and significant unobservable inputs, including option adjusted spreads, constant prepayment rates, and cost to service.

The principal considerations for our determination that performing procedures relating to the valuation of mortgage servicing rights is a critical audit matter are (i) there was significant judgment by management in determining the fair value of the MSRs, which in turn led to a high degree of auditor judgment and subjectivity in performing procedures relating to the valuation model and significant unobservable inputs, including option adjusted spreads, constant prepayment rates and cost to service, used in the valuation of MSRs, and (ii) there was a high degree of auditor judgment in evaluating audit evidence related to the valuation of the MSRs.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the valuation of the MSRs valuation, including controls over the aforementioned significant unobservable inputs. These procedures also included, among others, testing management's process for determining the fair value of the MSRs. This included evaluating the appropriateness of the valuation model, testing the completeness and accuracy of the data used in the model, and evaluating the reasonableness of the valuation, including the significant unobservable inputs considering external market and industry data.

/s/ PricewaterhouseCoopers LLP

Detroit, Michigan

February 28, 2020

We have served as the Company's auditor since 2015.

Flagstar Bancorp, Inc.
Consolidated Statements of Financial Condition
(In millions, except share data)

	December 31,	
	2019	2018
Assets		
Cash	$ 220	$ 260
Interest-earning deposits	206	148
Total cash and cash equivalents	426	408
Investment securities available-for-sale	2,116	2,142
Investment securities held-to-maturity	598	703
Loans held-for-sale ($5,219 and $3,732 measured at fair value, respectively)	5,258	3,869
Loans held-for-investment ($12 and $10 measured at fair value, respectively)	12,129	9,088
Loans with government guarantees	736	392
Less: allowance for loan losses	(107)	(128)
Total loans held-for-investment and loans with government guarantees, net	12,758	9,352
Mortgage servicing rights	291	290
Federal Home Loan Bank stock	303	303
Premises and equipment, net	416	390
Goodwill and intangible assets	170	190
Other assets	930	884
Total assets	$ 23,266	$ 18,531
Liabilities and Stockholders' Equity		
Noninterest bearing deposits	$ 5,467	$ 2,989
Interest bearing deposits	9,679	9,391
Total deposits	15,146	12,380
Short-term Federal Home Loan Bank advances and other	4,165	3,244
Long-term Federal Home Loan Bank advances	650	150
Other long-term debt	496	495
Other liabilities ($35 and $60 measured at fair value, respectively)	1,021	692
Total liabilities	21,478	16,961
Stockholders' Equity		
Common stock $0.01 par value, 80,000,000 and 80,000,000 shares authorized; 56,631,236 and 57,749,464 shares issued and outstanding, respectively	1	1
Additional paid in capital	1,483	1,522
Accumulated other comprehensive (loss) income	1	(47)
Retained earnings/(accumulated deficit)	303	94
Total stockholders' equity	1,788	1,570
Total liabilities and stockholders' equity	$ 23,266	$ 18,531

The accompanying notes are an integral part of these Consolidated Financial Statements.

Flagstar Bancorp, Inc.
Consolidated Statements of Operations
(In millions, except per share data)

	For the Years Ended December 31,		
	2019	2018	2017
Interest Income			
Loans	$ 713	$ 595	$ 446
Investment securities	77	86	80
Interest-earning deposits and other	4	2	1
Total interest income	794	683	527
Interest Expense			
Deposits	138	94	52
Short-term Federal Home Loan Bank advances and other	59	68	36
Long-term Federal Home Loan Bank advances	7	(4)	24
Other long-term debt	28	28	25
Total interest expense	232	186	137
Net interest income	562	497	390
Provision (benefit) for loan losses	18	(8)	6
Net interest income after provision (benefit) for loan losses	544	505	384
Noninterest Income			
Net gain on loan sales	335	200	268
Loan fees and charges	100	87	82
Net return on mortgage servicing rights	6	36	22
Loan administration income	30	23	21
Deposit fees and charges	38	21	18
Other noninterest income	101	72	59
Total noninterest income	610	439	470
Noninterest Expense			
Compensation and benefits	377	318	299
Occupancy and equipment	161	127	103
Commissions	111	80	72
Loan processing expense	80	59	57
Legal and professional expense	27	28	30
Federal insurance premiums	20	22	16
Intangible asset amortization	15	5	—
Other noninterest expense	97	73	66
Total noninterest expense	888	712	643
Income before income taxes	266	232	211
Provision for income taxes	48	45	148
Net income	$ 218	$ 187	$ 63
Net income per share			
Basic	$ 3.85	$ 3.26	$ 1.11
Diluted	$ 3.80	$ 3.21	$ 1.09
Weighted average shares outstanding			
Basic	56,584,238	57,520,289	57,093,868
Diluted	57,238,978	58,322,950	58,178,343

The accompanying notes are an integral part of these Consolidated Financial Statements.

Flagstar Bancorp, Inc.
Consolidated Statements of Comprehensive Income
(In millions)

	For the Years Ended December 31,		
	2019	2018	2017
Net income	$ 218	$ 187	$ 63
Other comprehensive income (loss), net of tax			
Investment securities	48	(29)	(10)
Derivatives and hedging activities	—	(2)	1
Other comprehensive income (loss), net of tax	48	(31)	(9)
Comprehensive income	$ 266	$ 156	$ 54

Flagstar Bancorp, Inc.
Consolidated Statements of Stockholders' Equity
(In millions, except share data)

	Common Stock					
	Number of Shares Outstanding	Amount of Common Stock	Additional Paid in Capital	Accumulated Other Comprehensive Income (Loss)	Retained Earnings (Accumulated Deficit)	Total Stockholders' Equity
Balance at December 31, 2016	56,824,802	$ 1	$ 1,503	$ (7)	$ (161)	$ 1,336
Net income	—	—	—	—	63	63
Total other comprehensive loss	—	—	—	(9)	—	(9)
Shares issued for Employee Stock Purchase Plan	48,032	—	—	—	—	—
Warrant exercise	154,313	—	4	—	—	4
Stock-based compensation	294,081	$ —	$ 5	—	—	5
Balance at December 31, 2017	57,321,228	$ 1	$ 1,512	$ (16)	$ (98)	$ 1,399
Net income	—	$ —	$ —	$ —	$ 187	$ 187
Total other comprehensive loss	—	—	—	(26)	$ —	(26)
Shares issued for Employee Stock Purchase Plan	114,385	—	10	—	$ —	10
Stock-based compensation	318,560	—	—	—	$ —	—
Reclassification of certain income tax effects (1)	—			(5)	$ 5	—
Repurchase of shares included in treasury stock	(4,709)	—	—	—	$ —	—
Balance at December 31, 2018	57,749,464	$ 1	$ 1,522	$ (47)	$ 94	1,570
Net income	—	$ —	$ —	$ —	$ 218	$ 218
Total other comprehensive income	—	—	—	48	—	48
Shares issued for Employee Stock Purchase Plan	106,881	—	—	—	—	—
Dividends declared and paid	376	—	—	—	(9)	(9)
Stock-based compensation	292,220	—	11	—	—	11
Repurchase of common shares	(1,517,705)	—	(50)	—	—	(50)
Balance at December 31, 2019	56,631,236	$ 1	$ 1,483	$ 1	$ 303	$ 1,788

(1) Income tax effects of the Tax Cuts and Jobs Act are reclassified from AOCI to retained earnings due to the adoption of ASU 2018-02.

The accompanying notes are an integral part of these Consolidated Financial Statements.

Flagstar Bancorp, Inc.
Consolidated Statements of Cash Flows
(In millions)

	For the Years Ended December 31,		
	2019	2018	2017
Operating Activities			
Net income	$ 218	$ 187	$ 63
Adjustments to reconcile net income to net cash used in operating activities:			
Depreciation and amortization	70	56	40
Provision (benefit) for loan losses	18	(8)	6
Net gain on loan and asset sales	(335)	(200)	(268)
Proceeds from sales of HFS	15,866	8,935	9,245
Origination, premium paid and purchase of loans, net of principal repayments	(32,715)	(32,261)	(34,235)
Net change in:			
Other	(205)	(87)	(173)
Net cash used in operating activities	$ (17,083)	$ (23,378)	$ (25,322)
Investing Activities			
Proceeds from sale of AFS securities including loans that have been securitized	$ 15,873	$ 23,721	$ 24,646
Collection of principal on investment securities AFS	184	199	218
Purchase of investment securities AFS and other	(500)	(340)	(904)
Collection of principal on investment securities HTM	106	92	154
Proceeds received from the sale of LHFI	219	161	104
Net origination, purchase, and principal repayments of LHFI	(3,179)	(978)	(1,760)
Acquisition of premises and equipment, net of proceeds	(61)	(71)	(97)
Purchase of bank owned life insurance	—	—	(50)
Net purchase of FHLB stock	—	—	(123)
Proceeds from the sale of MSRs	62	334	309
Assets acquired (liabilities assumed) in business combinations	—	1,499	(8)
Other, net	(16)	(10)	5
Net cash provided by investing activities	$ 12,688	$ 24,607	$ 22,494
Financing Activities			
Net change in deposit accounts	$ 2,766	$ 1,072	$ 134
Net change in short term FHLB borrowings and other	923	(1,016)	2,480
Proceeds from increases in FHLB long-term advances and other debt	550	200	255
Repayment of long-term FHLB advances	(50)	(1,455)	(50)
Net receipt of payments of loans serviced for others	284	181	22
Preferred stock dividends	(9)	—	—
Stock repurchase	(50)	—	—
Other	5	(2)	2
Net cash provided (used) by financing activities	$ 4,419	$ (1,020)	$ 2,843
Net increase in cash, cash equivalents and restricted cash (1)	24	209	15
Beginning cash, cash equivalents and restricted cash (1)	432	223	208
Ending cash, cash equivalents and restricted cash (1)	$ 456	$ 432	$ 223
Supplemental disclosure of cash flow information			
Interest paid on deposits and other borrowings	$ 230	$ 185	$ 136
Income tax payments	$ 4	$ —	$ 5
Non-cash reclassification of investment securities HTM to AFS	$ —	$ 144	$ —
Non-cash reclassification of loans originated LHFI to LHFS	$ 120	$ 279	$ 131
Non-cash reclassification of mortgage loans HFS to HFI	$ —	$ —	$ —
Non-cash reclassification of LHFS to AFS securities	$ 15,458	$ 23,718	$ 24,345
MSRs resulting from sale or securitization of loans	$ 223	$ 356	$ 288

(1) For further information on restricted cash, see Note 11 - Derivatives.

The accompanying notes are an integral part of these Consolidated Financial Statements.

Note 1 - Description of Business, Basis of Presentation, and Summary of Significant Accounting Policies

Description of Business

Flagstar Bancorp, Inc., is a savings and loan holding company founded in 1993. The Company's business is primarily conducted through its principal subsidiary, Flagstar Bank, FSB (the "Bank"), a federally chartered stock savings bank founded in 1987. We are one of the largest banks headquartered in Michigan. When we refer to "Flagstar", "the Company", "we", "our", or "us," we mean Flagstar Bancorp, Inc. and our consolidated subsidiaries.

The Company is subject to regulation, examination and supervision by the Federal Reserve. The Bank is subject to regulation, examination and supervision by the OCC of the U.S. Department of the Treasury, the CFPB and the FDIC. The Bank is a member of the FHLB of Indianapolis and its deposits are insured by the FDIC through the Deposit Insurance Fund.

Consolidation and Basis of Presentation

The accounting and financial reporting policies of us and our subsidiaries conform to accounting principles generally accepted in the United States. Additionally, where applicable the policies conform to the accounting and reporting guidelines prescribed by regulatory authorities. Certain prior period amounts have been reclassified to conform to the current period presentation. The preparation of the Consolidated Financial Statements, requires management to make estimates and assumptions that affect reported amounts of assets and liabilities, revenues and expenses and disclosures of contingent assets and liabilities. Actual results could be materially different from these estimates.

Subsequent Events

We have evaluated all subsequent events for potential recognition and disclosure through the filing date of this Form 10-K.

Cash, Cash Equivalents and Restricted Cash

Cash and cash equivalents include cash on hand, amounts due from correspondent banks and the FRB, and short-term investments that have a maturity at the date of acquisition of three months or less and are readily convertible to cash. Restricted cash includes cash that the Bank pledges as maintenance margin on centrally cleared derivatives and is included in other assets on the Consolidated Statements of Financial Condition.

Investment Securities

Investment securities transactions are recorded on the trade date for purchases and sales. Interest earned on investment securities, including the amortization of premiums and the accretion of discounts, are determined using the effective interest method over the period of maturity and recorded in interest income in the Consolidated Statements of Operations.

We measure securities classified as AFS at fair value, with unrealized gains and losses, net of tax, included in other comprehensive income (loss) in stockholders' equity. We recognize realized gains and losses on AFS securities when securities are sold. The cost of securities sold is based on the specific identification method. Any gains or losses realized upon the sale of a security are reported in other noninterest income in the Consolidated Statements of Operations. The fair value of investment securities is based on observable market prices, when available. If observable market prices are not available, our valuations are based on alternative methods, including: quotes for similar fixed-income securities, matrix pricing, or discounted cash flow methods. The fair values, obtained through an independent third party utilizing a pricing service, are compared to independent pricing sources on at least a quarterly basis.

Investment securities HTM are carried at amortized cost and adjusted for amortization of premiums and accretion of discounts using the interest method. Transfers of investment securities into the HTM category from the AFS category are accounted for at fair value at the date of transfer. Any related unrealized holding gain (loss), net of tax, that was included in the transfer is retained in other comprehensive income (loss) and is amortized as an adjustment to interest income over the remaining life of the securities.

We evaluate AFS and HTM investment securities for OTTI on a quarterly basis. An OTTI is considered to have occurred when the fair value of a debt security is below its amortized costs and we (1) have the intent to sell the security, (2) will more likely than not be required to sell the security before recovery of its amortized cost, or (3) do not expect to recover the entire amortized cost basis of the security. Investments that have an OTTI are written down through a charge to earnings for the amount representing the credit loss on the security. Gains and losses related to all other factors are recognized in other comprehensive income (loss).

Investment securities transactions are recorded on the trade date for purchases and sales. Interest earned on investment securities, including the amortization of premiums and the accretion of discounts, are determined using the effective interest method over the period of maturity and recorded in interest income in the Consolidated Statements of Operations.

For further information, see Note 2 - Investment Securities and Note 20 - Fair Value Measurements.

Loans Held-for-Sale

We classify loans as LHFS when we originate or purchase loans that we intend to sell. We have elected the fair value option for the majority of our LHFS. We estimate the fair value of mortgage loans based on quoted market prices for securities backed by similar types of loans, where available, or by discounting estimated cash flows using observable inputs inclusive of interest rates, prepayment speeds and loss assumptions for similar collateral. LHFS that are recorded at lower of cost or fair value may be carried at fair value on a nonrecurring basis when the fair value is less than cost. For further information, see Note 20 - Fair Value Measurements.

Loans that are transferred into the LHFS portfolio from the LHFI portfolio, due to a change in intent, are recorded at the lower of cost or fair value. Gains or losses recognized upon the sale of loans are determined using the specific identification method.

Loans Held-for-Investment

We classify loans that we have the intent and ability to hold for the foreseeable future or until maturity as LHFI. Loans held-for-investment are reported at their amortized cost, which includes the outstanding principal balance adjusted for any unamortized premiums, discounts, deferred fees and costs. Premiums and discounts on purchased loans and non-refundable loan origination and commitment fees, net of direct costs of originating loans, are deferred and recognized over the contractual lives of the related loans as an adjustment to the loans' effective yield, which is included in interest income on loans in the Consolidated Statements of Operations.

Loans originally classified as LHFS, for which we have elected the fair value option, and subsequently transferred to LHFI continue to be measured and reported at fair value on a recurring basis. Changes in fair value are recorded to other noninterest income on the Consolidated Statements of Operations. The fair value of these loans is determined using the same methods described above for LHFS. For further information, see Note 20 - Fair Value Measurements.

When loans originally classified as LHFS or as LHFI are reclassified due to a change in intent or ability to hold, cash flows associated with the loans are classified in the Consolidated Statements of Cash Flows as operating or investing, in accordance with the initial classification of the loans.

Past Due, Impaired and Modified (Troubled Debt Restructuring) Loans

Loans are considered to be past due when any payment of principal or interest is 30 days past the scheduled payment date. While it is the goal of management to collect on loans, we attempt to work out a satisfactory repayment schedule or modification with past due borrowers and will undertake foreclosure proceedings if the delinquency is not satisfactorily resolved. Our practices regarding past due loans are designed to both assist borrowers in meeting their contractual obligations and minimize losses incurred by the bank.

We cease the accrual of interest on all classes of consumer and commercial loans upon the earlier of, becoming 90 days past due, or when doubt exists as to the ultimate collection of principal or interest (classified as nonaccrual or nonperforming loans). When a loan is placed on nonaccrual status, the accrued interest income is reversed against interest income and the loan may only return to accrual status when principal and interest become current and are anticipated to be fully collectible.

We may modify certain loans in both our consumer and commercial loan portfolios to retain customers or to maximize collection of the outstanding loan balance. We have programs designed to assist borrowers by extending payment dates or reducing the borrower's contractual payments. All loan modifications are made on a case-by-case basis. Our standards relating to loan modifications consider, among other factors, minimum verified income requirements, cash flow analysis, and collateral valuations. TDRs result in those instances in which a borrower demonstrates financial difficulty and for which a concession has been granted, which may include a reduction of interest rate, extension of amortization period, principal and/or interest forgiveness or other actions intended to minimize the economic loss and to avoid foreclosure or repossession of collateral.

Modified loans are classified as nonperforming TDRs if the loan was nonperforming prior to the restructuring, or if the results of a contemporaneous credit evaluation determines that payment is not reasonably assured. Such loans will continue on nonaccrual status until the borrower has established a willingness and ability to make the restructured payments for at least six months, after which they will be classified as performing TDRs and begin to accrue interest.

Loans are considered impaired if it is probable that payment of all interest and principal will not be made in accordance with the original contractual terms of the loan agreement or when any portion of principal or interest is 90 days past due. This classification includes both performing and nonperforming TDRs as interest and principal will not be received in accordance with the original contractual terms of the loan agreement.

When a loan is considered impaired, the accrual of interest income is discontinued until the receipt of principal and interest is no longer in doubt. Interest income is recognized on impaired loans using a cost recovery method unless amounts contractually due are not in doubt. Cash received on nonperforming impaired loans is applied entirely against principal until the loan has been collected in full, after which time any additional cash receipts are recognized as interest income.

For further information, see Note 4 - Loans Held-for-Investment.

Loan Modifications (Troubled Debt Restructurings)

We may modify certain loans in both our consumer and commercial loan portfolios to retain customers or to maximize collection of the outstanding loan balance. We have programs designed to assist borrowers by extending payment dates or reducing the borrower's contractual payments. All loan modifications are made on a case-by-case basis. Our standards relating to loan modifications consider, among other factors, minimum verified income requirements, cash flow analysis, and collateral valuations. TDRs result in those instances in which a borrower demonstrates financial difficulty and for which a concession has been granted, which includes reductions of interest rate, extensions of amortization period, principal and/or interest forgiveness and other actions intended to minimize the economic loss and to avoid foreclosure or repossession of collateral. These loans are classified as nonperforming TDRs if the loan was nonperforming prior to the restructuring, or based upon the results of a contemporaneous credit evaluation. Such loans will continue on nonaccrual status until the borrower has established a willingness and ability to make the restructured payments for at least six months, after which they will be classified as performing TDRs and begin to accrue interest. Performing and nonperforming TDRs remain impaired as interest and principal will not be received in accordance with the original contractual terms of the loan agreement.

Some loan modifications classified as TDRs may not ultimately result in the full collection of principal and interest, as modified, but may give rise to potential incremental losses. We measure impairments using a discounted cash flow method for performing TDRs and measure impairment based on collateral values for nonperforming TDRs.

Allowance for Loan Losses

The allowance for loan losses represents management's estimate of probable losses in our LHFI portfolio, excluding loans carried under the fair value option. We establish an allowance when (a) available information indicates that it is probable that a loss has occurred and (b) the amount of the loss can be reasonably estimated. The allowance provides for probable losses that have been specifically identified (TDR and NPL loans) and for probable losses believed to be inherent in the loan portfolio which are collectively evaluated through a model-based component. Management applies judgment and assigns qualitative factors to each loan portfolio segment based on consideration of the following factors: changes in lending policies and procedures, changes in economic and business conditions, changes in the nature and volume of the portfolio, changes in lending management, changes in credit quality statistics, changes in the quality of the loan review system, changes in the value of underlying collateral for collateral-dependent loans, changes in concentrations of credit, and other internal or external factor changes.

A specific allowance is established on impaired loans when it is probable all amounts due will not be collected pursuant to the original contractual terms of the loan and the recorded investment in the loan exceeds its fair value. The required allowance is measured using either the present value of the expected future cash flows discounted at the loan's effective interest rate or the fair value of the collateral less estimated costs to sell if the loan is collateral dependent.

A General Allowance is established for losses inherent on non-impaired loans by segmenting the portfolio based upon common risk characteristics. The general loss is then determined by using a historical loss model which utilizes our loss history by specific product, or if the product is not sufficiently seasoned, per readily available industry peer loss data. The loss model utilizes average historical loss rates experienced during an identified look back period applied to outstanding principal balances over an estimated loss emergence period that represents the time period between the date at which the loss is estimated to have been incurred and the ultimate realization of that loss (by a charge-off). We evaluate the appropriateness of the lookback period at least quarterly and consider the recent performance of the portfolio compared to both recent historical periods and prior ten year period. We estimate the loss emergence period using available credit information and trends. In addition to the loss history or peer data, we also perform a qualitative assessment considering factors noted above and use our judgments to make any necessary adjustments.

Consumer loans secured by real estate are charged-off to the estimated fair value of the collateral when a loss is confirmed or at 180 days past due, whichever is sooner. Loss confirming events include, but are not limited to, bankruptcy (unsecured), continued delinquency, foreclosure or receipt of an asset valuation indicating a collateral deficiency and the asset is the sole source of repayment. For consumer loans not secured by real estate, the charge-off is taken upon the earlier of the confirmation of a loss or 120 days past due.

Commercial loans are evaluated on a loan level basis and either charged-off or written down to net realizable value if a loss confirming event has occurred. Loss confirming events include, but are not limited to, bankruptcy (unsecured), continued delinquency, foreclosure, or receipt of an asset valuation indicating a collateral deficiency and that asset is the sole source of repayment.

Transfers of Financial Assets

Our recognition of gain or loss on the sale of loans for which we surrender control is accounted for as a sale to the extent that 1) the transferred assets are legally isolated from us or our consolidated affiliates, even in bankruptcy or other receivership, 2) the transferee has the right to pledge or exchange the assets with no conditions that constrain the transferee and provide more than a trivial benefit to the Company, and 3) we do not maintain the obligation or unilateral ability to reclaim or repurchase the assets. If the sale criteria are met, the transferred financial assets are removed from the Consolidated Statements of Financial Condition and a gain or loss on sale is recognized.

Variable Interest Entities

An entity that has a controlling financial interest in a variable interest entity (VIE) is referred to as the primary beneficiary and consolidates the VIE. An entity is deemed to have a controlling financial interest and is the primary beneficiary of a VIE if it has both the power to direct the activities of the VIE that most significantly impact the VIE's economic performance and an obligation to absorb losses or the right to receive benefits that could potentially be significant to the VIE. For further information, see Note 7 - Variable Interest Entities

Repossessed Assets

Repossessed assets include one-to-four family residential property, commercial property and one-to-four family homes under construction that were acquired through foreclosure or acceptance of a deed-in-lieu of foreclosure. Repossessed assets are initially recorded in other assets at the estimated fair value of the collateral less estimated costs to sell. Losses arising from the initial acquisition of such properties are charged against the ALLL at the time of transfer. Subsequent valuation adjustments to reflect fair value, as well as gains and losses on disposal of these properties, are charged to other noninterest expense within noninterest expense in the Consolidated Statements of Operations as incurred. For further information, see Note 6 - Repossessed Assets and Note 20 - Fair Value Measurements.

Loans with Government Guarantees

We originate government guaranteed loans which are pooled and sold as Ginnie Mae MBS. Pursuant to Ginnie Mae servicing guidelines, we have the unilateral right to repurchase loans 90 days or more past due securitized in Ginnie Mae pools.

As a result, once the delinquency criteria have been met, and regardless of whether the repurchase option has been exercised, we account for the loans as if they had been repurchased. We recognize the loans and corresponding liability as loans with government guarantees and other liabilities, respectively, in the Consolidated Statements of Financial Condition. If the loan is repurchased, the liability is cash settled and the loan with government guarantee remains. Once repurchased, we may collect losses through a claims process with the government agency, as an approved lender.

Federal Home Loan Bank Stock

We own stock in the FHLB of Indianapolis, as required to permit us to obtain membership in and to borrow from the FHLB. The stock is redeemable at par and is carried at cost as no market quotes exist for the stock.

Premises and Equipment

Premises and equipment are carried at cost less accumulated depreciation. Land is carried at historical cost. Depreciation is calculated on a straight-line basis over the estimated useful lives of the assets which generally ranges from three to thirty years. Capitalized software is amortized on a straight-line basis over its useful life, which generally ranges from three years to seven years. Software expenditures, repair and maintenance costs that are considered general, administrative, or of a maintenance nature are expensed as incurred.

Goodwill and Intangible Assets

The excess of the cost of an acquisition over the fair value of the net assets acquired consists primarily of goodwill, core deposit intangibles and other identifiable intangible assets.

Goodwill is not amortized, but rather tested annually for impairment, or more frequently as events occur or circumstances change that would indicate the fair value is below the carrying amount. The Company may assess qualitative factors to determine whether it is more-likely-than-not the fair value is less than its carrying amount. If the Company concludes based on the qualitative assessment that goodwill may be impaired, a quantitative one-step impairment test would then be applied. An impairment loss would be recognized for any excess of carrying value over fair value of the goodwill.

Intangible assets subject to amortization are amortized over the estimated life, using a method that approximates the time the economic benefits are realized by the Company. Intangible assets are reviewed for impairment at least annually and whenever events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable.

Amortization expense on intangible assets was $15 million and $5 million for the years ended December 31, 2019 and December 31, 2018, respectively. The estimated future aggregate amortization expense on intangible assets for the years ended 2020, 2021, 2022, and 2023 is $13 million, $11 million, $9 million, and $7 million, respectively.

Mortgage Servicing Rights

We purchase and originate mortgage loans for sale to the secondary market and sell the loans on either a servicing-retained or servicing-released basis. If we retain the right to service the loan, an MSR is created at the time of sale which is recorded at fair value. We use an internal valuation model that utilizes an option-adjusted spread, prepayment speeds, costs to service and other assumptions to determine the fair value of MSRs.

Management obtains third-party valuations of the MSR portfolio on a quarterly basis from independent valuation services to assess the reasonableness of the fair value calculated by our internal valuation model. Changes in the fair value of our mortgage servicing rights are reported on the Consolidated Statements of Operations in net return on mortgage servicing. For further information, see Note 10 - Mortgage Servicing Rights and Note 20 - Fair Value Measurements.

We periodically enter into agreements to sell certain of our MSRs, which qualify as sales transactions. A transfer of servicing rights related to loans previously sold qualifies as a sale at the date on which title passes, if substantially all risks and rewards of ownership have irrevocably passed to the transferee and any protection provisions retained by the transferor are minor and can be reasonably estimated. In addition, if a sale is recognized and only minor protection provisions exist, a liability is accrued for the estimated obligation associated with those provisions.

Servicing Fee Income

Servicing fee income, late fees and ancillary fees received on loans for which we own the MSR, are included in the net return on mortgage servicing asset line of the Consolidated Statements of Operations. The fees are based on the outstanding principal and are recorded as income when earned. Subservicing fees, which are included in loan administration income on the Consolidated Statements of Operations are based on a contractual monthly amount per loan including late fees and other ancillary income.

Revenue from Contracts with Customers

Revenue from Contracts with Customers (Topic 606), under the guidance, an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration in exchange for those goods or services.

Effective January 1, 2018, we have adopted the requirements of ASU 2014-09, Revenue from Contracts with Customers (Topic 606) and all related amendments. We have implemented the guidance utilizing the modified retrospective approach which did not have a material impact on the Company's financial position or results of operations. We undertook a process to evaluate all of our significant revenue sources under the new standard. As lease contracts and financial instruments, which include loans and securities, are excluded from the scope of this standard, the majority of our revenue falls outside of the scope of Topic 606.

The adoption of this guidance does not result in changes to how revenue is recognized or the timing of recognition from our method prior to adoption. Revenue is recognized when obligations, under the terms of a contract with our customer, are satisfied, which generally occurs when services are performed. Revenue is measured as the amount of consideration we expect to receive in exchange for providing services.

The disaggregation of our revenue from contracts with customers is provided below:

		For the Years Ended December 31,	
	Location of Revenue (1)	2019	2018
		(Dollars in millions)	
Deposit account and other banking income	Deposit fees and charges	$ 27	$ 16
Interchange fees	Deposit fees and charges	11	5
Interchange fees	Other noninterest income	2	1
Wealth management	Other noninterest income	6	9
Total		$ 46	$ 31

(1) Recognized within the Community Banking segment.

Deposit account and other banking income - We charge depositors various deposit account service fees including those for outgoing wires, overdrafts, stop payments, and ATM fees. These fees are generated from a depositor’s option to purchase services offered under the contract and are only considered a contract when the depositor exercises their option to purchase these account services. Therefore we deem the term of our contracts with depositors to be day-to-day and do not extend beyond the services already provided. Deposit account and other banking fees are recorded at the point in time we perform the requested service.

Interchange income - We collect interchange fee income when debit cards that we have issued to our customers, are used in merchant transactions. Our performance obligation is satisfied and revenue is recognized at the point we initiate the payment of funds from a customer’s account to a merchant account.

Merchant fee income - We receive a percentage of merchant fees based upon card transactions processed through point of sale terminals at referred merchant locations. Our performance obligation is satisfied when our referral of a merchant to a payment processing vendor results in an executed agreement between the merchant and the vendor. Merchant fee revenue is recognized as received. Merchant fee income was less than $1 million for the years ended December 31, 2019 and December 31, 2018.

Wealth management revenue - We earn commission income through a revenue share program based on a tiered percentage of total gross commissions generated from the sales of investment and insurance services to Flagstar customers.

Commissions are earned and our performance obligation has been satisfied at the point of sale or trade execution. Our portion of earned commissions is calculated, paid and recognized as revenue on a monthly basis.

We also receive revenue from portfolio management services. We receive payment for portfolio management services in advance at the beginning of each quarter for services to be performed over the quarter which results an insignificant revenue liability. We recognize this revenue over the quarter on a straight-line basis, as we believe this is the most appropriate method to measure progress towards satisfaction of the performance obligation.

Derivatives

We utilize derivative instruments to manage the fair value changes in our MSRs, interest rate lock commitments and LHFS portfolio which are exposed to price and interest rate risk, facilitate asset/liability management, minimize the variability of future cash flows on long-term debt, and to meet the needs of our customers. All derivatives are recognized on the Consolidated Statements of Financial Condition as other assets and liabilities, as applicable, at their estimated fair value.

For those derivatives designated as qualified cash flow hedges, changes in the fair value of the derivatives, to the extent effective as a hedge, are recorded in accumulated other comprehensive income, net of income taxes, and reclassified into earnings concurrently with the earnings of the hedged item. For derivative instruments designated as qualified fair value hedges, which are used to hedge the exposure of fair value changes of an asset or liability attributable to a particular risk, the gain or loss on the derivative instrument, as well as the offsetting gain or loss on the hedged item attributable to the hedged risk, are recognized in current earnings during the period of the change in fair values. For all other derivatives, changes in the fair value of the derivative are recognized immediately in earnings. A majority of these derivatives are subject to master netting agreements and cleared through a Central Counterparty Clearing House, which mitigates non-performance risk with counterparties and enables us to settle activity on a net basis.

We use interest rate swaps, swaptions, futures, and forward loan sale commitments to mitigate the impact of fluctuations in interest rates and interest rate volatility on the fair value of the MSRs. Changes in their fair value are reflected in current period earnings under the net return on mortgage servicing asset. These derivatives are valued based on quoted prices for similar assets in an active market with inputs that are observable.

We also enter into various derivative agreements with customers and correspondents in the form of interest-rate lock commitments and forward purchase contracts which are commitments to originate or purchase mortgage loans whereby the interest rate on the loan is determined prior to funding and the customers have locked into that interest rate. The derivatives are valued using internal models that utilize market interest rates and other unobservable inputs. Changes in the fair value of these commitments due to fluctuations in interest rates are economically hedged through the use of forward loan sale commitments of MBS. The gains and losses arising from this derivative activity are reflected in current period earnings under the net gain on loan sales.

We may utilize interest rate swaps to hedge the forecasted cash flows from our underlying variable-rate FHLB advances and forecasted FHLB advances in qualifying cash flow hedge accounting relationships. Changes in the fair value of derivatives designated as cash flow hedges are recorded in other comprehensive income on the Consolidated Statement of Financial Condition and reclassified into interest expense concurrently with the interest expense on the debt. Interest rate swaps are valued based on quoted prices for similar assets in an active market with inputs that are observable. These hedges are evaluated for effectiveness using regression analysis at the time they are designated and the qualitatively throughout the hedge period unless a change in facts and circumstances is identified. For forecasted FHLB advances being hedged, we evaluate the likelihood of the transaction occurring based on the current facts and circumstances each reporting period to ensure the hedge relationship still qualifies for hedge accounting. If we de-designate a hedge relationship or determine that an interest rate swap no longer qualifies for hedge accounting, changes in fair value are no longer recorded in other comprehensive income. The effective amounts previously recorded in other comprehensive income are recognized in earnings over the remaining life of the hedged item as an adjustment to yield, until the point it is determined the underlying transaction is probable to not occur, at which point it is reclassified immediately into earnings.

We utilize interest rate swaps to manage fair value changes of our fixed-rate FHLB advances and certain AFS securities in a qualifying fair value hedge accounting relationships. Interest rate swaps are valued based on quoted prices for similar assets in an active market with inputs that are observable. Changes in the fair value of derivatives designated as fair value hedges, as well as the change in fair value of the hedged item, are recognized in current period earnings. The corresponding adjustment is recorded as a basis adjustment to the hedged item and hedging instrument. These hedges are evaluated for effectiveness using regression analysis at the time they are designated and then qualitatively throughout the hedge period unless a change in facts and circumstances is identified. If the Company determines an interest rate swap no longer qualifies for fair value hedge accounting or is de-designated, the hedged item will no longer be adjusted for changes in fair value and the amounts previously recorded as a basis adjustment are recognized in earnings over the remaining life of the hedged item as an adjustment to yield. If a previously hedged item is extinguished or sold, the remaining basis adjustment of the hedged item for prior fair value hedges will be reclassified to current period earnings.

To assist our customers in meeting their needs to manage interest rate risk, we enter into interest rate swap derivative contracts. To economically hedge this risk, we enter into offsetting derivative contracts to effectively eliminate the interest rate risk associated with these contracts.

For additional information regarding the accounting for derivatives, see Note 11 - Derivative Financial Instruments and for additional information on recurring fair value disclosures, see Note 20 - Fair Value Measurements.

Income Taxes

Current income tax expense represents our estimated taxes to be paid or refunded for the current period. Deferred taxes are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. DTAs and liabilities are measured using enacted tax rates that will apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on DTAs and liabilities of a change in tax rates is recognized as income or expense in the period that includes the enactment date. We evaluate our DTAs to determine if, based on all available evidence, it is more likely than not that they will be realized. If it is determined that it is more likely than not that the deferred taxes will not be realized, we establish a valuation allowance. For further information, see Note 17 - Income Taxes.

Representation and Warranty Reserve

When we sell mortgage loans into the secondary mortgage market, we make customary representations and warranties to the purchasers about various characteristics of each loan. Upon the sale of a loan, the Company recognizes a liability for that guarantee at its fair value as a reduction of our net gain on loan sales. Subsequent to the sale, the liability is re-measured on an ongoing basis based upon an estimate of probable future losses. An estimate of the fair value of the guarantee associated with the mortgage loans is recorded in other liabilities in the Consolidated Statements of Financial Condition, and was $5 million at December 31, 2019, as compared to $7 million at December 31, 2018.

Advertising Costs

Advertising costs are expensed in the period they are incurred and are included as part of other noninterest expense in the Consolidated Statements of Operations. Advertising expenses totaled $25 million, $26 million, and $16 million for the years ended December 31, 2019, 2018 and 2017, respectively.

Stock-Based Compensation

All share-based payments to employees, including grants of employee stock options and restricted stock units, are classified as equity with expenses being recognized in compensation and benefits in the Consolidated Statements of Operations based on their fair values. The amount of compensation is measured at the grant date and is expensed over the requisite service period, which is normally the vesting period with forfeitures being recognized as they occur. In addition to share-based payments to employees, the discount provided to employees through the Employee Stock Purchase Plan is also recognized as stock-based compensation. For further information, see Note 16 - Stock-Based Compensation.

Department of Justice Litigation Settlement

The executed settlement agreement with the DOJ representing the obligation to make future additional payments establishes a legally enforceable contract with a stipulated payment plan that meets the definition of a financial liability. We have elected the fair value option to account for this financial liability included in other liabilities on the Consolidated Financial Statements. For additional information on the valuation and terms of the DOJ litigation settlement, see Note 19 - Legal Proceedings, Contingencies and Commitments and Note 20 - Fair Value Measurements.

Recently Issued Accounting Pronouncements

Adoption of New Accounting Standards

The following ASUs have been adopted which impact our accounting policies and/or have a financial impact:

Leases **-** Effective January 1, 2019, we adopted the requirements of ASU 2016-02, Leases (Topic 842) and all related amendments. The Company elected to apply the practical expedient of forgoing the restatement of comparative periods. In addition, we elected the practical expedients permitted under transition guidance to not reassess leases entered into prior to adoption. As permitted under ASC 842, the Company made an accounting policy election to exempt leases with an initial term of twelve months or less from balance sheet recognition. Instead, short-term leases are expensed over the lease term with no impact to the balance sheet.

At December 31, 2019, our inventory of leases included various bank branches, ATM locations and retail home lending offices. Many of our leases contain options to extend or terminate early and we consider these options when evaluating the lease term to determine if they are reasonably certain to be exercised based on all relevant economic and financial factors. Lease rental expense totaled approximately $12 million, $11 million and $9 million for the years ended December 31, 2019, 2018 and 2017, respectively. All leases are classified as operating leases based on their terms.

The following table reflects information relating to our operating leases:

	December 31, 2019	
	(Dollars in millions)	
Operating Leases (1)		
Weighted-average remaining lease term (years)		3.7
Weighted-average discount rate		2.82%
Right-of-use asset (2)	$	22
Lease liability (3)	$	23

(1) Lease expense on operating leases includes a de-minimis amount of short-term lease expense and variable lease expense.
(2) Recorded in premises and equipment on the Consolidated Statements of Financial Condition.
(3) Recorded in other liabilities on the Consolidated Statements of Financial Condition

The following table presents our undiscounted cash flows on our operating lease liabilities as of December 31, 2019 and our minimum contractual obligations on our operating leases as of December 31, 2018:

	December 31, 2019		December 31, 2018	
	(Dollars in millions)			
Within one year	$	9	$	9
After one year and within two years		7		6
After two years and within three years		5		4
After three years and within four years		3		2
After four years and within five years		1		1
After five years		2		3
Total (1)	$	27	$	25

(1) The difference between the total undiscounted cash payments on operating leases and the lease liability is solely the effect of discounting.

We adopted the following accounting standard updates (ASU) during 2019, none of which had a material impact to our financial statements:

Standard	Description	Effective Date
ASU 2019-07	SEC Final Rule Releases: Codification Updates	July 26, 2019
ASU 2019-01	Leases (Topic 842): Codification Improvements	January 1, 2019
ASU 2018-20	Leases (Topic 842): Narrow-Scope Improvements for Lessors	January 1, 2019
ASU 2018-16	Derivatives and hedging (Topic 815): Inclusion of the Secured Overnight Financing Rate (SOFR) Overnight Index Swap (OIS) Rate as a Benchmark Interest Rate for Hedge Accounting Purposes	January 1, 2019
ASU 2018-11	Leases (Topic 842): Targeted Improvements	January 1, 2019
ASU 2018-10	Codification Improvements to Topic 842, Leases	January 1, 2019
ASU 2018-07	Compensation—Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting	January 1, 2019
ASU 2017-11	Earnings Per Share (Topic 260); Distinguishing Liabilities from Equity (Topic 480); Derivatives and Hedging (Topic 815): (Part I) Accounting for Certain Financial Instruments with Down Round Features, (Part II) Replacement of the Indefinite Deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Non-controlling Interests with a Scope.	January 1, 2019
ASU 2017-08	Receivables - Nonrefundable Fees and Other Costs (Subtopic 310-20): Premium Amortization on Purchased Callable Debt Securities	January 1, 2019
ASU 2017-06	Plan Accounting - Defined Benefit Pension Plans (Topic 960), Defined Contribution Pension Plans (Topic 962), Health and Welfare Benefit Plans (Topic 965): Employee Benefit Plan Master Trust Reporting	January 1, 2019

Accounting Standards Issued But Not Yet Adopted

Credit Losses - In June 2016, the FASB issued ASU 2016-13, Financial Instruments - Credit Losses (Topic 326), which replaces the incurred loss methodology with an expected loss methodology that is referred to as the current expected credit loss methodology. The new guidance requires financial assets to be presented at the net amount expected to be collected (i.e. net of expected credit losses). The measurement of expected credit losses will be based on relevant information about past events, including historical experience, current conditions, and reasonable and supportable forecasts that affect the collectability of the reported amount.

ASU 2016-13 is effective as of January 1, 2020 and will impact our allowance for credit loss held against collectively evaluated loans held for investment along with our unfunded commitment reserve. We do not have any investment securities that will be impacted by the new standard. We plan to record the cumulative effect of adoption as of January 1, 2020 through equity and will elect to phase-in the impact on capital, as allowed by the regulatory agencies. Any future changes to our allowance for credit losses and the reserve for unfunded commitments after January 1, 2020 will be recorded in our provision for credit losses.

Our cross-functional implementation team has designed and implemented new credit loss models using an industry leading vendor which measures the probability of default and loss given default to determine expected losses over the life of our loans. We plan to use a reasonable and supportable forecast of two years within our models and revert to historical averages on a straight line basis over 1 year. These assumptions may change over time based on our expectation of future market conditions.

We have identified, designed, documented, and have begun operating our internal controls over financial reporting which are primarily focused on our new models, the data utilized by those models including our reasonable and supportable forecast and the governance process to apply the necessary judgment to determine the allowance for credit losses.

Based on our current results and economic forecasts as of December 31, 2019, the estimated impact including our reserve for unfunded loan commitments is expected to be a pre-tax increase of approximately 25 to 35 percent. We do not expect any material allowance on held to maturity securities since the majority of this portfolio consists of agency-backed securities that have an immaterial risk of credit loss.

The following ASUs have been issued and are not expected to have a material impact on our Consolidated Financial Statements and/or significant accounting policies upon implementation:

Standard	Description	Effective Date
ASU 2019-05	Financial Instruments—Credit Losses (Topic 326): Targeted Transition Relief	January 1, 2020
ASU 2019-04	Codification Improvements to Topic 326, Financial Instruments—Credit Losses, Topic 815, Derivatives and Hedging, and Topic 825, Financial Instruments	January 1, 2020
ASU 2018-19	Codification Improvements to Topic 326, Financial Instruments—Credit Losses	January 1, 2020
ASU 2018-18	Collaborative Arrangements (Topic 808): Clarifying the Interaction between Topic 808 and Topic 606	January 1, 2020
ASU 2018-17	Consolidation (Topic 810): Targeted Improvements to Related Party Guidance for Variable Interest Entities	January 1, 2020
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 FASB Emerging Issues Task Force)	January 1, 2020
ASU 2017-04	Intangibles - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment	January 1, 2020

Note 2 - Investment Securities

The following table presents our investment securities:

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
	(Dollars in millions)			
December 31, 2019				
Available-for-sale securities				
Agency - Commercial	$ 948	$ 2	$ (3)	$ 947
Agency - Residential	1,015	4	(4)	1,015
Corporate debt obligations	76	1	—	77
Municipal obligations	31	—	—	31
Other MBS	44	1	—	45
Certificates of Deposit	1			1
Total available-for-sale securities (1)	$ 2,115	$ 8	$ (7)	$ 2,116
Held-to-maturity securities				
Agency - Commercial	$ 306	$ —	$ (1)	$ 305
Agency - Residential	292	3	(1)	294
Total held-to-maturity securities (1)	$ 598	$ 3	$ (2)	$ 599
December 31, 2018				
Available-for-sale securities				
Agency - Commercial	$ 1,413	$ 4	$ (43)	$ 1,374
Agency - Residential	686	—	(24)	662
Corporate debt obligations	41	—	—	41
Municipal obligations	33	—	(1)	32
Other MBS	32	—	—	32
Certificates of Deposit	1	—	—	1
Total available-for-sale securities (1)	$ 2,206	$ 4	$ (68)	$ 2,142
Held-to-maturity securities				
Agency - Commercial	$ 349	$ —	$ (13)	$ 336
Agency - Residential	354	—	(9)	345
Total held-to-maturity securities (1)	$ 703	$ —	$ (22)	$ 681

(1) There were no securities of a single issuer, which are not governmental or government-sponsored, that exceeded 10 percent of stockholders' equity at December 31, 2019 or December 31, 2018.

Management evaluates our securities portfolio each quarter to determine if any security is considered to be other than temporarily impaired. Agency securities, which are either explicitly or implicitly backed by the federal government, comprised 94 percent of our total securities at December 31, 2019. This factor is considered when evaluating our investment securities for OTTI. During the years ended December 31, 2019, 2018 and 2017, we had no OTTI.

Available-for-sale securities

We purchased $500 million of AFS securities, which were comprised of U.S. government sponsored agency MBS, certificates of deposit, and corporate debt obligations during the year ended December 31, 2019. In addition, we retained $19 million of passive interests in our own private MBS during the year ended December 31, 2019. We purchased $340 million of AFS securities, which included U.S. government sponsored agency MBS, certificates of deposit, and corporate debt obligations during the year ended December 31, 2018.

We had $432 million in sales of AFS securities during the year ended December 31, 2019, which resulted in a gain of $7 million. We had no sales of AFS securities during the year ended December 31, 2018. During the year ended December 31, 2017, we sold $289 million of U.S. government sponsored agency securities, which resulted in a gain of $3 million.

Held-to-maturity securities

In conjunction with adoption of ASU 2017-12 (Targeted Improvements to Accounting for Hedging Activities) the Company elected to transfer $144 million of investment securities from HTM to AFS during the first quarter of 2018, as permitted by the standard, which resulted in a de minimis impact to OCI.

There were no purchases or sales of HTM securities during the years ended December 31, 2019, December 31, 2018 and December 31, 2017.

The following table summarizes, by duration, the unrealized loss positions on investment securities:

	Unrealized Loss Position with Duration 12 Months and Over			Unrealized Loss Position with Duration Under 12 Months		
	Fair Value	Number of Securities	Unrealized Loss	Fair Value	Number of Securities	Unrealized Loss
	(Dollars in millions)					
December 31, 2019						
Available-for-sale securities						
Agency - Commercial	$ 148	17	$ (3)	$ 303	19	$ —
Agency - Residential	266	26	(3)	148	14	(1)
Municipal obligations	8	3	—	—	—	—
Held-to-maturity securities						
Agency - Commercial	$ 148	13	$ (1)	$ 85	6	$ —
Agency - Residential	35	7	(1)	38	10	—
December 31, 2018						
Available-for-sale securities						
Agency - Commercial	$ 1,025	74	$ (43)	$ 1	1	$ —
Agency - Residential	647	79	(24)	14	5	—
Municipal obligations	28	16	(1)	1	2	—
Corporate debt obligations	—	—	—	7	2	—
Held-to-maturity securities						
Agency - Commercial	$ 336	26	$ (13)	$ —	—	$ —
Agency - Residential	345	60	(9)	—	—	—

The following shows the amortized cost and estimated fair value of securities by contractual maturity:

	Investment Securities Available-for-Sale			Investment Securities Held-to-Maturity		
	Amortized Cost	Fair Value	Weighted-Average Yield	Amortized Cost	Fair Value	Weighted-Average Yield
	(Dollars in millions)					
December 31, 2019						
Due in one year or less	$ 3	$ 3	2.12%	$ —	$ —	—%
Due after one year through five years	20	20	4.07%	10	10	2.48%
Due after five years through 10 years	93	95	4.23%	9	9	2.29%
Due after 10 years	1,999	1,998	2.41%	579	580	2.42%
Total	$ 2,115	$ 2,116		$ 598	$ 599	

We pledge investment securities, primarily agency collateralized and municipal taxable mortgage obligations, to collateralize lines of credit and/or borrowings. We had pledged investment securities of $874 million and, $1.9 billion, at December 31, 2019 and 2018 respectively.

Note 3 - Loans Held-for-Sale

The majority of our mortgage loans originated as LHFS are ultimately sold into the secondary market on a whole loan basis or by securitizing the loans into agency, government, or private label mortgage-backed securities. At December 31, 2019 and 2018, LHFS totaled $5.3 billion and $3.9 billion, respectively. For the years ended December 31, 2019, 2018 and 2017, we had net gains on loan sales associated with LHFS of $333 million, $197 million, and $267 million, respectively.

At December 31, 2019 and 2018, $39 million and $137 million, respectively, of LHFS were recorded at lower of cost or fair value. We elected the fair value option for the remainder of the loans in the portfolio.

Note 4 - Loans Held-for-Investment

The following table presents our loans-held-for-investment:

	December 31, 2019	December 31, 2018
	(Dollars in millions)	
Consumer loans		
Residential first mortgage	$ 3,154	$ 2,999
Home Equity	1,024	731
Other	729	314
Total consumer loans	4,907	4,044
Commercial loans		
Commercial real estate	2,828	2,152
Commercial and industrial	1,634	1,433
Warehouse lending	2,760	1,459
Total commercial loans	7,222	5,044
Total loans held-for-investment	$ 12,129	$ 9,088

The following table presents the UPB of our loan sales and purchases in the loans held-for-investment portfolio:

	For the Year Ended		
	2019	2018	2017
	(Dollars in millions)		
Loans Sold (1)			
Performing loans	$ 217	$ 158	$ 102
Nonperforming loans	—	—	25
Total performing and nonperforming loans sold	$ 217	$ 158	$ 127
Net gain associated with loan sales (2)	$ 2	$ 2	$ 2
Loans Purchased			
Residential first mortgage loans	—	3	8
HELOC	249	—	250
Other consumer	51	34	—
Total loans purchased	$ 300	$ 37	$ 258
Premium associated with loans purchased	$ 11	$ —	$ 9

(1) Upon a change in our intent, the loans were transferred to LHFS and subsequently sold.
(2) Recorded in net gain on loan sales on Consolidated Statement of Operations.

We have pledged certain LHFI, LHFS, and loans with government guarantees to collateralize lines of credit and/or borrowings with the FRB of Chicago and the FHLB of Indianapolis. At December 31, 2019 and 2018, we pledged loans of $9.1 billion and $6.8 billion, respectively.

The following table presents changes in ALLL, by class of loan:

	Residential First Mortgage (1)	Home Equity	Other Consumer	Commercial Real Estate	Commercial and Industrial	Warehouse Lending	Total
	(Dollars in millions)						
Year Ended December 31, 2019							
Beginning balance ALLL	$ 38	$ 15	$ 3	$ 48	$ 18	$ 6	$ 128
Charge-offs (2)	(3)	(2)	(7)	—	(31)	—	(43)
Recoveries	1	2	—	—	1	—	4
Provision (benefit)	(14)	(1)	10	(10)	34	(1)	18
Ending balance ALLL	$ 22	$ 14	$ 6	$ 38	$ 22	$ 5	$ 107
Year Ended December 31, 2018							
Beginning balance ALLL	$ 47	$ 22	$ 1	$ 45	$ 19	$ 6	$ 140
Charge-offs (2)	(4)	(2)	(2)	—	—	—	(8)
Recoveries	2	1	1	—	—	—	4
Provision (benefit)	(7)	(6)	3	3	(1)	—	(8)
Ending balance ALLL	$ 38	$ 15	$ 3	$ 48	$ 18	$ 6	$ 128
Year Ended December 31, 2017							
Beginning balance ALLL	$ 65	$ 24	$ 1	$ 28	$ 17	$ 7	$ 142
Charge-offs (2)	(8)	(3)	(2)	(1)	—	—	(14)
Recoveries	1	2	1	1	1	—	6
Provision (benefit)	(11)	(1)	1	17	1	(1)	6
Ending balance ALLL	$ 47	$ 22	$ 1	$ 45	$ 19	$ 6	$ 140

(1) Includes allowance and charge-offs related to loans with government guarantees.
(2) Includes charge-offs of zero, zero and $1 million related to the transfer and subsequent sale of loans during the years ended December 31, 2019, 2018 and 2017, respectively. Also includes charge-offs related to loans with government guarantees of $2 million, $2 million, and $4 million during the years ended December 31, 2019, 2018 and 2017, respectively.

The following table sets forth the method of evaluation, by class of loan:

	Residential First Mortgage (1)	Home Equity	Other Consumer	Commercial Real Estate	Commercial and Industrial	Warehouse Lending	Total
	(Dollars in millions)						
December 31, 2019							
Loans held-for-investment (2)							
Individually evaluated	$ 32	$ 20	$ 1	$ —	$ —	$ —	$ 53
Collectively evaluated	3,113	1,001	728	2,828	1,634	2,760	12,064
Total loans	$ 3,145	$ 1,021	$ 729	$ 2,828	$ 1,634	$ 2,760	$ 12,117
Allowance for loan losses (2)							
Individually evaluated	$ 5	$ 7	$ 1	$ —	$ —	$ —	$ 13
Collectively evaluated	17	7	5	38	22	5	94
Total allowance for loan losses	$ 22	$ 14	$ 6	$ 38	$ 22	$ 5	$ 107
December 31, 2018							
Loans held-for-investment (2)							
Individually evaluated	$ 32	$ 23	$ —	$ —	$ —	$ —	$ 55
Collectively evaluated	2,959	706	314	2,152	1,433	1,459	9,023
Total loans	$ 2,991	$ 729	$ 314	$ 2,152	$ 1,433	$ 1,459	$ 9,078
Allowance for loan losses (2)							
Individually evaluated	$ 4	$ 7	$ —	$ —	$ —	$ —	$ 11
Collectively evaluated	34	8	3	48	18	6	117
Total allowance for loan losses	$ 38	$ 15	$ 3	$ 48	$ 18	$ 6	$ 128

(1) Includes allowance related to loans with government guarantees.
(2) Excludes loans carried under the fair value option.

The following table sets forth the LHFI aging analysis of past due and current loans (for further information on our policy for past due and impaired loans, see Note 1 - Description of Business, Basis of Presentation, and Summary of Significant Accounting Policies):

	30-59 Days Past Due	60-89 Days Past Due	90 Days or Greater Past Due (1)	Total Past Due	Current	Total LHFI
	(Dollars in millions)					
December 31, 2019						
Consumer loans						
Residential first mortgage	$ 5	$ 4	$ 21	$ 30	$ 3,124	$ 3,154
Home equity	1	—	4	5	1,019	1,024
Other	3	1	1	5	724	729
Total consumer loans	9	5	26	40	4,867	4,907
Commercial loans						
Commercial real estate	—	—	—	—	2,828	2,828
Commercial and industrial	—	—	—	—	1,634	1,634
Warehouse lending	—	—	—	—	2,760	2,760
Total commercial loans	—	—	—	—	7,222	7,222
Total loans (2)	$ 9	$ 5	$ 26	$ 40	$ 12,089	$ 12,129
December 31, 2018						
Consumer loans						
Residential first mortgage	$ 4	$ 2	$ 19	$ 25	$ 2,974	$ 2,999
Home equity	1	—	3	4	727	731
Other	—	—	—	—	314	314
Total consumer loans	5	2	22	29	4,015	4,044
Commercial loans						
Commercial real estate	—	—	—	—	2,152	2,152
Commercial and industrial	—	—	—	—	1,433	1,433
Warehouse lending	—	—	—	—	1,459	1,459
Total commercial loans	—	—	—	—	5,044	5,044
Total loans (2)	$ 5	$ 2	$ 22	$ 29	$ 9,059	$ 9,088

(1) Includes less than 90 days past due performing loans which are placed on non-accrual. Interest revenue is not being recognized on these loans.
(2) Includes $4 million and $3 million of past due loans accounted for under the fair value option at December 31, 2019 and 2018, respectively.

Interest that would have been accrued on impaired loans if such loans were paying in accordance with their original terms, totaled approximately $1 million, $1 million and $1 million during the years ended December 31, 2019, 2018 and 2017, respectively. At December 31, 2019 and 2018, we had no loans 90 days or greater past due and still accruing interest.

Troubled Debt Restructurings

The following table provides a summary of TDRs by type and performing status:

	TDRs		
	Performing	Nonperforming	Total
	(Dollars in millions)		
December 31, 2019			
Consumer loans			
Residential first mortgage	$ 20	$ 8	$ 28
Home equity	18	2	20
Total TDRs (1)(2)	$ 38	$ 10	$ 48
December 31, 2018			
Consumer loans			
Residential first mortgage	$ 22	$ 8	$ 30
Home Equity	22	2	24
Total TDRs (1)(2)	$ 44	$ 10	$ 54

(1) The ALLL on TDR loans totaled $8 million and $10 million at December 31, 2019 and 2018, respectively.
(2) Includes $2 million and $3 million of TDR loans accounted for under the fair value option at December 31, 2019 and 2018, respectively.

The following table provides a summary of newly modified TDRs:

	New TDRs			
	Number of Accounts	Pre-Modification Unpaid Principal Balance	Post-Modification Unpaid Principal Balance (1)	Increase (Decrease) in Allowance at Modification
	(Dollars in millions)			
Year Ended December 31, 2019				
Residential first mortgages	8	$ 1	$ 1	$ —
Home equity (2)(3)	6	—	—	—
Total TDR loans	14	$ 1	$ 1	$ —
Year Ended December 31, 2018				
Residential first mortgages	14	$ 3	$ 3	$ —
Home equity (2)(3)	17	1	1	—
Total TDR loans	31	$ 4	$ 4	$ —
Year Ended December 31, 2017				
Residential first mortgages	16	$ 4	$ 4	$ —
Home equity (2)(3)	82	6	5	(1)
Total TDR loans	98	$ 10	$ 9	$ (1)

(1) Post-modification balances include past due amounts that are capitalized at modification date.
(2) Home equity post-modification UPB reflects write downs.
(3) Includes loans carried at fair value option.

During the years ended December 31, 2019, 2018, and 2017, there were zero, zero, and one, newly modified TDR loans which had been modified in the preceding 12 months that subsequently defaulted in those periods, respectively. The UPB associated with those TDR loans was zero in the year ended December 31, 2019, zero and less than $1 million, in the aggregate, in each of the years ended December 31, 2018 and 2017. There was no increase or decrease in the allowance associated with these TDRs at subsequent default. All TDRs within consumer and commercial loan portfolios are considered subsequently defaulted when greater than 90 days past due. Subsequent default is defined as a payment re-defaulted within 12 months of the restructuring date.

Impaired Loans

The following table presents individually evaluated impaired loans and the associated allowance:

	December 31, 2019			December 31, 2018		
	Recorded Investment	Net Unpaid Principal Balance	Related Allowance	Recorded Investment	Net Unpaid Principal Balance	Related Allowance
	(Dollars in millions)					
With no related allowance recorded						
Consumer loans						
Residential first mortgage	$ 16	$ 20	$ —	$ 13	$ 16	$ —
Home equity	1	4	—	1	4	—
Other consumer	—	1	—	—	—	—
Total loans with no related allowance recorded	$ 17	$ 25	$ —	$ 14	$ 20	$ —
With an allowance recorded						
Consumer loans						
Residential first mortgage	$ 16	$ 16	$ 3	$ 19	$ 20	$ 4
Home equity	19	19	7	22	23	7
Other consumer	1	1	1	—	—	—
Total loans with an allowance recorded	$ 36	$ 36	$ 11	$ 41	$ 43	$ 11
Total impaired loans						
Consumer loans						
Residential first mortgage	$ 32	$ 36	$ 3	$ 32	$ 36	$ 4
Home equity	20	23	7	23	27	7
Other consumer	1	2	1	—	—	—
Total impaired loans	$ 53	$ 61	$ 11	$ 55	$ 63	$ 11

The following table presents average impaired loans and the interest income recognized:

	For the Years Ended December 31,					
	2019		2018		2017	
	Average Recorded Investment	Interest Income Recognized	Average Recorded Investment	Interest Income Recognized	Average Recorded Investment	Interest Income Recognized
	(Dollars in millions)					
Consumer loans						
Residential first mortgage	$ 36	$ —	$ 33	$ 1	$ 38	$ 1
Home equity	17	—	25	2	28	1
Other consumer	2	—	—	—	—	—
Commercial loans						
Commercial and industrial	15	—	2	—	—	—
Total impaired loans	$ 70	$ —	$ 60	$ 3	$ 66	$ 2

Credit Quality

We utilize an internal risk rating system which is applied to all consumer and commercial loans. Descriptions of our internal risk ratings as they relate to credit quality follow the ratings used by the U.S. bank regulatory agencies as listed below.

Pass. Pass assets are not impaired nor do they have any known deficiencies that could impact the quality of the asset.

Watch. Watch assets are defined as pass rated assets that exhibit elevated risk characteristics or other factors that deserve management's close attention and increased monitoring. However, the asset does not exhibit a potential or well-defined weakness that would warrant a downgrade to criticized or adverse classification.

Special mention. Assets identified as special mention possess credit deficiencies or potential weaknesses deserving management's close attention. Special mention assets have a potential weakness or pose an unwarranted financial risk that, if not corrected, could weaken the assets and increase risk in the future. Special mention assets are criticized, but do not expose an institution to sufficient risk to warrant adverse classification.

Substandard. Assets identified as substandard are inadequately protected by the current net worth and paying capacity of the obligor or of the collateral pledged, if any. Assets so classified must have a well-defined weakness or weaknesses that jeopardize the full collection or liquidation of the debt. They are characterized by the distinct possibility that we will sustain some loss if the deficiencies are not corrected. For home equity loans and other consumer loans, we evaluate credit quality based on the aging and status of payment activity and any other known credit characteristics that call into question full repayment of the asset. Substandard loans may be placed on either accrual or non-accrual status.

Doubtful. An asset classified as doubtful has all the weaknesses inherent in one classified substandard, with the added characteristic that the weaknesses make collection or liquidation in full, on the basis of currently existing facts, conditions and values, highly questionable and improbable. A doubtful asset has a high probability of total or substantial loss, but because of specific pending events that may strengthen the asset, its classification as loss is deferred. Doubtful borrowers are usually in default, lack adequate liquidity or capital, and lack the resources necessary to remain an operating entity. Pending events can include mergers, acquisitions, liquidations, capital injections, the perfection of liens on additional collateral, the valuation of collateral, and refinancing. Generally, pending events should be resolved within a relatively short period and the ratings will be adjusted based on the new information. Due to the high probability of loss, doubtful assets are placed on non-accrual.

Loss. An asset classified as loss is considered uncollectible and of such little value that the continuance as a bankable asset is not warranted. This classification does not mean that an asset has absolutely no recovery or salvage value, but, rather that it is not practical or desirable to defer writing off the asset even though partial recovery may be affected in the future.

Consumer Loans

Consumer loans consist of open and closed end loans extended to individuals for household, family, and other personal expenditures, and includes consumer loans, and loans to individuals secured by their personal residence, including first mortgage, home equity, and home improvement loans. Because consumer loans are usually relatively small-balance, homogeneous exposures, consumer loans are rated primarily on payment performance. Payment performance is a proxy for the strength of repayment capacity and loans are generally classified based on their payment status rather than by an individual review of each loan.

In accordance with regulatory guidance, we assign risk ratings to consumer loans in the following manner:

- Consumer loans are classified as Watch once the loan becomes 60 days past due.
- Open and closed-end consumer loans 90 days or more past due are classified Substandard.

Commercial Loans

Management conducts periodic examinations which serve as an independent verification of the accuracy of the ratings assigned. Loan grades are based on different factors within the borrowing relationship: entity sales, debt service coverage, debt/total net worth, liquidity, balance sheet and income statement trends, management experience, business stability, financing structure, and financial reporting requirements. The underlying collateral is also rated based on the specific type of collateral and corresponding LTV. The combination of the borrower and collateral risk ratings results in the final rating for the borrowing relationship.

	December 31, 2019				
	Pass	Watch	Special Mention	Substandard	Total Loans
	(Dollars in millions)				
Consumer Loans					
Residential First Mortgage	$ 3,107	$ 27	$ —	$ 20	$ 3,154
Home equity	1,002	18	—	4	1,024
Other Consumer	727	1	—	1	729
Total Consumer Loans	$ 4,836	$ 46	$ —	$ 25	$ 4,907
Commercial Loans					
Commercial Real Estate	$ 2,794	$ 24	$ 5	$ 5	$ 2,828
Commercial and Industrial	1,533	72	24	5	1,634
Warehouse	2,556	189	15	—	2,760
Total Commercial Loans	$ 6,883	$ 285	$ 44	$ 10	$ 7,222

	December 31, 2018				
	Pass	Watch	Special Mention	Substandard	Total Loans
	(Dollars in millions)				
Consumer Loans					
Residential First Mortgage	$ 2,952	$ 28	$ —	$ 19	$ 2,999
Home equity	705	23	—	3	731
Other Consumer	314	—	—	—	314
Total Consumer Loans	$ 3,971	$ 51	$ —	$ 22	$ 4,044
Commercial Loans					
Commercial Real Estate	$ 2,132	$ 14	$ 5	$ 1	$ 2,152
Commercial and Industrial	1,351	53	29	—	1,433
Warehouse	1,324	120	15	—	1,459
Total Commercial Loans	$ 4,807	$ 187	$ 49	$ 1	$ 5,044

Note 5 - Loans with Government Guarantees

Substantially all loans with government guarantees are insured or guaranteed by the FHA or U.S. Department of Veterans Affairs. FHA loans earn interest at a rate based upon the 10-year U.S. Treasury note rate at the time the underlying loan becomes delinquent, which is not paid by the FHA or the U.S. Department of Veterans Affairs until claimed. Certain loans within our portfolio may be subject to indemnifications and insurance limits which exposes us to limited credit risk. We have reserved for these risks within other assets and as a component of our ALLL on residential first mortgages.

At December 31, 2019 and December 31, 2018, respectively, loans with government guarantees totaled $736 million and $392 million.

Repossessed assets and the associated claims related to government guaranteed loans are recorded in other assets and totaled $45 million and $50 million at December 31, 2019 and December 31, 2018, respectively.

Note 6 - Repossessed Assets

Repossessed assets include the following:

	December 31,	
	2019	2018
	(Dollars in millions)	
One-to-four family properties	$ 6	$ 5
Commercial properties	4	2
Total repossessed assets	$ 10	$ 7

The following schedule provides the activity for repossessed assets:

	For the Years Ended December 31,		
	2019	2018	2017
	(Dollars in millions)		
Beginning balance	$ 7	$ 8	$ 14
Additions, net	12	10	18
Disposals	(4)	(8)	(14)
Net (write down) on disposal	(5)	(3)	(9)
Transfers out	—	—	(1)
Ending balance	$ 10	$ 7	$ 8

Note 7 - Variable Interest Entities

We have no consolidated VIEs as of December 31, 2019 and December 31, 2018.

In connection with our securitization activities, we have retained a five percent interest in the investment securities of certain trusts ("other MBS") and are contracted as the sub-servicer of the underlying loans, compensated based on market rates, which constitutes a continuing involvement in these trusts. Although we have a variable interest in these securitization trusts, we are not their primary beneficiary due to the relative size of our investment in comparison to the total amount of securities issued by the VIE and our inability to direct activities that most significantly impact the VIE's economic performance. As a result, we have not consolidated the assets and liabilities of the VIE in our Statements of Financial Condition. The Bank's maximum exposure to loss is limited to our investment in the VIE, as well as the standard representations and warranties made in conjunction with the loan transfer. See Note 2 - Investment Securities and Note 20 - Fair Value Measurements, for additional information.

Note 8 - Federal Home Loan Bank Stock

Our investment in FHLB stock was $303 million at both December 31, 2019 and December 31, 2018. As a member of the FHLB, we are required to hold shares of FHLB stock in an amount equal to at least one percent of the aggregate UPB of our mortgage loans, home purchase contracts and similar obligations at the beginning of each year or 4.5 percent of our total FHLB advances, whichever is greater. We had no required purchases or redemptions of FHLB stock during the years ended December 31, 2019 and 2018. Dividends received on the stock equaled $16 million, $15 million and $9 million for the years ended December 31, 2019, 2018 and 2017, respectively. These dividends were recorded in the Consolidated Statements of Operations as other noninterest income.

Note 9 - Premises and Equipment

The following presents our premises and equipment balances and estimated useful lives:

	Estimated Useful Lives	December 31,	
		2019	2018
		(Dollars in millions)	
Land	N/A	$ 73	$ 74
Computer hardware and software	3 - 7 years	372	329
Office buildings and improvements	15 - 31.5 years	191	185
Furniture, fixtures and equipment	5 - 7 years	68	57
Leased equipment	3 - 10 years	36	40
Leasehold improvements	5-10 years	9	10
Fixed assets in progress (1)	N/A	40	37
Right-of-use asset	N/A	22	—
Total		811	732
Less accumulated depreciation		(395)	(342)
Premises and equipment, net		$ 416	$ 390

(1) Consists primarily of internally developed software and software upgrades which have not yet been placed in service.

Depreciation expense was $59 million, $50 million and $39 million, for the years ended December 31, 2019, 2018 and 2017, respectively.

Note 10 - Mortgage Servicing Rights

We have investments in MSRs that result from the sale of loans to the secondary market for which we retain the servicing. We account for MSRs at their fair value. A primary risk associated with MSRs is the potential reduction in fair value as a result of higher than anticipated prepayments due to loan refinancing prompted, in part, by declining interest rates or government intervention. Conversely, these assets generally increase in value in a rising interest rate environment to the extent that prepayments are slower than anticipated. We utilize derivatives as economic hedges to offset changes in the fair value of the MSRs resulting from the actual or anticipated changes in prepayments stemming from changing interest rate environments. There is also a risk of valuation decline due to higher than expected increases in default rates, which we do not believe can be effectively managed using derivatives. For further information regarding the derivative instruments utilized to manage our MSR risks, see Note 11 - Derivative Financial Instruments.

Changes in the fair value of residential first mortgage MSRs were as follows:

	For the Years Ended December 31,		
	2019	2018	2017
	(Dollars in millions)		
Balance at beginning of period	$ 290	$ 291	$ 335
Additions from loans sold with servicing retained	223	356	288
Reductions from sales	(57)	(339)	(310)
Decrease in MSR fair value due to pay-offs, pay-downs, run-off, model changes, and other (1)	(89)	(20)	(31)
Changes in estimates of fair value due to interest rate risk (1) (2)	(76)	2	9
Fair value of MSRs at end of period	$ 291	$ 290	$ 291

(1) Changes in fair value are included within net return on mortgage servicing rights on the Consolidated Statements of Operations.
(2) Represents estimated MSR value change resulting primarily from market-driven changes.

The following table summarizes the hypothetical effect on the fair value of servicing rights using adverse changes of 10 percent and 20 percent to the weighted-average of significant assumptions used in valuing these assets:

	December 31, 2019			December 31, 2018		
		Fair value resulting from			Fair value resulting from	
	Actual	10% adverse change	20% adverse change	Actual	10% adverse change	20% adverse change
	(Dollars in millions)					
Option adjusted spread	5.34%	$ 284	$ 280	5.42%	$ 284	$ 280
Constant prepayment rate	10.59%	271	257	9.57%	278	268
Weighted average cost to service per loan	$ 84.41	285	282	$ 85.57	286	283

The sensitivity calculations above are hypothetical and should not be considered to be predictive of future performance. Changes in fair value based on adverse changes in assumptions generally cannot be extrapolated because the relationship of the change in assumption to the change in fair value may not be linear. To isolate the effect of the specified change, the fair value shock analysis is consistent with the identified adverse change, while holding all other assumptions constant. In practice, a change in one assumption generally impacts other assumptions, which may either magnify or counteract the effect of the change. For further information on the fair value of MSRs, see Note 1 - Description of Business, Basis of Presentation, and Summary of Significant Accounting Standards and Note 20 - Fair Value Measurements.

Contractual servicing and subservicing fees. Contractual servicing and subservicing fees, including late fees and other ancillary income are presented below. Contractual servicing fees are included within net (loss) return on mortgage servicing rights on the Consolidated Statements of Operations. Contractual subservicing fees including late fees and other ancillary income are included within loan administration income on the Consolidated Statements of Operations. Subservicing fee income is recorded for fees earned on subserviced loans, net of third party subservicing costs.

The following table summarizes income and fees associated with owned mortgage servicing rights:

	For the Years Ended December 31,		
	2019	2018	2017
	(Dollars in millions)		
Net return (loss) on mortgage servicing rights			
Servicing fees, ancillary income and late fees (1)	$ 96	$ 65	$ 60
Decrease in MSR fair value due to pay-offs, pay-downs, run-off, model changes, and other	(89)	(20)	(31)
Changes in fair value	(76)	2	9
Gain (loss) on MSR derivatives (2)	76	(5)	(8)
Net transaction costs	(1)	(6)	(8)
Total return (loss) included in net return on mortgage servicing rights	$ 6	$ 36	$ 22

(1) Servicing fees are recorded on the accrual basis. Ancillary income and late fees are recorded on a cash basis.
(2) Changes in the derivatives utilized as economic hedges to offset changes in fair value of the MSRs.

The following table summarizes income and fees associated with our mortgage loans subserviced for others:

	For the Years Ended December 31,		
	2019	2018	2017
	(Dollars in millions)		
Loan administration income on mortgage loans subserviced			
Servicing fees, ancillary income and late fees (1)	$ 106	$ 54	$ 35
Charges on subserviced custodial balances (2)	(67)	(29)	(11)
Other servicing charges	(9)	(2)	(3)
Total income on mortgage loans subserviced, included in loan administration	$ 30	$ 23	$ 21

(1) Servicing fees are recorded on the accrual basis. Ancillary income and late fees are recorded on cash basis.
(2) Charges on subserviced custodial balances represent interest due to MSR owner

Note 11 - Derivative Financial Instruments

Derivative financial instruments are recorded at fair value in other assets and other liabilities on the Consolidated Statements of Financial Condition. Our policy is to present its derivative assets and derivative liabilities on the Consolidated Statement of Financial Condition on a gross basis, even when provisions allowing for set-off are in place. However, for derivative contracts cleared through certain central clearing parties, variation margin payments are recognized as settlements. We are exposed to non-performance risk by the counterparties to our various derivative financial instruments. A majority of our derivatives are centrally cleared through a Central Counterparty Clearing House or consist of residential mortgage interest rate lock commitments further limiting our exposure to non-performance risk. We believe that the non-performance risk inherent in our remaining derivative contracts is minimal based on credit standards and the collateral provisions of the derivative agreements.

Derivatives not designated as hedging instruments: We maintain a derivative portfolio of interest rate swaps, futures and forward commitments used to manage exposure to changes in interest rates, MSR asset values and to meet the needs of customers. We also enter into interest rate lock commitments, which are commitments to originate mortgage loans whereby the interest rate on the loan is determined prior to funding and the customers have locked into that interest rate. Market risk on interest rate lock commitments and mortgage LHFS is managed using corresponding forward sale commitments. Changes in fair value of derivatives not designated as hedging instruments are recognized in the Consolidated Statements of Income.

Derivatives designated as hedging instruments: We have designated certain interest rate swaps as fair value hedges of fixed-rate FHLB advances and investment securities available for sale using the last-of-layer method. Derivatives that are designated in hedging relationships are assessed for effectiveness using regression analysis at inception and qualitatively thereafter, unless regression analysis is deemed necessary. All designated hedge relationships were and are expected to be highly effective as of December 31, 2019. Cash flows and the profit impact associated with designated hedges are reported in the same category as the underlying hedged item.

During the fourth quarter of 2018, we completed the Wells Fargo branch acquisition. This acquisition resulted in the addition of $1.8 billion of deposits and significantly changed the composition of our balance sheet. We settled all of our variable LIBOR based long-term FHLB borrowings and determined that our forecasted interest payments were probable not to occur. As a result, we reclassified $29 million of hedging gains that had been deferred in OCI from de-designated hedging relationships immediately into income in 2018. We have no gains or losses estimated to be reclassified from other comprehensive income into earnings during the next 12 months.

The following tables present the notional amount, estimated fair value and maturity of our derivative financial instruments:

	December 31, 2019 (1)		
	Notional Amount	Fair Value (2)	Expiration Dates
	(Dollars in millions)		
Derivatives in fair value hedge relationships:			
Assets			
Interest rate swaps on FHLB advances	$ 200	$ —	2020
Interest rate swaps on AFS securities	100	—	2022
Total derivative assets	$ 300	$ —	
Derivatives not designated as hedging instruments:			
Assets			
Futures	$ 550	$ —	2020-2023
Mortgage-backed securities forwards	1,918	2	2020
Rate lock commitments	3,870	34	2020
Interest rate swaps	799	26	2020-2029
Total derivative assets	$ 7,137	$ 62	
Liabilities			
Mortgage-backed securities forwards	5,749	9	2020
Rate lock commitments	229	1	2020
Interest rate swaps and swaptions	1,662	8	2020-2050
Total derivative liabilities	$ 7,640	$ 18	

(1) Variation margin pledged to or received from a Central Counterparty Clearing House to cover the prior days fair value of open positions, is considered settlement of the derivative position for accounting purposes.

(2) Derivative assets and liabilities are included in other assets and other liabilities on the Consolidated Statements of Financial Condition, respectively.

	December 31, 2018 (1)		
	Notional Amount	Fair Value (2)	Expiration Dates
	(Dollars in millions)		
Derivatives in fair value hedge relationships:			
Assets			
Interest rate swaps on CDs	$ 20	$ —	2019
Liabilities			
Interest rate swaps on CDs	$ 10	$ —	2019
Derivatives not designated as hedging instruments:			
Assets			
Futures	$ 248	$ —	2019-2023
Mortgage-backed securities forwards	362	4	2019
Rate lock commitments	2,221	20	2019
Interest rate swaps and swaptions	1,662	23	2019-2049
Total derivative assets	$ 4,493	$ 47	
Liabilities			
Futures	$ 1,513	$ 1	2019-2023
Mortgage-backed securities forwards	4,625	31	2019
Rate lock commitments	45	—	2019
Interest rate swaps	755	7	2019-2028
Total derivative liabilities	$ 6,938	$ 39	

(1) Variation margin pledged to or received from a Central Counterparty Clearing House to cover the prior days fair value of open positions, is considered settlement of the derivative position for accounting purposes.

(2) Derivative assets and liabilities are included in other assets and other liabilities on the Consolidated Statements of Financial Condition, respectively.

The following tables present the derivatives subject to a master netting arrangement, including the cash pledged as collateral:

	Gross Amount	Gross Amounts Netted in the Statement of Financial Position	Net Amount Presented in the Statement of Financial Position	Gross Amounts Not Offset in the Statement of Financial Position	
				Financial Instruments	Cash Collateral
			(Dollars in millions)		
December 31, 2019					
Derivatives not designated as hedging instruments:					
Assets					
Mortgage-backed securities forwards	$ 2	$ —	$ 2	$ —	$ —
Interest rate swaps	26	—	26	—	—
Total derivative assets	$ 28	$ —	$ 28	$ —	$ —
Liabilities					
Mortgage-backed securities forwards	9	—	9	—	24
Interest rate swaps and swaptions (1)	8	—	8	—	39
Total derivative liabilities	$ 17	$ —	$ 17	$ —	$ 63
December 31, 2018					
Derivatives not designated as hedging instruments:					
Assets					
Mortgage-backed securities forwards	$ 4	$ —	$ 4	$ —	$ —
Interest rate swaps and swaptions (1)	23	—	23	—	14
Total derivative assets	$ 27	$ —	$ 27	$ —	$ 14
Liabilities					
Futures	$ 1	$ —	$ 1	$ —	$ 1
Mortgage-backed securities forwards	31	—	31	—	29
Interest rate swaps (1)	7	—	7	—	23
Total derivative liabilities	$ 39	$ —	$ 39	$ —	$ 53

(1) Variation margin pledged to or received from a Central Counterparty Clearing House to cover the prior days fair value of open positions, is considered settlement of the derivative position for accounting purposes.

The fair value basis adjustment on our hedged AFS securities is included in investment securities available for sale on our Consolidated Statements of Financial Condition. The carrying amount of our hedged securities was $287 million at December 31, 2019, of which $1 million was due to the fair value hedge relationship, and zero at December 31, 2018. The closed portfolio of AFS securities designated in this last layer method hedge was $291 million (amortized cost of $289 million) at December 31, 2019, of which we have designated $100 million. There were no designated AFS hedges at December 31, 2018.

The carrying amount of hedged FHLB advances was $200 million at December 31, 2019 and zero at December 31, 2018. The fair value hedge relationship had a de minimis impact at December 31, 2019 and zero at December 31, 2018.

At December 31, 2019, we pledged a total of $63 million related to derivative financial instruments, consisting of $34 million of cash collateral on derivative liabilities and $29 million of maintenance margin on centrally cleared derivatives and had a de minimis obligation to return cash on derivative assets. We pledged a total of $53 million related to derivative financial instruments, consisting of $30 million of cash collateral on derivative liabilities and $23 million of maintenance margin on centrally cleared derivatives and had an obligation to return cash of $14 million on derivative assets at December 31, 2018. Within the Consolidated Statements of Financial Condition, the collateral related to derivative activity is included in other assets and liabilities and the cash pledged as maintenance is restricted and included in other assets.

The following table presents the net gain recognized on designated instruments, net of the impact of offsetting positions:

	Amount Recorded in Net Interest Income (1)	
	For the Years Ended December 31,	
	2019	2018 (2)
	(Dollars in millions)	
Gain on cash flow hedging relationships in interest contracts		
Amount of gain reclassified from AOCI into income	$ —	$ 30
Total gain on hedges	$ —	$ 30

(1) The income impact from fair value hedging relationships for the years ending December 31, 2019 was de minimis and zero at December 31, 2018.
(2) Includes $29 million of hedging gains reclassified into net interest income in conjunction with the payoff of long-term FHLB advances.

The following table presents the net gain/(loss) recognized in income on derivative instruments, net of the impact of offsetting positions:

		For the Years Ended December 31,		
		2019	2018	2017
		(Dollars in millions)		
Derivatives not designated as hedging instruments:	**Location of Gain (Loss)**			
Futures	Net loss on mortgage servicing rights	$ (2)	$ (4)	$ (1)
Interest rate swaps and swaptions	Net gain (loss) on mortgage servicing rights	57	1	(11)
Mortgage-backed securities forwards	Net gain (loss) on mortgage servicing rights	21	(2)	4
Rate lock commitments and forward agency and loan sales	Net gain (loss) on loan sales	35	(31)	(34)
Forward commitments	Other noninterest income	2	—	—
Interest rate swaps (1)	Other noninterest income	5	3	2
Total derivative (loss) gain		$ 118	$ (33)	$ (40)

(1) Includes customer-initiated commercial interest rate swaps.

Note 12 - Deposit Accounts

The deposit accounts are as follows:

	December 31,	
	2019	2018
	(Dollars in millions)	
Retail deposits		
Branch retail deposits		
Demand deposit accounts	$ 1,318	$ 1,297
Savings accounts	3,030	2,812
Money market demand accounts	495	628
Certificates of deposit/CDARS	2,353	2,387
Total branch retail deposits	7,196	7,124
Commercial deposits (1)		
Demand deposit accounts	1,438	1,243
Savings accounts	342	314
Money market demand accounts	188	173
Total commercial retail deposits	1,968	1,730
Total retail deposits	9,164	8,854
Government deposits		
Demand deposit accounts	360	326
Savings accounts	495	567
Certificates of deposit/CDARS	358	309
Total government deposits (2)	1,213	1,202
Wholesale deposits	633	583
Custodial deposits (3)	4,136	1,741
Total deposits	$ 15,146	$ 12,380

(1) Includes deposits from commercial and business banking customers.
(2) Government deposits include funds from municipalities and schools.
(3) These accounts represent a portion of the investor custodial accounts and escrows controlled by us in connection with loans serviced or subserviced for others and that have been placed on deposit with the Bank.

The following indicates the scheduled maturities for certificates of deposit with a minimum denomination of $250,000:

	December 31,	
	2019	2018
	(Dollars in millions)	
Three months or less	$ 223	$ 251
Over three months to six months	238	165
Over six months to twelve months	278	229
One to two years	101	139
Thereafter	35	33
Total	$ 875	$ 817

Note 13 - Borrowings

Federal Home Loan Bank Advances and Other Borrowings

The following is a breakdown of our FHLB advances and other borrowings outstanding:

	December 31, 2019		December 31, 2018	
	Amount	Rate	Amount	Rate
	(Dollars in millions)			
Short-term fixed rate term advances	$ 3,695	1.61%	$ 2,993	2.52%
Other short-term borrowings	470	1.64%	251	2.87%
Total short-term Federal Home Loan Bank advances and other borrowings	4,165		3,244	
Long-term fixed rate advances (1)	650	1.45%	150	1.53%
Total long-term Federal Home Loan Bank advances	650		150	
Total Federal Home Loan Bank advances and other borrowings	$ 4,815		$ 3,394	

(1) Includes the current portion of fixed rate advances of $0 million and $50 million at December 31, 2019 and December 31, 2018, respectively.

The following table contains detailed information on our FHLB advances and other borrowings:

	For the Years Ended December 31,		
	2019	2018	2017
	(Dollars in millions)		
Maximum outstanding at any month end	$ 5,005	$ 5,740	$ 5,665
Average outstanding balance	3,064	4,713	4,590
Average remaining borrowing capacity	4,194	2,089	1,195
Weighted average interest rate	1.90%	1.96%	1.30%

The following table outlines the maturity dates of our FHLB advances and other borrowings:

	December 31, 2019
	(Dollars in millions)
2020	$ 4,165
2021	—
2022	—
2023	250
Thereafter	400
Total	$ 4,815

Parent Company Senior Notes and Trust Preferred Securities

The following table presents long-term debt, net of debt issuance costs:

	December 31, 2019		December 31, 2018	
	Amount	Interest Rate	Amount	Interest Rate
	(Dollars in millions)			
Senior Notes				
Senior notes, matures 2021	$ 249	6.125%	$ 248	6.125%
Trust Preferred Securities				
Floating Three Month LIBOR Plus:				
Plus 3.25%, matures 2032	$ 26	5.20%	$ 26	6.07%
Plus 3.25%, matures 2033	$ 26	5.24%	$ 26	5.69%
Plus 3.25%, matures 2033	$ 26	5.21%	$ 26	6.05%
Plus 2.00%, matures 2035	$ 26	3.99%	$ 26	4.44%
Plus 2.00%, matures 2035	$ 26	3.99%	$ 26	4.44%
Plus 1.75%, matures 2035	$ 51	3.64%	$ 51	4.54%
Plus 1.50%, matures 2035	$ 25	3.49%	$ 25	3.94%
Plus 1.45%, matures 2037	$ 25	3.34%	$ 25	4.24%
Plus 2.50%, matures 2037	$ 16	4.39%	$ 16	5.29%
Total Trust Preferred Securities	247		247	
Total other long-term debt	$ 496		$ 495	

Senior Notes

On July 11, 2016, we issued $250 million of senior notes ("Senior Notes") which mature on July 15, 2021. Prior to June 15, 2021, we may redeem some or all of the Senior Notes at a redemption price equal to the greater of 100 percent of the aggregate principal amount of the notes to be redeemed or the sum of the present values of the remaining scheduled payments discounted to the redemption date on a semi-annual basis using a discount rate equal to the Treasury Rate plus 0.50 percent, in addition to accrued and unpaid interest.

Trust Preferred Securities

We sponsor nine trust subsidiaries, which issued preferred stock to third party investors. We issued junior subordinated debt securities to those trusts, which we have included in long-term debt. The junior subordinated debt securities are the sole assets of those trusts. The trust preferred securities are callable by us at any time. Interest is payable quarterly; however, we may defer interest payments for up to 20 quarters without default or penalty. As of December 31, 2019, we had no deferred interest.

Note 14 - Accumulated Other Comprehensive Income (Loss)

The following table sets forth the components in accumulated other comprehensive income (loss):

	For the Years Ended December 31,		
	2019	2018	2017
	(Dollars in millions)		
Investment Securities			
Beginning balance	$ (47)	$ (18)	$ (8)
Unrealized gain (loss)	57	(30)	(19)
Less: Tax provision (benefit)	14	(7)	(7)
Net unrealized gain (loss)	43	(23)	(12)
Reclassifications out of AOCI (1)	6	(1)	3
Less: Tax provision	1	—	1
Net unrealized gain (loss) reclassified out of AOCI	5	(1)	2
Reclassification of certain income tax effects (2)	—	(5)	—
Other comprehensive income (loss), net of tax	48	(29)	(10)
Ending balance	$ 1	$ (47)	$ (18)
Cash Flow Hedges			
Beginning balance	$ —	$ 2	$ 1
Unrealized gain	—	27	5
Less: Tax provision	—	7	1
Net unrealized gain	—	20	4
Reclassifications out of AOCI (3)	—	(30)	(5)
Less: Tax benefit	—	(8)	(2)
Net unrealized loss reclassified out of AOCI	—	(22)	(3)
Other comprehensive income (loss), net of tax	—	(2)	1
Ending balance	$ —	$ —	$ 2

(1) Reclassifications are reported in other noninterest income in the Consolidated Statement of Operations.
(2) Income tax effects of the Tax Cuts and Jobs Act are reclassified from AOCI to retained earnings due to early adoption of ASU 2018-02.
(3) Reclassifications are reported in interest expense on the Consolidated Statement of Operations.

Note 15 - Earnings Per Share

Basic earnings per share, excluding dilution, is computed by dividing earnings available to common stockholders by the weighted average number of shares of common stock outstanding during the period. Diluted earnings per share reflects the potential dilution that could occur if securities or other contracts to issue common stock were exercised and converted into common stock or resulted in the issuance of common stock that could then share in our earnings.

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

	For the Years Ended December 31,		
	2019	2018	2017
	(In millions, except share data)		
Net income applicable to common stockholders	$ 218	$ 187	$ 63
Weighted Average Shares			
Weighted average common shares outstanding	56,584,238	57,520,289	57,093,868
Effect of dilutive securities			
May Investor Warrants	—	—	12,287
Stock-based awards	654,740	802,661	1,072,188
Weighted average diluted common shares	57,238,978	58,322,950	58,178,343
Earnings per common share			
Basic earnings per common share	$ 3.85	$ 3.26	$ 1.11
Effect of dilutive securities			
May Investor Warrants	—	—	—
Stock-based awards	(0.05)	(0.05)	(0.02)
Diluted earnings per common share	$ 3.80	$ 3.21	$ 1.09

Note 16 - Stock-Based Compensation

Certain key employees, officers, directors and others are eligible to receive stock awards. Awards that may be granted under the 2016 Stock Plan include stock options, restricted stock, restricted stock units, performance awards, dividend equivalents and other awards.

The compensation expense recognized related to stock-based compensation was $13 million, $11 million, and $11 million during each of the years ended December 31, 2019, 2018 and 2017, respectively.

Stock Options

No stock options have been granted by the Company since 2002. There were no stock options exercised during the years ended December 31, 2019, 2018 and 2017 as all options had negative intrinsic value. The remaining stock options expired January 22, 2020, and were not exercised.

The following table summarizes stock option activity:

	For the Years Ended December 31,					
	2019		2018		2017	
	Number of Shares	Weighted Average Exercise Price	Number of Shares	Weighted Average Exercise Price	Number of Shares	Weighted Average Exercise Price
Options outstanding, beginning of year	36,093	$ 80.00	40,718	$ 80.00	45,791	$ 80.00
Options canceled, forfeited and expired	(1,894)	80.00	(4,625)	80.00	(5,073)	80.00
Options outstanding, end of year	34,199	$ 80.00	36,093	$ 80.00	40,718	$ 80.00
Options vested or expected to vest, end of year	34,199	$ 80.00	36,093	$ 80.00	40,718	$ 80.00
Options exercisable, end of year	16,968	$ 80.00	17,991	$ 80.00	20,286	$ 80.00

(1) All outstanding options at December 31, 2019 are vested or expected to vest and have a weighted average remaining contractual life of 0.1 years.

Restricted Stock and Restricted Stock Units

We have issued restricted stock units to officers, directors and certain employees under our long term incentive program (LTIP). Restricted stock units generally will vest in 3 increments on each annual anniversary of the date of grant beginning with the first anniversary or vest after three years subject to service and performance conditions.

On October 20, 2015, our Board approved and adopted the Flagstar Bancorp, Inc. Executive Long-Term Incentive Program ("ExLTIP"). The ExLTIP provided for payouts to certain executives only if our stock achieved and sustained a specified market performance within ten years of the grant date, which occurred. The ExLTIP awards were made in the form of restricted stock units under and subject to the terms of the 2016 Flagstar Bancorp, Inc. Stock and Incentive Plan, which was approved at the May 24, 2016 annual shareholder meeting. With the achievement of the performance hurdles and satisfactory quality reviews, installments were paid out in May 2017, 2018, and 2019. The remaining two installments will be made annually on the vesting date anniversary subject to quality review.

With the achievement of the performance-based ExLTIP, on March 20, 2018, the Board approved the adoption of the 2018 Executive Long Term Incentive Program II ("2018 ExLTIP II"). The 2018 ExLTIP II was provided to certain executives and is comprised of RSUs which are dependent on stock performance, time-based RSUs for which vesting is based on service over a four years period and RSUs that are performance and time vested with the same terms as those granted to other employees under the existing LTIP. As of December 31, 2019 the stock performance hurdles have not been met.

At December 31, 2019, the maximum number of shares of common stock that may be issued were 1,416,986 shares. The total grant date fair value of awards vested during the years ended December 31, 2019, 2018, 2017 was \$10 million, \$9 million, and \$7 million, respectively. As of December 31, 2019, the total unrecognized compensation cost related to non-vested awards was \$23 million with a weighted average expense recognition period of 1.8 years.

The following table summarizes restricted stock activity:

	For the Years Ended December 31,					
	2019		2018		2017	
	Number of Shares	Weighted Average Grant -Date Fair Value per Share	Number of Shares	Weighted Average Grant -Date Fair Value per Share	Number of Shares	Weighted Average Grant -Date Fair Value per Share
Restricted Stock and Restricted Stock Units						
Non-vested balance at beginning of period	1,620,568	$ 27.27	1,290,450	$ 20.52	1,461,910	$ 17.68
Granted	338,737	32.11	875,352	34.32	357,058	28.06
Vested	(379,936)	26.98	(401,379)	23.04	(385,454)	17.36
Canceled and forfeited	(180,242)	25.66	(143,855)	21.46	(143,064)	18.89
Non-vested balance at end of period	1,399,127	$ 28.72	1,620,568	$ 27.27	1,290,450	$ 20.52

2017 Employee Stock Purchase Plan

The Employee Stock Purchase Plan ("2017 ESPP") was approved on March 20, 2017 by our Board and on May 23, 2017 by our shareholders. The 2017 ESPP became effective July 1, 2017 and will remain effective until terminated by the Board. A total of 800,000 shares of the Company's common stock are reserved and authorized for issuance for purchase under the 2017 ESPP. There were 106,881 and 114,385 shares issued under the 2017 ESPP during the years ended December 31, 2019 and 2018, respectively, and the associated compensation expense was de minimis for both periods.

Note 17 - Income Taxes

Components of the provision for income taxes consist of the following:

	For the Years Ended December 31,		
	2019	2018	2017
	(Dollars in millions)		
Current			
Federal	$ 17	$ —	$ 2
State	6	1	—
Total current income tax expense	23	1	2
Deferred			
Federal	39	47	66
Federal impact of tax reform	—	—	80
State	(14)	(3)	—
Total deferred income tax expense	25	44	146
Total income tax expense	$ 48	$ 45	$ 148

Our effective tax rate differs from the statutory federal tax rate. The following is a summary of such differences:

	For the Years Ended December 31,		
	2019	2018	2017
	(Dollars in millions)		
Provision at statutory federal income tax rate (1)	$ 56	$ 49	$ 74
(Decreases) increases resulting from:			
Bank owned life insurance	(2)	(2)	(3)
State income tax (benefit), net of federal income tax effect (net of valuation allowance release)	(6)	(2)	—
Low income housing tax losses	(1)	(1)	
Tax reform	—	—	80
Other	1	1	(3)
Provision for income taxes	$ 48	$ 45	$ 148
Effective tax provision rate	18.1%	19.4%	70.1%

(1) The statutory federal income tax rate was 21 percent for the years ended December 31, 2019 and December 31, 2018 and 35 percent for the year ended December 31, 2017.

The decrease in our income tax provision and effective tax provision rate during the year ended December 31, 2019 as compared to the year ended December 31, 2018, was primarily due to a change in our valuation allowance for net deferred tax assets at the state level.

Temporary differences and carry forwards that give rise to DTAs and liabilities are comprised of the following:

	December 31,	
	2019	2018
	(Dollars in millions)	
Deferred tax assets		
Net operating loss carryforwards (Federal and State)	$ 43	$ 58
Allowance for loan losses	26	30
Accrued compensation	12	10
Litigation settlement	9	14
Lease liability	6	—
Contingent consideration	4	3
General business credits	—	7
General business reserves	2	10
Other	11	11
Total	$ 113	$ 143
Valuation allowance	(5)	(14)
Total net	$ 108	$ 129
Deferred tax liabilities		
Mark-to-market adjustments	$ (12)	$ (11)
Premises and equipment	(7)	(8)
State and local taxes	(7)	(3)
Commercial lease financing	(5)	(4)
Mortgage loan servicing rights	(5)	—
Right of use asset	(6)	—
Total	$ (42)	$ (26)
Net deferred tax asset	$ 66	$ 103

We have not provided deferred income taxes for the Bank's pre-1988 tax bad debt reserve at December 31, 2019 of approximately $4.0 million because it is not anticipated that this temporary difference will reverse in the foreseeable future. Such reserves would only be taken into taxable income if the Bank, or a successor institution, liquidates, redeems shares, pays dividends in excess of earnings, or ceases to qualify as a bank for tax purposes.

During the years ended December 31, 2019 and 2018, we had federal net operating loss carry forwards of $68 million and $154 million, respectively. These carry forwards, if unused, expire in calendar years 2028 through 2029. As a result of a change in control occurring on January 30, 2009, Section 382 of the Internal Revenue Code places an annual limitation on the use of our new operating loss carry forwards that existed at that time. At December 31, 2019 we had $68 million of net operating loss carry forwards subject to certain annual use limitations which expire in calendar years 2028 through 2029.

We regularly evaluate the need for DTA valuation allowances based on a more likely than not standard as defined by generally accepted accounting principles. The ability to realize DTAs depends on the ability to generate sufficient taxable income within the carryback or carryforward periods provided for in the tax law for each applicable tax jurisdiction.

We had a total state DTA before valuation allowance of $35 million which includes total state net operating loss carryforwards of $454 million at December 31, 2019. In connection with our ongoing assessment of deferred taxes, we analyzed each state net operating loss separately and determined the amount of net operating loss available, estimated the amount which we expected to expire unused, and recorded a valuation allowance to reduce the DTA for state net operating losses to the amount which is more likely than not to be realized. At December 31, 2019, the net state DTAs which will more likely than not be realized, was $30 million. We have a valuation allowance of $5 million due to state loss carryover limitations.

We will continue to regularly assess the realizability of our DTAs. Changes in earnings performance and future earnings projections, among other factors, may cause us to adjust our valuation allowance.

Our income tax returns are subject to review and examination by federal, state and local government authorities. On an ongoing basis, numerous federal, state and local examinations are in progress and cover multiple tax years. At December 31, 2019, the Internal Revenue Service had completed an examination of us through the taxable year ended December 31, 2013. The years open to examination by state and local government authorities vary by jurisdiction.

We recognize interest and penalties related to uncertain tax positions in income tax expense. For the years ended December 31, 2019, 2018 and 2017, we did not recognize any interest income, interest expense, or increase or decreases to uncertain income tax positions of greater than $1 million, individually or in aggregate.

Note 18 - Regulatory Capital

We, along with the Bank, must meet specific capital guidelines that involve quantitative measures of the Bank's assets, liabilities, and certain off-balance sheet items as calculated under regulatory accounting practices. The Bank's capital amounts and classifications are also subject to qualitative judgments by regulators. Failure to meet minimum capital requirements can initiate certain mandatory, and possibly additional discretionary actions by regulators that could have a material effect on the Consolidated Financial Statements. On January 1, 2015, the Basel III rules became effective and included transition provisions through 2018. In preparation for the capital simplification rules, effective January 1, 2020, the Basel III implementation phase-in has been halted. For additional information, see Item 1. Business and Item 1A. Risk Factors.

To be categorized as "well-capitalized," the Company and the Bank must maintain minimum tangible capital, Tier 1 capital, common equity Tier 1, and total capital ratios as set forth in the table below. We, along with the Bank, are considered "well-capitalized" at both December 31, 2019 and December 31, 2018.

The following tables present the regulatory capital ratios as of the dates indicated:

Flagstar Bancorp	Actual		For Capital Adequacy Purposes		Well-Capitalized Under Prompt Corrective Action Provisions	
	Amount	Ratio	Amount	Ratio	Amount	Ratio
	(Dollars in millions)					
December 31, 2019						
Tier 1 capital (to adjusted avg. total assets)	$ 1,720	7.57%	$ 909	4.0%	$ 1,136	5.0%
Common equity Tier 1 capital (to RWA)	1,480	9.32%	715	4.5%	1,033	6.5%
Tier 1 capital (to RWA)	1,720	10.83%	953	6.0%	1,271	8.0%
Total capital (to RWA)	1,830	11.52%	1,271	8.0%	1,589	10.0%
December 31, 2018						
Tier 1 capital (to adjusted avg. total assets)	$ 1,505	8.29%	$ 726	4.0%	$ 908	5.0%
Common equity Tier 1 capital (to RWA)	1,265	10.54%	540	4.5%	780	6.5%
Tier 1 capital (to RWA)	1,505	12.54%	720	6.0%	960	8.0%
Total capital (to RWA)	1,637	13.63%	960	8.0%	1,201	10.0%

Flagstar Bank	Actual		For Capital Adequacy Purposes		Well-Capitalized Under Prompt Corrective Action Provisions	
	Amount	Ratio	Amount	Ratio	Amount	Ratio
	(Dollars in millions)					
December 31, 2019						
Tier 1 capital (to adjusted avg. total assets)	$ 1,752	7.71%	$ 909	4.0%	$ 1,136	5.0%
Common equity Tier 1 capital (to RWA)	1,752	11.04%	714	4.5%	1,032	6.5%
Tier 1 capital (to RWA)	1,752	11.04%	952	6.0%	1,270	8.0%
Total capital (to RWA)	1,862	11.73%	1,270	8.0%	1,587	10.0%
December 31, 2018						
Tier 1 capital (to adjusted avg. total assets)	$ 1,574	8.67%	$ 726	4.0%	$ 908	5.0%
Common equity Tier 1 capital (to RWA)	1,574	13.12%	540	4.5%	780	6.5%
Tier 1 capital (to RWA)	1,574	13.12%	720	6.0%	960	8.0%
Total capital (to RWA)	1,705	14.21%	960	8.0%	1,200	10.0%

Note 19 - Legal Proceedings, Contingencies and Commitments

Legal Proceedings

We and our subsidiaries are subject to various pending or threatened legal proceedings arising out of the normal course of business operations. In addition, the Bank is routinely named in civil actions throughout the country by borrowers and former borrowers relating to the origination, purchase, sale, and servicing of mortgage loans. From time to time, governmental agencies also conduct investigations or examinations of various practices of the Bank. In the course of such investigations or examinations, the Bank cooperates with such agencies and provides information as requested.

We assess the liabilities and loss contingencies in connection with pending or threatened legal and regulatory proceedings on at least a quarterly basis and establish accruals when we believe it is probable that a loss may be incurred and that the amount of such loss can be reasonably estimated. Once established, litigation accruals are adjusted, as appropriate, in light of additional information.

At December 31, 2019, we do not believe that the amount of any reasonably possible losses in excess of any amounts accrued with respect to ongoing proceedings or any other known claims will be material to our financial statements, or that the ultimate outcome of these actions will have a material adverse effect on our financial condition, results of operations or cash flows.

DOJ litigation settlement

In 2012, the Bank entered into a Settlement Agreement with the DOJ which meets the definition of a financial liability (the "DOJ Liability").

In accordance with the Settlement Agreement, we made an initial payment of $15 million and agreed to make future annual payments totaling $118 million in annual increments of up to $25 million upon meeting all conditions, which are evaluated quarterly and include: (a) the reversal of the DTA valuation allowance, which occurred at the end of 2013; (b) the repayment of the Fixed Rate Cumulative Perpetual Preferred Stock, Series C (the "TARP Preferred"), which occurred in the third quarter of 2016; and (c) the Bank's Tier 1 Leverage Capital Ratio equals 11 percent or greater as filed in the Call Report with the OCC.

No payment would be required until six months after the Bank files its Call Report with the OCC first reporting that its Tier 1 Leverage Capital Ratio was 11 percent or greater. If all other conditions were then satisfied, an initial annual payment would be due at that time. The next annual payment is then only made if such other conditions continue to be satisfied, otherwise payments are delayed until all such conditions are met. Further, making such a payment must not violate any material banking regulatory requirement, and the OCC must not object in writing.

Consistent with our business and regulatory requirements, Flagstar shall seek in good faith to fulfill the conditions, and will not undertake any conduct or fail to take any action the purpose of which is to frustrate or delay our ability to fulfill any of the above conditions.

Additionally, if the Bank and Bancorp become party to a business combination in which the Bank or Bancorp represent less than 33.3 percent of the resulting company's assets, annual payments must commence twelve months after the date of that business combination.

The Settlement Agreement meets the definition of a financial instrument for which we elected the fair value option. We consider the assumptions a market participant would make to transfer the liability and evaluate the potential ways we might satisfy the Settlement Agreement and our estimates of the likelihood of these outcomes, which may change over time. The fair value of the liability is subject to significant uncertainty and is impacted by forecasted estimates of the timing of potential payments, some of which are impacted by inputs including estimates of equity, earnings, timing and amount of dividends and growth of the balance sheet and their related impacts on forecasted Tier 1 Leverage Capital Ratio discount rate, and the likelihood and types of potential business combinations, or any other means by which a payment could be made. For further information on the fair value to the liability, see Note 20 - Fair Value Measurements.

Other litigation accruals

At December 31, 2019 and December 31, 2018, excluding the fair value liability relating to the DOJ litigation settlement, our total accrual for contingent liabilities and settled litigation was $3 million and $2 million, respectively.

Commitments

The following table is a summary of the contractual amount of significant commitments:

	December 31,	
	2019	2018
	(Dollars in millions)	
Commitments to extend credit		
Mortgage loan commitments including interest-rate locks	$ 4,099	$ 2,293
Warehouse loan commitments	1,944	2,334
Commercial and industrial commitments	1,107	918
Other commercial commitments	2,015	1,260
HELOC commitments	558	429
Other consumer commitments	175	108
Standby and commercial letters of credit	82	63

Commitments to extend credit are agreements to lend to a customer as long as there is not a violation of any condition established in the contract. Since many of these commitments expire without being drawn upon, the total commitment amounts do not necessarily represent future cash flow requirements. Commitments generally have fixed expiration dates or other termination clauses. We evaluate each customer's credit worthiness on a case-by-case basis. The amount of collateral obtained, if deemed necessary by us, upon extension of credit is based on management's credit evaluation of the counterparties.

These instruments involve, to varying degrees, elements of credit and interest rate risk beyond the amount recognized on the Consolidated Statements of Financial Condition. Our exposure to credit losses in the event of nonperformance by the other party to the financial instrument for commitments to extend credit and standby letters of credit is represented by the contractual amount of those instruments. We utilize the same credit policies in making commitments and conditional obligations as we do for balance sheet instruments. The types of credit we extend are as follows:

Mortgage loan commitments including interest-rate locks. We enter into mortgage loan commitments, including interest-rate locks with our customers. These interest-rate lock commitments are considered to be derivative instruments and the fair value of these commitments is recorded in the Consolidated Statements of Financial Condition in other assets. For further information, see Note 11 - Derivative Financial Instruments.

Warehouse loan commitments. Lines of credit provided to mortgage originators to fund loans they originate and then sell. The proceeds of the sale of the loans are used to repay the draw on the line used to fund the loans.

Commercial and industrial and other commercial commitments. Conditional commitments issued under various terms to lend funds to business and other entities. These commitments include revolving credit agreements, term loan commitments and short-term borrowing agreements. Many of these loan commitments have fixed expiration dates or other termination clauses and may require payment of a fee. Since many of these commitments are expected to expire without being funded, the total commitment amounts do not necessarily represent future liquidity requirements.

HELOC commitments. Commitments to extend, originate or purchase credit are primarily lines of credit to consumers and have specified rates and maturity dates. Many of these commitments also have adverse change clauses, which allow us to cancel the commitment due to deterioration in the borrowers' creditworthiness or a decline in the collateral value.

Other consumer commitments. Conditional commitments issued to accommodate the financial needs of customers. The commitments are made under various terms to lend funds to consumers, which include revolving credit agreements, term loan commitments and short-term borrowing agreements.

Standby and commercial letters of credit. Conditional commitments issued to guarantee the performance of a customer to a third party. Standby letters of credit generally are contingent upon the failure of the customer to perform according to the terms of the underlying contract with the third party, while commercial letters of credit are issued specifically to facilitate commerce and typically result in the commitment being drawn on when the underlying transaction is consummated between the customer and the third party. These financial standby letters of credit irrevocably obligate the bank to pay a third party beneficiary when a customer fails to repay an outstanding loan or debt instrument.

We maintain a reserve for the estimate of probable credit losses inherent in unfunded commitments to extend credit. Unfunded commitments to extend credit include unfunded loans with available balances, new commitments to lend that are not yet funded, and standby and commercial letters of credit. A reserve balance of $3 million at December 31, 2019 and December 31, 2018, respectively, is reflected in other liabilities on the Consolidated Statements of Financial Condition.

Supplemental executive retirement plan with former CEO. The Company entered into a supplemental executive retirement plan (“SERP”) with a former CEO in 2009. Under the plan, the former CEO was to receive a $16 million payment in August 2018. The Company fully accrued for the SERP liability during that time period and no SERP payments have been made to the former CEO. Due to the condition of the Company at the time the former CEO’s employment ended, we believe that any payment under the SERP would be deemed to be a “Golden Parachute” payment and, therefore, is subject to certain banking regulations. As a result, we would need to make an application to the regulators to make a payment and certify to certain criteria. The Company does not believe that it can make such a certification. The former CEO has filed a lawsuit to compel us to make that certification and ultimately pay the liability. Final dispensation of the "SERP" is not within our control and the liability of $16 million at December 31, 2019 may be adjusted as more information is known.

Note 20 - Fair Value Measurements

We utilize fair value measurements to record or disclose the fair value on certain assets and liabilities. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability through an orderly transaction between market participants at the measurement date. The determination of fair values of financial instruments often requires the use of estimates. In cases where quoted market values in an active market are not available, we use present value techniques and other valuation methods to estimate the fair values of our financial instruments. These valuation models rely on market-based parameters when available, such as interest rate yield curves or credit spreads. Unobservable inputs may be based on management's judgment, assumptions and estimates related to credit quality, our future earnings, interest rates and other relevant inputs. These valuation methods require considerable judgment and the resulting estimates of fair value can be significantly affected by the assumptions made and methods used.

Valuation Hierarchy

U.S. GAAP establishes a three-level valuation hierarchy for disclosure of fair value measurements. The hierarchy is based on the transparency of the inputs used in the valuation process with the highest priority given to quoted prices available in active markets and the lowest priority to unobservable inputs where no active market exists, as discussed below.

Level 1 - Quoted prices (unadjusted) for identical assets or liabilities in active markets in which we can participate as of the measurement date;

Level 2 - Quoted prices for similar instruments in active markets, and other inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instrument; and

Level 3 - Unobservable inputs that reflect our own assumptions about the assumptions that market participants would use in pricing an asset or liability.

A financial instrument's categorization within the valuation hierarchy is based upon the lowest level of input within the valuation hierarchy that is significant to the overall fair value measurement. Transfers between levels of the fair value hierarchy are recognized at the end of the reporting period.

Assets and Liabilities Measured at Fair Value on a Recurring Basis

The following tables present the financial instruments carried at fair value by caption on the Consolidated Statements of Financial Condition and by level in the valuation hierarchy:

	December 31, 2019			
	Level 1	Level 2	Level 3	Total Fair Value
	(Dollars in millions)			
Investment securities available-for-sale				
Agency - Commercial	$ —	$ 947	$ —	$ 947
Agency - Residential	—	1,015	—	1,015
Municipal obligations	—	31	—	31
Corporate debt obligations	—	77	—	77
Other MBS	—	45	—	45
Certificate of Deposits	—	1	—	1
Loans held-for-sale				
Residential first mortgage loans	—	5,219	—	5,219
Commercial Loan	—	—	—	—
Loans held-for-investment				
Residential first mortgage loans	—	10	—	10
Home equity	—	—	2	2
Mortgage servicing rights	—	—	291	291
Derivative assets				
Rate lock commitments (fallout-adjusted)	—	—	34	34
Mortgage-backed securities forwards	—	2	—	2
Interest rate swaps and swaptions	—	26	—	26
Total assets at fair value	$ —	$ 7,373	$ 327	$ 7,700
Derivative liabilities				
Rate lock commitments (fallout-adjusted)	$ —	$ —	$ (1)	$ (1)
Futures	—	—	—	—
Mortgage-backed securities forwards	—	(9)	—	(9)
Interest rate swaps and swaptions	—	(8)	—	(8)
DOJ litigation settlement	—	—	(35)	(35)
Contingent consideration	—	—	(10)	(10)
Total liabilities at fair value	$ —	$ (17)	$ (46)	$ (63)

	December 31, 2018			
	Level 1	Level 2	Level 3	Total Fair Value
	(Dollars in millions)			
Investment securities available-for-sale				
Agency - Commercial	$ —	$ 1,374	$ —	$ 1,374
Agency - Residential	—	662	—	662
Municipal obligations	—	32	—	32
Corporate debt obligations	—	42	—	42
Other MBS	—	32	—	32
Loans held-for-sale				
Residential first mortgage loans	—	3,732	—	3,732
Loans held-for-investment				
Residential first mortgage loans	—	8	—	8
Home equity	—	—	2	2
Mortgage servicing rights	—	—	290	290
Derivative assets				
Rate lock commitments (fallout-adjusted)	—	—	20	20
Mortgage-backed securities forwards	—	4	—	4
Interest rate swaps and swaptions	—	23	—	23
Total assets at fair value	$ —	$ 5,909	$ 312	$ 6,221
Derivative liabilities				
Futures	$ —	$ (1)	$ —	$ (1)
Mortgage-backed securities forwards	—	(31)	—	(31)
Interest rate swaps	—	(7)	—	(7)
DOJ litigation settlement	—	—	(60)	(60)
Contingent consideration	—	—	(6)	(6)
Total liabilities at fair value	$ —	$ (39)	$ (66)	$ (105)

Fair Value Measurements Using Significant Unobservable Inputs

The following tables include a roll forward of the Consolidated Statements of Financial Condition amounts (including the change in fair value) for financial instruments classified by us within Level 3 of the valuation hierarchy:

	Balance at Beginning of Year	Total Gains / (Losses) Recorded in Earnings (1)	Purchases / Originations	Sales	Settlement	Transfers In (Out)	Balance at End of Year
	(Dollars in millions)						
Year Ended December 31, 2019							
Assets							
Loans held-for-investment							
Home equity	$ 2	$ —	$ —	$ —	$ —	$ —	$ 2
Mortgage servicing rights (1)	290	(165)	223	(57)	—	—	291
Rate lock commitments (net) (1)(2)	20	86	326	—	—	(398)	34
Totals	$ 312	$ (79)	$ 549	$ (57)	$ —	$ (398)	$ 327
Liabilities							
DOJ litigation settlement	$ (60)	$ 25	$ —	$ —	$ —	$ —	$ (35)
Contingent consideration	(6)	(7)	—	—	3	—	(10)
Totals	$ (66)	$ 18	$ —	$ —	$ 3	$ —	$ (45)
Year Ended December 31, 2018							
Assets							
Loans held-for-investment							
Home equity	$ 4	$ —	$ —	$ —	$ (2)	$ —	$ 2
Mortgage servicing rights (1)	291	(18)	356	(339)	—	—	290
Rate lock commitments (net) (1)(2)	24	(34)	235	—	—	(205)	20
Totals	$ 319	$ (52)	$ 591	$ (339)	$ (2)	$ (205)	$ 312
Liabilities							
DOJ litigation settlement	$ (60)	$ —	$ —	$ —	$ —	$ —	$ (60)
Contingent consideration	(25)	13	—	—	6	—	(6)
Totals	$ (85)	$ 13	$ —	$ —	$ 6	$ —	$ (66)
Year Ended December 31, 2017							
Assets							
Loans held-for-sale							
Home Equity	$ —	$ 1	$ —	$ (52)	$ (1)	$ 52	$ —
Loans held-for-investment							
Home equity	$ 65	$ 2		$ —	$ (8)	$ (55)	$ 4
Mortgage servicing rights (1)	335	$ (22)	288	(310)			291
Rate lock commitments (net) (1)(2)	18	54	$ 267	—	—	(315)	24
Totals	$ 418	$ 35	$ 555	$ (362)	$ (9)	$ (318)	$ 319
Liabilities							
DOJ litigation settlement	$ (60)	$ —	$ —	$ —	$ —	$ —	$ (60)
Contingent consideration	—	(1)	(25)	—	1	—	(25)
Totals	$ (60)	$ (1)	$ (25)	$ —	$ 1	$ —	$ (85)

(1) We utilized swaptions, futures, forward agency and loan sales and interest rate swaps to manage the risk associated with mortgage servicing rights and rate lock commitments. Gains and losses for individual lines do not reflect the effect of our risk management activities related to such Level 3 instruments.

(2) Rate lock commitments are reported on a fallout adjusted basis. Transfers out of Level 3 represent the settlement value of the commitments that are transferred to LHFS, which are classified as Level 2 assets.

The following tables present the quantitative information about recurring Level 3 fair value financial instruments and the fair value measurements as of:

	Fair Value		Valuation Technique	Unobservable Input	Range (Weighted Average)	
				(Dollars in millions)		
December 31, 2019						
Assets						
Loans held-for-investment						
Home equity	$	2	Discounted cash flows	Discount rate Constant prepayment rate Constant default rate	7.2% -10.8% (9.0%) 13.0% - 19.5% (16.2%) 2.7%-4.0% (3.3%)	(1)
Mortgage servicing rights	$	291	Discounted cash flows	Option adjusted spread Constant prepayment rate Weighted average cost to service per	2.4% - 20.4% (5.3%) 0% - 12.3% (10.6%) $67 - $95 ($84)	(1)
Rate lock commitments (net)	$	34	Consensus pricing	Origination pull-through rate	80.0% - 87.2% (81.5%)	(1)
Liabilities						
DOJ litigation settlement	$	(35)	Discounted cash flows	See description below	See description below	
Contingent consideration	$	(10)	Discounted cash flows	See description below	See description below	(2)

	Fair Value		Valuation Technique	Unobservable Input	Range (Weighted Average)	
				(Dollars in millions)		
December 31, 2018						
Assets						
Loans held-for-investment						
Home equity	$	2	Discounted cash flows	Discount rate Constant prepayment rate Constant default rate	7.2% - 10.8% (9.0%) 13.6% - 20.3% (16.9%) 3.0% - 4.6% (3.8%)	(1)
Mortgage servicing rights	$	290	Discounted cash flows	Option adjusted spread Constant prepayment rate Weighted average cost to service per	2.1% - 25.9% (5.4%) 0% - 10.7% (9.6%) $67 - $95 ($86)	(1)
Rate lock commitments (net)	$	20	Consensus pricing	Origination pull-through rate	75.0% - 87.2% (76.8%)	(1)
Liabilities						
DOJ litigation settlement	$	(60)	Discounted cash flows	See description below	See description below	
Contingent consideration	$	(6)	Discounted cash flows	See description below	See description below	(2)

(1) Unobservable inputs were weighted by their relative fair value of the instruments.
(2) Unobservable inputs were not weighted as only one instrument exists.

Recurring Significant Unobservable Inputs

Home equity. The most significant unobservable inputs used in the fair value measurement of the home equity loans are discount rates, constant prepayment rates, and default rates. The constant prepayment and default rates are based on a 12 month historical average. Significant increases (decreases) in the discount rate in isolation result in a significantly lower (higher) fair value measurement. Increases (decreases) in prepay rates in isolation result in a higher (lower) fair value and increases (decreases) in default rates in isolation result in a lower (higher) fair value.

MSRs. The significant unobservable inputs used in the fair value measurement of the MSRs are option adjusted spreads, prepayment rates, and cost to service. Significant increases (decreases) in all three assumptions in isolation result in a significantly lower (higher) fair value measurement. Weighted average life (in years) is used to determine the change in fair value of MSRs. For December 31, 2019 and December 31, 2018 the weighted average life (in years) for the entire MSR portfolio was 4.1 and 5.2, respectively.

DOJ litigation settlement. The significant unobservable input used in the fair value measurement of the DOJ litigation settlement are the discount rate, asset growth rate, return on assets, dividend rate, and potential ways we might be required to begin making DOJ liability payments and our estimates of the likelihood of these outcomes, as further discussed in Note 19 - Legal Proceedings, Contingencies and Commitments. The DOJ liability had a fair value adjustment of $25 million for the year ended December 31, 2019. This reduced the liability to $35 million based on changes in the probability of potential ways we might be required to begin making DOJ liability payments and our estimates of the likelihood of these outcomes. Our assessment of these outcomes reflect a reduced likelihood, and longer timing, for potential future payments.

Rate lock commitments. The significant unobservable input used in the fair value measurement of the rate lock commitments is the pull through rate. The pull through rate is a statistical analysis of our actual rate lock fallout history to determine the sensitivity of the residential mortgage loan pipeline compared to interest rate changes and other deterministic values. New market prices are applied based on updated loan characteristics and new fallout ratios (i.e., the inverse of the pull through rate) are applied accordingly. Significant increases (decreases) in the pull through rate in isolation result in a significantly higher (lower) fair value measurement.

Contingent consideration. The significant unobservable input used in the fair value of the contingent consideration is future forecasted target production volumes and profitability of the division. An increase or decrease to these inputs results in an increase or decrease of the liability.

Assets and Liabilities Measured at Fair Value on a Nonrecurring Basis

We also have assets that under certain conditions are subject to measurement at fair value on a nonrecurring basis.

The following table presents assets measured at fair value on a nonrecurring basis:

	Total (1)	Level 2	Level 3	Gains/(Losses)
	(Dollars in millions)			
December 31, 2019				
Loans held-for-sale (2)	$ 6	$ 6	$ —	$ (1)
Impaired loans held-for-investment (2)				
Residential first mortgage loans	14	—	14	(5)
Repossessed assets (3)	10	—	10	(3)
Totals	$ 30	$ 6	$ 24	$ (9)
December 31, 2018				
Loans held-for-sale (2)	$ 5	$ 5	$ —	$ (1)
Impaired loans held-for-investment (2)				
Residential first mortgage loans	12	—	12	(4)
Repossessed assets (3)	7	—	7	(3)
Totals	$ 24	$ 5	$ 19	$ (8)

(1) The fair values are determined at various dates during the years ended December 31, 2019 and 2018, respectively.
(2) Gains/(losses) reflect fair value adjustments on assets for which we did not elect the fair value option.
(3) Gains/(losses) reflect write downs of repossessed assets based on the estimated fair value of the specific assets.

The following tables present the quantitative information about nonrecurring Level 3 fair value financial instruments and the fair value measurements:

	Fair Value	Valuation Technique	Unobservable Input	Range (Weighted Average)	
	(Dollars in millions)				
December 31, 2019					
Impaired loans held-for-investment					
Residential first mortgage loans	$ 14	Fair value of collateral	Loss severity discount	25% - 30% (25.9%)	(1)
Repossessed assets	$ 10	Fair value of collateral	Loss severity discount	0% - 100% (17.1%)	(1)
December 31, 2018					
Impaired loans held-for-investment					
Residential first mortgage loans	$ 12	Fair value of collateral	Loss severity discount	25% - 30% (28.3%)	(1)
Repossessed assets	$ 7	Fair value of collateral	Loss severity discount	0% - 100% (25.8%)	(1)

(1) Unobservable inputs were weighted by their relative fair value of the instruments.

Nonrecurring Significant Unobservable Inputs

The significant unobservable inputs used in the fair value measurement of the impaired loans and repossessed assets are appraisals or other third-party price evaluations which incorporate measures such as recent sales prices for comparable properties.

Fair Value of Financial Instruments

The following table presents the carrying amount and estimated fair value of financial instruments that are carried either at fair value, cost, or amortized cost:

	December 31, 2019				
		Estimated Fair Value			
	Carrying Value	Total	Level 1	Level 2	Level 3
	(Dollars in millions)				
Assets					
Cash and cash equivalents	$ 426	$ 426	$ 426	$ —	$ —
Investment securities available-for-sale	2,116	2,116	—	2,116	—
Investment securities held-to-maturity	598	599	—	599	—
Loans held-for-sale	5,258	5,258	—	5,258	—
Loans held-for-investment	12,129	12,031	—	10	12,021
Loans with government guarantees	736	707	—	707	—
Mortgage servicing rights	291	291	—	—	291
Federal Home Loan Bank stock	303	303	—	303	—
Bank owned life insurance	349	349	—	349	—
Repossessed assets	10	10	—	—	10
Other assets, foreclosure claims	45	45	—	45	—
Derivative financial instruments	62	88	—	54	34
Liabilities					
Retail deposits					
Demand deposits and savings accounts	$ (6,811)	$ (6,050)	$ —	$ (6,050)	$ —
Certificates of deposit	(2,353)	(2,368)	—	(2,368)	—
Wholesale deposits	(633)	(640)	—	(640)	—
Government deposits	(1,213)	(1,156)	—	(1,156)	—
Custodial deposits	(4,136)	(4,066)	—	(4,066)	—
Federal Home Loan Bank advances	(4,815)	(4,816)	—	(4,816)	—
Long-term debt	(496)	(462)	—	(462)	—
DOJ litigation settlement	(35)	(35)	—	—	(35)
Contingent consideration	(10)	(10)	—	—	(10)
Derivative financial instruments	(18)	(44)	—	(43)	(1)

	December 31, 2018				
		Estimated Fair Value			
	Carrying Value	Total	Level 1	Level 2	Level 3
	(Dollars in millions)				
Assets					
Cash and cash equivalents	$ 408	$ 408	$ 408	$ —	$ —
Investment securities available-for-sale	2,142	2,142	—	2,142	—
Investment securities held-to-maturity	703	681	—	681	—
Loans held-for-sale	3,869	3,870	—	3,870	—
Loans held-for-investment	9,088	8,966		8	8,958
Loans with government guarantees	392	374		374	
Mortgage servicing rights	290	290	—	—	290
Federal Home Loan Bank stock	303	303	—	303	—
Bank owned life insurance	340	340	—	340	—
Repossessed assets	7	7	—	—	7
Other assets, foreclosure claims	50	50	—	50	—
Derivative financial instruments, assets	47	47	—	27	20
Liabilities					
Retail deposits					
Demand deposits and savings accounts	$ (6,467)	$ (5,475)	$ —	$ (5,475)	$ —
Certificates of deposit	(2,387)	(2,379)	—	(2,379)	—
Wholesale deposits	(583)	(585)	—	(585)	—
Government deposits	(1,202)	(1,145)	—	(1,145)	—
Custodial deposits	(1,741)	(1,664)	—	(1,664)	—
Federal Home Loan Bank advances	(3,394)	(3,383)	—	(3,383)	—
Long-term debt	(495)	(463)	—	(463)	—
DOJ litigation settlement	(60)	(60)	—	—	(60)
Contingent consideration	(6)	(6)	—	—	(6)
Derivative financial instruments, liabilities	(39)	(39)	—	(39)	—

Fair Value Option

We elected the fair value option for certain items as discussed throughout the Notes to the Consolidated Financial Statements primarily to more closely align the accounting method with the underlying economic exposure. Interest income on LHFS is accrued on the principal outstanding primarily using the "simple-interest" method.

The following table reflects the change in fair value included in earnings of financial instruments for which the fair value option has been elected:

	For the Years Ended December 31,		
	2019	2018	2017
	(Dollars in millions)		
Assets			
Loans held-for-sale			
Net gain on loan sales	$ 348	$ (29)	$ 283
Loans held-for-investment			
Other noninterest income	1	—	1
Liabilities			
DOJ litigation settlement			
Other noninterest income	25	—	—

The following table reflects the difference between the aggregate fair value and aggregate remaining contractual principal balance outstanding for assets and liabilities for which the fair value option has been elected:

	December 31, 2019			December 31, 2018		
	Unpaid Principal Balance	Fair Value	Fair Value Over / (Under) Unpaid Principal Balance	Unpaid Principal Balance	Fair Value	Fair Value Over / (Under) Unpaid Principal Balance
	(Dollars in millions)					
Assets						
Nonaccrual loans						
Loans held-for-sale	$ 3	$ 3	$ —	$ 6	$ 6	$ —
Loans held-for-investment	5	4	(1)	4	3	(1)
Total nonaccrual loans	8	7	(1)	10	9	(1)
Other performing loans						
Loans held-for-sale	5,057	5,216	159	3,601	3,726	125
Loans held-for-investment	8	8	—	8	7	(1)
Total other performing loans	5,065	5,224	159	3,609	3,733	124
Total loans						
Loans held-for-sale	5,060	5,219	159	3,607	3,732	125
Loans held-for-investment	13	12	(1)	12	10	(2)
Total loans	$ 5,073	$ 5,231	$ 158	$ 3,619	$ 3,742	$ 123
Liabilities						
Litigation settlement (1)	$ (118)	$ (35)	$ 83	$ (118)	$ (60)	$ 58

(1) We are obligated to pay $118 million in installment payments upon meeting certain performance conditions, as described in Note 19 - Legal Proceedings, Contingencies and Commitments.

Note 21 - Segment Information

Our operations are conducted through three operating segments: Community Banking, Mortgage Originations, and Mortgage Servicing. The Other segment includes the remaining reported activities. Operating segments are defined as components of an enterprise that engage in business activity from which revenues are earned and expenses incurred for which discrete financial information is available that is evaluated regularly by executive management in deciding how to allocate resources and in assessing performance. The operating segments have been determined based on the products and services offered and reflect the manner in which financial information is currently evaluated by management. Each segment operates under the same banking charter, but is reported on a segmented basis for this report. Each of the operating segments is complementary to each other and because of the interrelationships of the segments, the information presented is not indicative of how the segments would perform if they operated as independent entities.

The Community Banking segment originates loans, provides deposits and fee based services to consumer, business, and mortgage lending customers through its Branch Banking, Business Banking and Commercial Banking, Government Banking, Warehouse Lending and LHFI Portfolio groups. Products offered through these groups include checking accounts, savings accounts, money market accounts, certificates of deposit, consumer loans, commercial loans, commercial real estate loans, equipment finance and leasing, home builder finance loans and warehouse lines of credit. Other financial services available include consumer and corporate card services, customized treasury management solutions, merchant services and capital markets services such as loan syndications, and investment and insurance products and services.

The Mortgage Originations segment originates and acquires one-to-four family residential mortgage loans to sell or hold on our balance sheet. Loans originated-to-sell, comprise the majority of the lending activity. These loans are originated through mortgage branches, call centers, the Internet and third party counterparties. The Mortgage Origination segment recognizes interest income on loans that are held for sale and the gains from sales associated with these loans, whereas the interest income on LHFI and a loss on sales for the purchase of these loans is recognized in the Community Banking segment.

The Mortgage Servicing segment services and subservices mortgage loans for others on a fee for service basis and may also collect ancillary fees and earn income through the use of noninterest-bearing escrows. Revenue for those serviced and subserviced loans is earned on a contractual fee basis, with the fees varying based on our responsibilities and the status of the underlying loans. The Mortgage Servicing segment also provides servicing of residential mortgages for our own LHFI portfolio in the Community Banking segment and our own LHFS portfolio in the Mortgage Originations segment, for which it earns revenue via an intercompany service fee allocation.

The Other segment includes the treasury functions, which include, the impact of interest rate risk management, balance sheet funding activities and the administration of the investment securities portfolios, as well as miscellaneous other expenses of a corporate nature. In addition, the Other segment includes revenue and expenses related to treasury and corporate assets and liabilities and equity not directly assigned or allocated to the Community Banking, Mortgage Originations or Mortgage Servicing operating segments.

Revenues are comprised of net interest income (before the provision (benefit) for loan losses) and noninterest income. Noninterest expenses and provision (benefit) for income taxes, are fully allocated to each operating segment. Allocation methodologies may be subject to periodic adjustment as the internal management accounting system is revised and the business or product lines within the segments change.

The following tables present financial information by business segment for the periods indicated:

	Year Ended December 31, 2019				
	Community Banking	Mortgage Originations	Mortgage Servicing	Other (1)	Total
	(Dollars in millions)				
Summary of Operations					
Net interest income	$ 449	$ 106	$ 16	$ (9)	$ 562
Provision (benefit) for loan losses	20	2	—	(4)	18
Net interest income after provision (benefit) for loan losses	429	104	16	(5)	544
Net gain on loan sales	(29)	364	—	—	335
Loan fees and charges	(1)	69	32	—	100
Loan administration income	(5)	(22)	124	(67)	30
Net return on mortgage servicing rights	—	6	—	—	6
Other noninterest income	64	10	—	65	139
Total noninterest income	29	427	156	(2)	610
Compensation and benefits	100	114	28	135	377
Commissions	2	109	—	—	111
Loan processing expense	7	35	36	2	80
Other noninterest expense	167	88	59	6	320
Total noninterest expense	276	346	123	143	888
Income before indirect overhead allocations and income taxes	182	185	49	(150)	266
Indirect overhead allocation Income (expense)	(41)	(42)	(18)	101	—
Provision (benefit) for income taxes	30	29	6	(17)	48
Net income (loss)	$ 111	$ 114	$ 25	$ (32)	$ 218
Intersegment (expense) revenue	$ (19)	$ 29	$ 26	$ (36)	$ —
Average balances					
Loans held-for-sale	$ 32	$ 3,920	$ —	$ —	$ 3,952
Loans with government guarantees	—	553	—	—	553
Loans held-for-investment (2)	10,910	24	—	(2)	10,932
Total assets	11,378	5,408	47	3,840	20,673
Deposits	10,301	—	3,850	556	14,707

(1) Includes offsetting adjustments made to reclassify income and expenses relating to operating leases and custodial deposits for subservicing clients.
(2) Includes adjustment made to reclassify operating lease assets to loans held-for-investment.

	Year Ended December 31, 2018				
	Community Banking	Mortgage Originations	Mortgage Servicing	Other (1)	Total
	(Dollars in millions)				
Summary of Operations					
Net interest income	$ 314	$ 128	$ 7	$ 48	$ 497
Provision (benefit) for loan losses	2	2	—	(12)	(8)
Net interest income after provision (benefit) for loan losses	312	126	7	60	505
Net gain on loan sales	(12)	212	—	—	200
Loan fees and charges	(1)	63	25	—	87
Loan administration income	(3)	(14)	69	(29)	23
Net return on mortgage servicing rights	—	36	—	—	36
Other noninterest income	44	16	—	33	93
Total noninterest income	28	313	94	4	439
Compensation and benefits	70	105	19	124	318
Commissions	2	78	—	—	80
Loan processing expense	5	25	26	3	59
Other noninterest expense	103	58	44	50	255
Total noninterest expense	180	266	89	177	712
Income before indirect overhead allocations and income taxes	160	173	12	(113)	232
Indirect overhead allocation	(39)	(68)	(20)	127	—
Provision (benefit) for income taxes	25	22	(2)	—	45
Net income (loss)	$ 96	$ 83	$ (6)	$ 14	$ 187
Intersegment (expense) revenue	$ 1	$ 10	$ 19	$ (30)	$ —
Average balances					
Loans held-for-sale	$ 24	$ 4,172	$ —	$ —	$ 4,196
Loans with government guarantees	—	303	—	—	303
Loans held-for-investment (2)	8,417	9	—	29	8,455
Total assets	8,615	5,406	34	3,925	17,980
Deposits	8,892	—	1,883	—	10,775

(1) Includes offsetting adjustments made to reclassify income and expenses relating to operating leases and custodial deposits for subservicing clients.
(2) Includes adjustment made to reclassify operating lease assets to loans held-for-investment.

	Year Ended December 31, 2017				
	Community Banking	Mortgage Originations	Mortgage Servicing	Other (1)	Total
	(Dollars in millions)				
Summary of Operations					
Net interest income	$ 238	$ 129	$ 11	$ 12	$ 390
Provision (benefit) for loan losses	4	4	—	(2)	6
Net interest income after provision (benefit) for loan losses	234	125	11	14	384
Net gain on loan sales	(10)	278	—	—	268
Loan fees and charges	—	67	15	—	82
Loan administration income	—	(18)	39	—	21
Net return on mortgage servicing rights	—	22	—	—	22
Other noninterest income	31	21	12	13	77
Total noninterest income	21	370	66	13	470
Compensation and benefits	62	100	16	121	299
Commissions	—	72	—	—	72
Loan processing expense	5	26	22	4	57
Other noninterest expense	87	65	39	24	215
Total noninterest expense	154	263	77	149	643
Income before indirect overhead allocations and income taxes	101	232	—	(122)	211
Indirect overhead allocation	(41)	(63)	(23)	127	—
Provision (benefit) for income taxes	21	59	(8)	76	148
Net income (loss)	$ 39	$ 110	$ (15)	$ (71)	$ 63
Intersegment (expense) revenue	$ (6)	$ 4	$ 19	$ (17)	$ —
Average balances					
Loans held-for-sale	$ 16	$ 4,130	$ —	$ —	$ 4,146
Loans with government guarantees	—	290	—	—	290
Loans held-for-investment (2)	6,475	7	—	29	6,511
Total assets	6,544	5,414	36	3,852	15,846
Deposits	7,454	—	1,453	—	8,907

(1) Includes offsetting adjustments made to reclassify income and expenses relating to operating leases and custodial deposits for subservicing clients.
(2) Includes adjustment made to reclassify operating lease assets to loans held-for-investment.

Note 22 - Holding Company Only Financial Statements

The following are the unconsolidated financial statements for the Holding Company on a stand-alone basis. These condensed financial statements should be read in conjunction with the Consolidated Financial Statements and Notes thereto. The Holding Company's principal sources of funds are cash dividends paid by the Bank to the Holding Company.

Flagstar Bancorp, Inc.
Condensed Unconsolidated Statements of Financial Condition
(Dollars in millions)

	December 31,	
	2019	2018
	(Dollars in millions)	
Assets		
Cash and cash equivalents	$ 233	$ 201
Investment in subsidiaries (1)	2,031	1,836
Other assets	47	52
Total assets	$ 2,311	$ 2,089
Liabilities and Stockholders' Equity		
Liabilities		
Long term debt	$ 496	$ 495
Other liabilities	27	24
Total liabilities	523	519
Stockholders' Equity		
Common stock	1	1
Additional paid in capital	1,533	1,522
Accumulated other comprehensive loss	1	(47)
Retained earnings	303	94
Treasury Stock	(50)	—
Total stockholders' equity	1,788	1,570
Total liabilities and stockholders' equity	$ 2,311	$ 2,089

(1) Includes unconsolidated trusts of $7 million for December 31, 2019 and 2018.

Flagstar Bancorp, Inc.
Condensed Unconsolidated Statements of Operations
(Dollars in millions)

	For the Years Ended December 31,		
	2019	2018	2017
	(Dollars in millions)		
Income			
Interest	$ 4	$ 1	$ —
Cash dividends received from subsidiaries	100	—	—
Total	104	1	—
Expenses			
Interest	$ 28	$ 27	$ 25
General and administrative	6	7	9
Total	34	34	34
Net income (loss) before undistributed income of subsidiaries	70	(33)	(34)
Equity in undistributed income of subsidiaries	142	212	110
Net income before income taxes	212	179	76
Provision (benefit) for income taxes	(6)	(8)	13
Net income	218	187	63
Other comprehensive income loss (1)	48	(31)	(9)
Comprehensive income	$ 266	$ 156	$ 54

(1) See Consolidated Statements of Comprehensive Income for other comprehensive income (loss) detail.

Flagstar Bancorp, Inc.
Condensed Unconsolidated Statements of Cash Flows
(Dollars in millions)

	For the Years Ended December 31,		
	2019	2018	2017
	(Dollars in millions)		
Net income	$ 218	$ 187	$ 63
Adjustments to reconcile net loss to net cash provided by operating activities			
Equity in undistributed (income) loss of subsidiaries	(241)	(177)	47
Dividends received from subsidiaries	104	—	—
Other	(1)	(15)	11
Stock-based compensation	11	10	5
Net cash used in operating activities	91	5	126
Investing Activities			
Net cash provided by investing activities	—	—	—
Financing Activities			
Accelerated share repurchase	(50)	—	—
Dividends declared and paid	(9)	—	—
Net cash used in financing activities	(59)	—	—
Net increase in cash and cash equivalents	32	5	126
Cash and cash equivalents, beginning of year	201	196	70
Cash and cash equivalents, end of year	$ 233	$ 201	$ 196

Note 23 - Quarterly Financial Data (Unaudited)

The following table represents summarized data for each of the quarters in 2019 and 2018:

	2019			
	Fourth Quarter	Third Quarter	Second Quarter	First Quarter
	(Dollars in millions, except per share data)			
Interest income	$ 213	$ 203	$ 198	$ 180
Interest expense	61	57	60	54
Net interest income	152	146	138	126
Provision for loan losses	—	1	17	—
Net interest income after provision for loan losses	152	145	121	126
Net gain on loan sales	101	110	75	49
Loan fees and charges	30	29	24	17
Deposit fees and charges	10	10	10	8
Loan administration income	8	5	6	11
Net return (loss) on the mortgage servicing rights	(3)	(2)	5	6
Other noninterest income	16	19	48	18
Noninterest expense	245	238	214	191
Income before income tax	69	78	75	44
Provision for income taxes	11	15	14	8
Net income from continuing operations	$ 58	$ 63	$ 61	$ 36
Basic income per share	$ 1.01	$ 1.12	$ 1.08	$ 0.64
Diluted income per share	$ 1.00	$ 1.11	$ 1.06	$ 0.63

	2018			
	Fourth Quarter	Third Quarter	Second Quarter	First Quarter
	(Dollars in millions, except per share data)			
Interest income	$ 181	$ 183	$ 167	$ 152
Interest expense	29	59	52	46
Net interest income	152	124	115	106
Benefit from loan losses	(5)	(2)	(1)	—
Net interest income after provision for loan losses	157	126	116	106
Net gain on loan sales	34	43	63	60
Loan fees and charges	20	23	24	20
Deposit fees and charges	6	5	5	5
Loan administration income	8	5	5	5
Net return on the mortgage servicing rights	10	13	9	4
Other noninterest income	20	18	17	17
Noninterest expense	189	173	177	173
Income before income tax	66	60	62	44
Provision for income taxes	12	12	12	9
Net income from continuing operations	$ 54	$ 48	$ 50	$ 35
Basic income per share	$ 0.94	$ 0.84	$ 0.86	$ 0.61
Diluted income per share	$ 0.93	$ 0.83	$ 0.85	$ 0.60

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURES

None.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

As of the end of the period covered by this report and pursuant to Rule 13a-15 of the Securities Exchange Act of 1934 as amended (the Exchange Act), our management, with the participation of the Chief Executive Officer and Chief Financial Officer, conducted an evaluation of the effectiveness and design of our disclosure controls and procedures (as that term is defined in Rule 13a-15(e) of the Exchange Act). In designing and evaluating our disclosure controls and procedures, we recognize that any controls and procedures, no matter how well designed and implemented, can provide only reasonable assurance of achieving the desired control objectives, and that our management's duties require it to make its best judgment regarding the design of our disclosure controls and procedures.

Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of December 31, 2019 to provide reasonable assurance that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Commission's rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rule 13a-15(f) under the Exchange Act. 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 GAAP. Internal control over financial reporting includes policies and procedures that:

(i) Pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company;

(ii) Provide reasonable assurance that transactions are recorded as necessary to permit preparation of the financial statements in accordance with U.S. 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

(iii) 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 due to changes in conditions, or that the degree of compliance with existing policies or procedures may deteriorate.

With the participation of the Chief Executive Officer and Chief Financial Officer, our management conducted an assessment of the effectiveness of our internal control over financial reporting as of December 31, 2019, based on the framework and criteria established in *Internal Control-Integrated Framework (2013)*, issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

Based on this assessment, as of December 31, 2019 we assert that we maintained effective internal control over financial reporting.

The effectiveness of Management's internal control over financial reporting as of December 31, 2019, has been audited by PricewaterhouseCoopers, LLP, our independent registered public accounting firm, as stated in their report, included herein.

Changes in Internal Control over Financial Reporting

There have been no changes in our internal control over financial reporting that occurred during the fiscal quarter ended December 31, 2019 that have materially affected, or are reasonably likely to materially affect, such internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS OF THE REGISTRANT AND CORPORATE GOVERNANCE

Except as set forth below, the information required by this Item 10 will be contained in our Proxy Statement relating to the 2020 Annual Meeting of Stockholders and is hereby incorporated by reference.

Our Code of Business Conduct and Ethics, our Corporate Governance Guidelines and charters for our Audit Committee, Compensation Committee, and Nominating Corporate Governance Committee are available at www.flagstar.com or upon written request by stockholders to Flagstar Bancorp, Inc., Attn: Investor Relations, 5151 Corporate Drive, Troy, MI 48098.

None of the information currently posted, or posted in the future, on our website is incorporated by reference into this Form 10-K.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this Item 11 will be contained in our Proxy Statement relating to the 2020 Annual Meeting of Stockholders and is hereby incorporated by reference, provided that the Compensation Committee Report shall be deemed to be furnished and not filed.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Except as set forth below, the information required by this Item 12 will be contained in our Proxy Statement relating to the 2020 Annual Meeting of Stockholders and is hereby incorporated by reference.

Equity Compensation Plan Information

The following table sets forth certain information with respect to securities to be issued under our equity compensation plans as of December 31, 2019.

Plan Category	Number of Securities to Be Issued Upon Exercise	Weighted Average Exercise Price (1)	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans
Equity compensation plans approved by security holders - Restricted Stock Units (2)	1,399,127	$ 28.72	1,416,986
Equity compensation plans not approved by security holders	—	—	—
Total	1,399,127	$ 28.72	1,416,986

(1) Weighted average exercise price is calculated including RSUs, which for this purpose are treated as having an exercise price of zero.
(2) For further information regarding the equity compensation plans under which the RSUs are authorized for issuance, see Note 16 - Stock-Based Compensation.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this Item 13 will be contained in our Proxy Statement relating to the 2020 Annual Meeting of Stockholders and is hereby incorporated by reference.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this Item 14 will be contained in our Proxy Statement relating to the 2020 Annual Meeting of Stockholders and is hereby incorporated by reference.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a)(1) and (2) — Financial Statements and Schedules

The information required by these sections of Item 15 are set forth in the Index to Consolidated Financial Statements under Item 8. of this annual report on Form 10-K.

(3) — Exhibits

The following documents are filed as a part of, or incorporated by reference into, this report:

Exhibit No.	Description
3.1*	Second Amended and Restated Articles of Incorporation of Flagstar Bancorp, Inc. (previously filed as Exhibit 3.1 to the Company’s Quarterly Report on Form 10-Q, for the period ended June 30, 2017, and incorporated herein by reference).
3.2*	Sixth Amended and Restated Bylaws of the Company (previously filed as Exhibit 3.2 to the Company’s Quarterly Report on Form 10-Q, for the period ended September 30, 2016, and incorporated herein by reference).
4.1*	Indenture, dated July 11, 2016, between Flagstar Bancorp, Inc. as Issuers and Wilmington Trust, National Association, as Trustee and Collateral Agent, including the form of 6.125% senior secured note due 2021 (previously filed as Exhibit 4.1 to the Company's Current Report on Form 8-K, dated July 11, 2016, and incorporated herein by reference).
4.2*	Registration Rights Agreement, dated as of July 11, 2016, among Flagstar Bancorp, Inc., J.P.Morgan Securities LLC and Sandler O’Neill & Partners, L.P. as representatives of the initial purchasers (previously filed as Exhibit 4.3 to the Company's Current Report on Form 8-K, dated July 11, 2016, and incorporated herein by reference).
4.3*	Form of 6.125% Global Note due 2021 (previously filed as Exhibit 4.3 to the Company's Current Report on Form S-4, dated October 7, 2016, and incorporated herein by reference).
4.4	Description of Rights of Shareholders
10.1*+	Flagstar Bancorp, Inc. 2006 Equity Incentive Plan (previously filed as Exhibit 10.1 to the Company’s Annual Report on Form 10-K for the period ended December 31, 2016, and incorporated herein by reference).
10.2*	Investment Agreement, dated as of December 17, 2008, between the Company and MP Thrift Investments L.P. (previously filed as Exhibit 10.5 to the Company’s Annual Report on Form 10-K for the period ended December 31, 2016, and incorporated herein by reference).
10.3*	Closing Agreement, dated as of January 30, 2009, between the Company and MP Thrift Investments L.P. (previously filed as Exhibit 10.6 to the Company’s Annual Report on Form 10-K for the period ended December 31, 2016, and incorporated herein by reference).
10.4*	Purchase Agreement, dated as of February 17, 2009, between the Company and MP Thrift Investments L.P. (previously filed as Exhibit 10.7 to the Company’s Annual Report on Form 10-K for the period ended December 31, 2016, and incorporated herein by reference).
10.5*	Second Purchase Agreement, dated as of February 27, 2009, between the Company and MP Thrift Investments L.P. (previously filed as Exhibit 10.8 to the Company’s Annual Report on Form 10-K for the period ended December 31, 2016, and incorporated herein by reference).
10.6*	Capital Securities Purchase Agreement, dated as of June 30, 2009, by and between the Company, Flagstar Statutory Trust XI, a Delaware statutory trust and MP Thrift Investments L.P. (previously filed as Exhibit 10.7 to the Company's Annual Report on Form 10-K for the period ended December 31, 2017, and incorporated herein by reference).
10.7*	Stipulation and Order of Settlement and Dismissal, dated February 24, 2012, by and among the Company, the Bank and the United States of America (previously filed as Exhibit 10.12 to the Company's Annual Report on Form 10-K for the period ended December 31, 2016, and incorporated herein by reference).
10.8*+	Amended and Restated Employment Agreement, dated as of May 21, 2019, by and between Flagstar Bancorp, Inc., Flagstar Bank, FSB and Alessandro P. DiNello (previously filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the period ended June 30, 2019, and incorporated herein by reference.

Exhibit No.	Description
10.9*+	Amended and Restated Employment Agreement dated as of May 21, 2019, by and between Flagstar Bancorp, Inc., Flagstar Bank, FSB and Lee M. Smith (previously filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the period ended June 30, 2019, and incorporated herein by reference.
10.10*+	Flagstar Bancorp, Inc. 2016 Stock Award and Incentive Plan (previously filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the period ended September 30, 2015, and incorporated herein by reference).
10.11*+	Form of Senior Executive Officer Award Agreement under Flagstar Bancorp, Inc. 2016 Stock Award and Incentive Plan (previously filed as Exhibit 10.1 to the Company's Current Report on Form 10-Q, for the period ended June 30, 2018, and incorporated herein by reference).
10.12*+	Form of Executive Long-Term Incentive Program Award Agreement under Flagstar Bancorp, Inc. 2016 Stock Award and Incentive Plan (previously filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the period ended September 30, 2015, and incorporated herein by reference).
10.13*+	2016 Stock Award and Incentive Plan Restricted Stock Unit Senior Executive Officer Award Agreement - 4 year ratable (previously filed as Exhibit 10.1 to the Company's Current Report on Form 8-K, dated March 26, 2018, and incorporated herein by reference).
10.14*+	2016 Stock Award and Incentive Plan Restricted Stock Unit and Performance Share Unit Senior Executive Officer Award Agreement - SEO Performance (previously filed as Exhibit 10.2 to the Company's Current Report on Form 8-K, dated March 26, 2018, and incorporated herein by reference).
10.15*+	Executive Long-Term Incentive Program Award Agreement II ($44 VWAP) (previously filed as Exhibit 10.3 to the Company's Current Report on Form 8-K, dated March 26, 2018, and incorporated herein by reference).
10.16*+	Executive Long-Term Incentive Program Award Agreement II ($40 VWAP) (previously filed as Exhibit 10.4 to the Company's Current Report on Form 8-K, dated March 26, 2018, and incorporated herein by reference).
10.17*+	2016 Stock Award and Incentive Plan Restricted Stock Unit Senior Executive Officer Award Agreement - SEO Time (previously filed as Exhibit 10.5 to the Company's Current Report on Form 8-K, dated March 26, 2018, and incorporated herein by reference).
10.18*+	Change in Control Agreement effective January 18, 2019, by and between Flagstar Bancorp, Inc., Flagstar Bank, FSB and James K. Ciroli (previously filed as Exhibit 10.19 to the Company's Annual Report on Form 10-K for the period ended December 31, 2018, and incorporated herein by reference).
10.19*+	Change in Control Agreement effective January 18, 2019, by and between Flagstar Bancorp, Inc., Flagstar Bank, FSB and Stephen Figliuolo (previously filed as Exhibit 10.19 to the Company's Annual Report on Form 10-K for the period ended December 31, 2018, and incorporated herein by reference).
21	List of Subsidiaries of the Company.
23	Consent of PricewaterhouseCoopers, LLP.
31.1	Section 302 Certification of Chief Executive Officer.
31.2	Section 302 Certification of Chief Financial Officer.
32.1	Section 906 Certification of Chief Executive Officer.
32.2	Section 906 Certification of Chief Financial Officer.
101	Financial statements from Annual Report on Form 10-K of the Company for the year ended December 31, 2019, formatted in XBRL: (i) the Consolidated Statements of Financial Condition, (ii) the Consolidated Statements of Operations, (iii) the Consolidated Statements of Comprehensive Income (Loss), (iv) the Consolidated Statements of Stockholders' Equity, (v) the Consolidated Statements of Cash Flows and (vi) the Notes to the Consolidated Financial Statements.

* Incorporated herein by reference

\+ Constitutes a management contract or compensation plan or arrangement

Flagstar Bancorp, Inc. will furnish to any stockholder a copy of any of the exhibits listed above upon written request and upon payment of a specified reasonable fee, which fee shall be equal to the Company's reasonable expenses in furnishing the exhibit to the stockholder. Requests for exhibits and information regarding the applicable fee should be directed to "Kenneth Schellenberg, Director of Investor Relations" at the address of the principal executive offices set forth on the cover of this Annual Report on Form 10-K.

(b) — Exhibits. See Item 15.(a)(3) above.
(c) — Financial Statement Schedules. See Item 15.(a)(2) above.

ITEM 16. FORM 10-K SUMMARY

Not applicable.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on February 28, 2020.

FLAGSTAR BANCORP, INC.

By:	/s/ Alessandro P. DiNello
	Alessandro P. DiNello
	President and Chief Executive Officer (Principal Executive Officer)
By:	/s/ James K. Ciroli
	James K. Ciroli
	Executive Vice President and Chief Financial Officer (Principal Financial Officer)

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that the undersigned, in his or her capacity as director or officer, or both, as the case may be, of Flagstar Bancorp, Inc., does hereby appoint Alessandro DiNello and James K. Ciroli, and each of them, his or her attorney or attorneys with full power of substitution to execute in his or her name, in his or her capacity as a director or officer, or both, as the case may be, of Flagstar Bancorp, Inc., the 2019 Form 10-K Annual Report and any and all amendments and supplements to such 2019 Form 10-K Annual Report and post-effective amendments and supplements thereto, and to file the same with all exhibits thereto and all other documents in connection therewith with the Securities and Exchange Commission.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities indicated on February 28, 2020.

	SIGNATURE	TITLE
By:	/s/ ALESSANDRO DINELLO Alessandro DiNello	President and Chief Executive Officer (Principal Executive Officer)
By:	/s/ JAMES K. CIROLI James K. Ciroli	Executive Vice President and Chief Financial Officer (Principal Financial Officer)
By:	/s/ BRYAN L. MARX Bryan L. Marx	Senior Vice President and Chief Accounting Officer (Principal Accounting Officer)
By:	/s/ JOHN D. LEWIS John D. Lewis	Chairman
By:	/s/ DAVID J. MATLIN David J. Matlin	Director
By:	/s/ PETER SCHOELS Peter Schoels	Director
By:	/s/ DAVID L. TREADWELL David L. Treadwell	Director
By:	/s/ JAY J. HANSEN Jay J. Hansen	Director
By:	/s/ JAMES A. OVENDEN James A. Ovenden	Director
By:	/s/ BRUCE E. NYBERG Bruce E. Nyberg	Director
By:	/s/ JENNIFER WHIP Jennifer Whip	Director

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