UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K

☑ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2020

OR

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

Commission file number: 0-50231

Federal National Mortgage Association

(Exact name of registrant as specified in its charter)

Fannie Mae

Federally chartered corporation	**52-0883107**	**1100 15th Street, NW** **Washington, DC 20005**	**800 232-6643**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification No.)*	*(Address of principal executive offices, including zip code)*	*(Registrant's telephone number, including area code)*

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
None	N/A	N/A

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

Common Stock, without par value
8.25% Non-Cumulative Preferred Stock, Series T, stated value $25 per share
Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series S, stated value $25 per share
7.625% Non-Cumulative Preferred Stock, Series R, stated value $25 per share
6.75% Non-Cumulative Preferred Stock, Series Q, stated value $25 per share
Variable Rate Non-Cumulative Preferred Stock, Series P, stated value $25 per share
Variable Rate Non-Cumulative Preferred Stock, Series O, stated value $50 per share
5.375% Non-Cumulative Convertible Series 2004-1 Preferred Stock, stated value $100,000 per share
5.50% Non-Cumulative Preferred Stock, Series N, stated value $50 per share
4.75% Non-Cumulative Preferred Stock, Series M, stated value $50 per share
5.125% Non-Cumulative Preferred Stock, Series L, stated value $50 per share
5.375% Non-Cumulative Preferred Stock, Series I, stated value $50 per share
5.81% Non-Cumulative Preferred Stock, Series H, stated value $50 per share
Variable Rate Non-Cumulative Preferred Stock, Series G, stated value $50 per share
Variable Rate Non-Cumulative Preferred Stock, Series F, stated value $50 per share
5.10% Non-Cumulative Preferred Stock, Series E, stated value $50 per share
5.25% Non-Cumulative Preferred Stock, Series D, stated value $50 per share

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 15(d) of the 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 the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☑	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
Emerging growth company	☐		

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

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.☑

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

The aggregate market value of the common stock held by non-affiliates of the registrant computed by reference to the last reported sale price of the common stock quoted on the OTCQB, operated by OTC Markets Group, Inc., on June 30, 2020 (the last business day of the registrant's most recently completed second fiscal quarter) was approximately $2.5 billion.

As of February 1, 2021, there were 1,158,087,567 shares of common stock of the registrant outstanding.

Table of Contents

PART I

We have been under conservatorship, with the Federal Housing Finance Agency ("FHFA") acting as conservator, since September 6, 2008. As conservator, FHFA succeeded to all rights, titles, powers and privileges of the company, and of any shareholder, officer or director of the company with respect to the company and its assets. The conservator has since provided for the exercise of certain authorities by our Board of Directors. Our directors do not have any fiduciary duties to any person or entity except to the conservator and, accordingly, are not obligated to consider the interests of the company, the holders of our equity or debt securities, or the holders of Fannie Mae MBS unless specifically directed to do so by the conservator.

We do not know when or how the conservatorship will terminate, what further changes to our business will be made during or following conservatorship, what form we will have and what ownership interest, if any, our current common and preferred stockholders will hold in us after the conservatorship is terminated or whether we will continue to exist following conservatorship. FHFA established 2020 performance objectives for us that included preparing for our eventual exit from conservatorship. Congress and the Administration continue to consider options for reform of the housing finance system, including Fannie Mae.

We are not permitted to pay dividends or other distributions to stockholders other than the U.S. Department of the Treasury ("Treasury") and, if we attain and maintain sufficient capital to meet the capital requirements and buffers recently established by FHFA for two consecutive quarters, we will not be able to retain any additional capital reserves. Our agreements with Treasury include a commitment from Treasury to provide us with funds to maintain a positive net worth under specified conditions; however, the U.S. government does not guarantee our securities or other obligations. Our agreements with Treasury also include covenants that significantly restrict our business activities. For additional information on the conservatorship, the uncertainty of our future, our agreements with Treasury, and recent developments relating to housing finance reform, see "Conservatorship, Treasury Agreements and Housing Finance Reform," "Legislation and Regulation" and "Risk Factors."

Forward-looking statements in this report are based on management's current expectations and are subject to significant uncertainties and changes in circumstances, as we describe in "Business—Forward-Looking Statements." Future events and our future results may differ materially from those reflected in our forward-looking statements due to a variety of factors, including those discussed in "Risk Factors" and elsewhere in this report.

You can find a "Glossary of Terms Used in This Report" in "Management's Discussion and Analysis of Financial Condition and Results of Operations ('MD&A')."

Item 1. Business

Introduction

Fannie Mae is a leading source of financing for mortgages in the United States, with $4.0 trillion in assets as of December 31, 2020. Organized as a government-sponsored entity, Fannie Mae is a shareholder-owned corporation. Our charter is an act of Congress, and we have a mission under that charter to provide liquidity and stability to the residential mortgage market and to promote access to mortgage credit. We were initially established in 1938.

Our revenues are primarily driven by guaranty fees we receive for assuming the credit risk on loans underlying the mortgage-backed securities we issue. We do not originate loans or lend money directly to borrowers. Rather, we primarily work with lenders who originate loans to borrowers. We securitize those loans into Fannie Mae mortgage-backed securities that we guarantee (which we refer to as Fannie Mae MBS or our MBS).

Effectively managing credit risk is key to our business. In exchange for assuming credit risk on the loans we acquire, we receive guaranty fees. These fees take into account the credit risk characteristics of the loans we acquire and consist of two primary components:

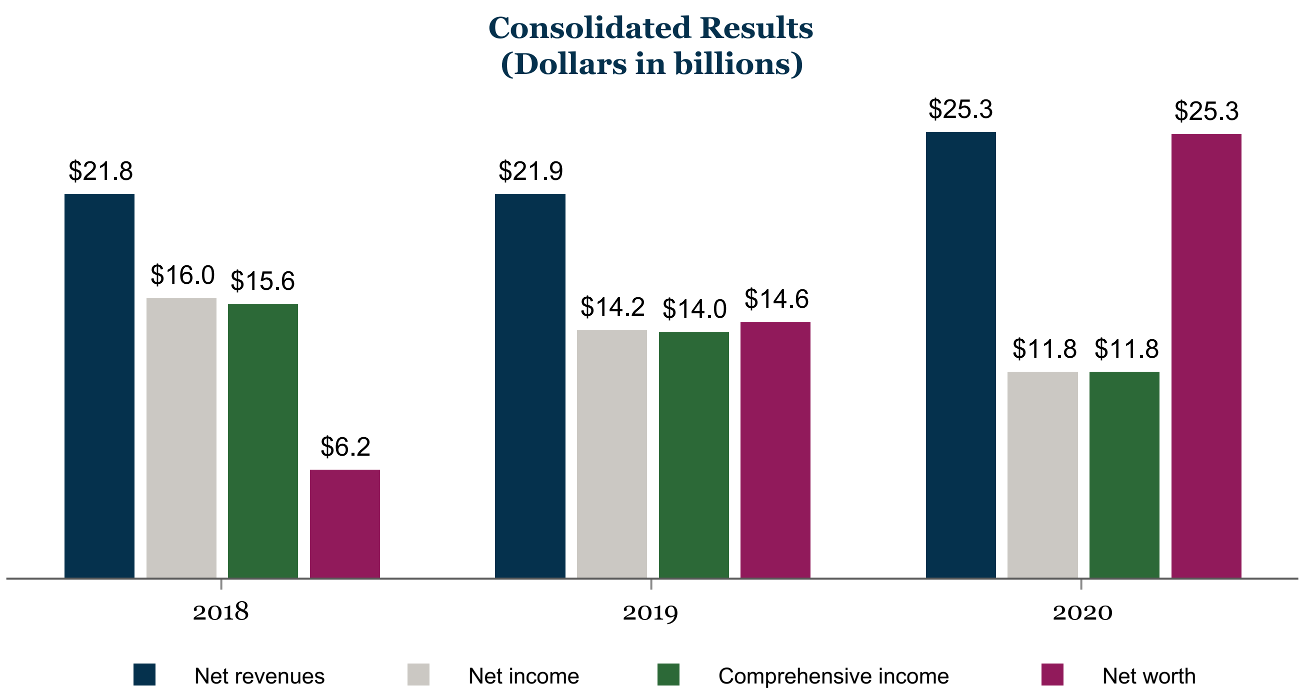
- Loan-level pricing adjustments, which are upfront fees received when we acquire single-family loans.
- Base guaranty fees, which we receive monthly over the life of the loan.

Guaranty fees are set at the time we acquire loans and do not change over the life of the loan. How long a loan remains in our guaranty book is heavily dependent on interest rates. When interest rates decrease, a larger portion of our book of business turns over as more loans refinance. On the other hand, as interest rates increase, fewer loans refinance and our book turns over more slowly. Since guaranty fees are set at the time a loan is originated, the impact of any change in guaranty fees on future revenues is dependent on the rate at which loans in our book of business turn over and new loans are originated.

Executive Summary

Please read this summary together with our MD&A, our consolidated financial statements as of December 31, 2020 and the accompanying notes.

Summary of Our Financial Performance



2020 vs. 2019

- *Net revenues* increased $3.4 billion compared to 2019, primarily driven by an increase in net amortization income as a result of record levels of refinancing activity in 2020. Interest rates declined to historically low levels in 2020 and remained low throughout the majority of the year. Due to this trend, refinance activity grew, resulting in approximately 38% of the loans in our single-family conventional guaranty book of business as of December 31, 2020 being originated during the year. We expect loans originated in the current environment will be less likely to refinance in the future, slowing the pace at which loans in our book of business turn over in future years. A slower turnover rate would limit the impact that changes in our guaranty fees have on our future revenues as any changes would take longer to meaningfully impact the average charged guaranty fee on our total book of business.
- *Net income* decreased $2.4 billion compared to 2019, primarily driven by a shift from credit-related income to credit-related expense, driven by the economic dislocation caused by the COVID-19 pandemic and lower redesignation activity, as well as a reduction in investment gains driven by a decrease in the volume of reperforming loan sales. This was partially offset by the increase in net revenues from higher net amortization income discussed above.
- *Net worth* increased by $10.7 billion to $25.3 billion in 2020. The increase is attributed to $11.8 billion of comprehensive income for the twelve months ended December 31, 2020 offset by a charge of $1.1 billion to retained earnings due to our implementation of Accounting Standards Update 2016-13, Financial Instruments—Credit Losses, Measurement of Credit Losses on Financial Instruments and related amendments (the "CECL standard") on January 1, 2020. See "Note 1, Summary of Significant Accounting Policies—New Accounting Guidance—The Current Expected Credit Loss Standard" for further details on our implementation of the CECL standard. Our future net worth will be impacted by recent changes in our obligation to pay dividends to Treasury, which are described in "Conservatorship, Treasury Agreements and Housing Finance Reform—Treasury Agreements."

2019 vs. 2018

- *Net revenues* remained flat from 2018 to 2019. There was an increase in guaranty fee income due to an increase in the size of our guaranty book of business, as well as an increase in our average guaranty fee charged, offset by a reduction in net interest income from our portfolio as we continued to reduce the size of our legacy assets.
- *Net income* decreased $1.8 billion compared to 2018, primarily driven by a shift from fair value gains in 2018 to fair value losses in 2019 as a result of decreasing interest rates throughout most of 2019. Additionally, credit enhancement expenses grew as we increased the percentage of our guaranty book of business covered by credit risk transfer transactions. The decrease in net income was partially offset by an increase in investment gains due to an increase in gains on sales of single-family HFS loans and by an increase in credit-related income primarily driven by a decrease in actual and projected interest rates in 2019.
- *Net worth* increased $8.4 billion in 2019. The increase is attributed to $14.0 billion of comprehensive income offset by $5.6 billion of dividends paid to the Treasury.

Long-term financial performance. Our long-term financial performance will depend on many factors, including:

- the size of and our share of the U.S. mortgage market, which in turn will depend upon population growth, household formation and housing supply;
- borrower performance, the guaranty fees we charge, and changes in macroeconomic factors, including home prices and interest rates; and
- actions by FHFA, the Administration and Congress relating to our business and housing finance reform, including the capital requirements that will be applicable to us, our ongoing financial obligations to Treasury, restrictions on our activities and our business footprint, our competitive environment, and actions we are required to take to support borrowers or the mortgage market.

As described further in “COVID-19 Impact” and “Risk Factors,” the COVID-19 pandemic has significantly affected our financial performance and we expect that it will continue to do so. Given the unprecedented nature of the COVID-19 pandemic, it is difficult to assess or predict the long-term effects of the pandemic on our financial performance.

COVID-19 Impact

In March 2020, the COVID-19 outbreak in the United States was declared a national emergency. The COVID-19 pandemic resulted in stay-at-home orders, school closures and widespread business shutdowns across the country. Although business activity and community life have resumed to varying degrees, the future path of economic activity remains highly uncertain.

The pandemic continues to have a significant impact on our business and on our financial results. We provide a brief overview below of the economic impact of the pandemic, our response to it, and the pandemic’s impact on our business and financial results.

Economic Impact

The COVID-19 pandemic caused substantial financial market volatility and has significantly adversely affected both the U.S. and global economies. Although the economy has improved significantly since the second quarter of 2020, business activity remains below the level before the onset of the pandemic, and unemployment remains substantially higher than pre-pandemic levels. Continued high levels of new daily cases of COVID-19 in the U.S., combined with concerns about the emergence of new, more infectious variants of the coronavirus, have led to new shut-downs in various locales and reductions in business activity, with increased risk of additional public-health measures. The federal government has taken and continues to take many actions to reduce the negative economic impact of the COVID-19 pandemic. For example, the Federal Reserve lowered the federal funds rate and increased its purchases of Treasury and mortgage-backed securities, purchased corporate debt securities, and established and expanded liquidity facilities to support the flow of credit to consumers and businesses. In addition, the federal government passed legislation increasing and expanding unemployment benefits, providing direct cash payments to eligible taxpayers, allocating funds to assist businesses, states, and municipalities, and providing rental assistance, as well as mandating forbearance programs and eviction moratoriums.

The disruption caused by the pandemic differs from previous economic downturns because of the high level of uncertainty related to the health and safety of consumers and workers. We expect the path and timing of economic recovery will be impacted by the success of vaccination efforts and fiscal stimulus. We believe that sustained economic recovery depends on continued growth in consumer spending, increased business activity, and an associated reduction in unemployment, all of which impact the ability of borrowers and renters to make their monthly payments. The pandemic resulted in a contraction in U.S. gross domestic product ("GDP") in the first half of 2020 that was not entirely offset by growth in the second half of the year. See "MD&A—Key Market Economic Indicators" for information on macroeconomic conditions during 2020 and our current forecasts regarding future macroeconomic conditions.

Fannie Mae Response

We are taking a number of actions to help borrowers, renters, lenders and servicers manage the negative impact of the COVID-19 pandemic, including:

- providing payment forbearance (that is, a temporary suspension or reduction of the borrower's monthly mortgage payments) to single-family and multifamily borrowers with COVID-19-related financial hardships;
- suspending most single-family foreclosures and evictions;
- conducting outreach efforts to provide borrowers and renters with information on the relief options available to them, including our #HeretoHelp media campaign and updating our KnowYourOptions.com website;
- providing lenders and servicers temporary flexibilities for some of our Selling Guide and Servicing Guide requirements; and
- providing liquidity to lenders by purchasing a higher-than-usual volume of single-family loans through our whole loan conduit.

We have also taken steps to mitigate the risk to Fannie Mae from the impacts of the pandemic, including the following:

- *Selling Guide Changes.* We have temporarily changed some of our Single-Family Selling Guide requirements to help ensure that up-to-date information is being considered to support the borrower's ability to repay the loan, such as requiring more recent documentation of borrower employment, income and assets.
- *Adverse Market Refinance Fee.* We implemented a new adverse market refinance fee for single-family loans in light of the increased costs and risk we expect to incur due to the COVID-19 pandemic. This fee, which became effective in December 2020, is a one-time charge of 0.5% of the loan amount that the lender is required to pay at the time we acquire the loan. For every $1 billion in eligible refinance loans we acquire, we will collect $5 million in adverse market refinance fees. To help ensure that the fee does not negatively impact our affordable housing mission, the fee only applies to eligible single-family loan refinances and does not apply to loans for home purchases, refinance loans with an original principal amount of less than or equal to $125,000, or certain HomeReady® refinance loans. The lender may choose whether to pass on all, some or none of the fee to the borrower. The new fee is intended to help us offset some of the higher projected expenses and risk due to COVID-19, including costs associated with the actions we are taking to help borrowers, lenders and servicers impacted by the pandemic, such as providing forbearances, suspending foreclosures and evictions, and offering repayment plans, payment deferrals and loan modifications.
- *Additional Reserve Requirements.* To address possible fluctuations in multifamily borrower income and expenses resulting from the COVID-19 pandemic, we instituted additional reserve requirements for certain new multifamily loan acquisitions.

See "MD&A—Single-Family Business—Single-Family Mortgage Credit Risk Management" and "MD&A—Multifamily Business—Multifamily Mortgage Credit Risk Management" for more information on the actions we are taking in response to the COVID-19 pandemic.

We have also taken steps to help protect the safety and resiliency of our workforce. From mid-March through early October 2020, we required nearly all of our workforce to work remotely. In early October we began allowing employees, on a voluntary basis, to request approval to return to work at some of our office locations and have established mandatory COVID-19 safety protocols for these locations. We expect a significant majority of our employees will continue to work remotely for the foreseeable future. To date, our business resiliency plans and technology systems have effectively supported this telework arrangement.

Impact on our Business and Financial Results

The economic dislocation caused by the COVID-19 pandemic was the primary driver of the decline in our net income in 2020, as compared with 2019. We increased our allowance for loan losses to reflect our expected loan losses as a result of the pandemic, which resulted in increased credit-related expenses. We are also incurring other costs associated with the pandemic, such as paying higher fees to servicers to support providing loss mitigation to borrowers and advancing principal and interest payments to MBS investors for loans in forbearance. As a result, we expect the COVID-19 pandemic to continue to negatively affect our financial results and our returns on capital.

We did not enter into new credit risk transfer transactions in the second quarter of 2020 due to adverse market conditions resulting from the COVID-19 pandemic. Market conditions improved in the second half of 2020, but we have not entered into any new transactions as we evaluate their costs and benefits, including a reduction in the capital relief these transactions provide under FHFA's enterprise regulatory capital framework. We may engage in credit risk transfer transactions in the future, which could help us manage capital and manage within our risk appetite, particularly given the growth and turnover in our book in 2020. The structure of and extent to which we engage in any additional credit risk transfer transactions will be affected by the enterprise regulatory capital framework, our risk appetite, the strength of future market conditions, including the cost of these transactions, and the review of our overall business and capital plan. For information on these transactions and their benefits and costs, see "MD&A—Single-Family Business—Single-Family Mortgage Credit Risk Management—Credit Enhancement and Transfer of Mortgage Credit Risk" and "MD&A—Multifamily Business—Multifamily Mortgage Credit Risk Management—Transfer of Multifamily Mortgage Credit Risk." See "Legislation and Regulation—GSE Act and Other Legislative and Regulatory Matters—Capital" for information on the enterprise regulatory capital framework.

Also see "MD&A—Retained Mortgage Portfolio," "MD&A—Liquidity and Capital Management" and "MD&A—Risk Management" for discussions of the impact of the COVID-19 pandemic on our business.

Our Mission and Charter

Our Mission

Our mission is to provide liquidity and stability to the residential mortgage market and to promote access to mortgage credit.

This mission is derived from our corporate charter, which is the Federal National Mortgage Association Charter Act, or the Charter Act. The Charter Act establishes the parameters under which we operate and our purposes, which are to:

- provide stability in the secondary market for residential mortgages;
- respond appropriately to the private capital market;
- provide ongoing assistance to the secondary market for residential mortgages (including activities relating to mortgages on housing for low- and moderate-income families involving a reasonable economic return that may be less than the return earned on other activities) by increasing the liquidity of mortgage investments and improving the distribution of investment capital available for residential mortgage financing; and
- promote access to mortgage credit throughout the nation (including central cities, rural areas and underserved areas) by increasing the liquidity of mortgage investments and improving the distribution of investment capital available for residential mortgage financing.

Our Charter

The Charter Act specifies that our operations are to be financed by private capital to the maximum extent feasible. We are expected to earn reasonable economic returns on all our activities. However, we may accept lower returns on certain activities relating to mortgages on housing for low- and moderate-income families in order to support those segments of the market. We expect the lower returns to be offset by activities that yield higher returns.

Principal balance limitations. To meet our purposes, the Charter Act authorizes us to purchase and securitize mortgage loans secured by single-family and multifamily properties. Our acquisitions of single-family conventional mortgage loans are subject to maximum original principal balance limits, known as "conforming loan limits." The conforming loan limits are adjusted each year based on FHFA's housing price index. For 2020, the conforming loan limit for mortgages secured by one-family residences was set at $510,400, with higher limits for mortgages secured by two- to four-family residences and in four statutorily-designated states and territories (Alaska, Hawaii, Guam and the U.S. Virgin Islands). For 2021, FHFA increased the national conforming loan limit for one-family residences to $548,250. In addition, higher loan limits of up to 150% of the otherwise applicable loan limit apply in certain high-cost areas. The Charter Act does not impose maximum original principal balance limits on loans we purchase or securitize that are insured by the Federal Housing Administration ("FHA") or guaranteed by the Department of Veterans Affairs ("VA").

The Charter Act also includes the following provisions:

- *Credit enhancement requirements.* The Charter Act generally requires credit enhancement on any single-family conventional mortgage loan that we purchase or securitize that has a loan-to-value ("LTV") ratio over 80% at the time of purchase. The credit enhancement may take the form of one or more of the following: (1) insurance or a guaranty by a qualified insurer on the portion of the unpaid principal balance of a mortgage loan that exceeds 80% of the property value; (2) a seller's agreement to repurchase or replace the loan in the event of default; or (3) retention by the seller of at least a 10% participation interest in the loan. Regardless of LTV ratio, the Charter

Act does not require us to obtain credit enhancement to purchase or securitize loans insured by FHA or guaranteed by the VA.

- *Issuances of our securities.* We are authorized, upon the approval of the Secretary of the Treasury, to issue debt obligations and mortgage-related securities. Neither the U.S. government nor any of its agencies guarantees, directly or indirectly, our debt or mortgage-related securities.
- *Authority of Treasury to purchase our debt obligations.* At the discretion of the Secretary of the Treasury, Treasury may purchase our debt obligations up to a maximum of $2.25 billion outstanding at any one time.
- *Exemption for our securities offerings.* Our securities offerings are exempt from registration requirements under the federal securities laws. As a result, we do not file registration statements or prospectuses with the SEC with respect to our securities offerings. However, our equity securities are not treated as exempt securities for purposes of Sections 12, 13, 14 or 16 of the Securities Exchange Act of 1934 (the "Exchange Act"). Consequently, we are required to file periodic and current reports with the SEC, including annual reports on Form 10-K, quarterly reports on Form 10-Q, and current reports on Form 8-K. Our non-equity securities are exempt securities under the Exchange Act.
- *Exemption from specified taxes.* Fannie Mae is exempt from taxation by states, territories, counties, municipalities and local taxing authorities, except for taxation by those authorities on our real property. We are not exempt from the payment of federal corporate income taxes.
- *Limitations.* We may not originate mortgage loans or advance funds to a mortgage seller on an interim basis, using mortgage loans as collateral, pending the sale of the mortgages in the secondary market. We may purchase or securitize mortgage loans only on properties located in the United States and its territories.

Liquidity Provided in 2020

We provided over $1.4 trillion in liquidity to the mortgage market in 2020, which enabled the financing of approximately 6 million home purchases, refinancings or rental units. This represents our highest volume of single-family and multifamily acquisitions on record.

Fannie Mae Provided over $1.4 trillion in Liquidity in 2020

Unpaid Principal Balance	Units
$411B	1.5M Single-Family Home Purchases
$948B	3.4M Single-Family Refinancings
$76B	792K Multifamily Rental Units

Mortgage Securitizations

We support market liquidity by issuing Fannie Mae MBS that are readily traded in the capital markets. We create Fannie Mae MBS by placing mortgage loans in a trust and issuing securities that are backed by those mortgage loans. Monthly payments received on the loans are the primary source of payments passed through to Fannie Mae MBS holders. We guarantee to the MBS trust that we will supplement amounts received by the MBS trust as required to permit timely payment of principal and interest on the trust certificates. In return for this guaranty, we receive guaranty fees.

Below we discuss the three broad categories of our securitization transactions and UMBS.

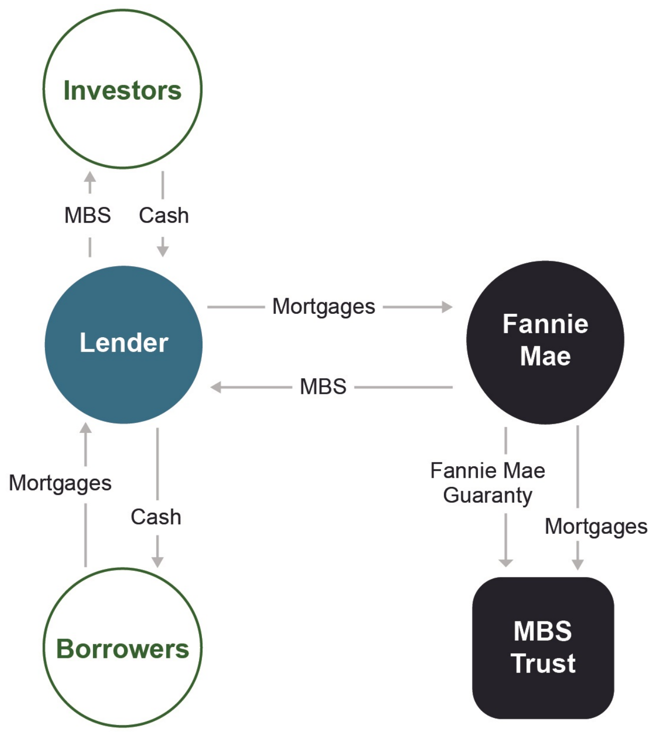
Securitization Transactions

We currently securitize a substantial majority of the single-family and multifamily mortgage loans we acquire. Our securitization transactions primarily fall within three broad categories: lender swap transactions, portfolio securitizations, and structured securitizations.

Lender Swap Transactions

Our most common type of securitization transaction is our "lender swap transaction." In a single-family lender swap transaction, a mortgage lender that operates in the primary mortgage market generally delivers a pool of mortgage loans to us in exchange for Fannie Mae MBS backed by these mortgage loans. Lenders may hold the Fannie Mae MBS they receive from us or sell them to investors. A pool of mortgage loans is a group of mortgage loans with similar characteristics. After receiving the mortgage loans in a lender swap transaction, we place them in a trust for which we serve as trustee. This trust is established for the sole purpose of holding the mortgage loans separate and apart from our corporate assets. We guarantee to each MBS trust that we will supplement amounts received by the MBS trust as required to permit timely payment of principal and interest on the related Fannie Mae MBS. We are entitled to a portion of the interest payment as a fee for providing our guaranty. The mortgage servicer also retains a portion of the interest payment as a fee for servicing the loan. Then, on behalf of the trust, we make monthly distributions to the Fannie Mae MBS certificateholders from the principal and interest payments and other collections on the underlying mortgage loans.

Lender Swap Transaction

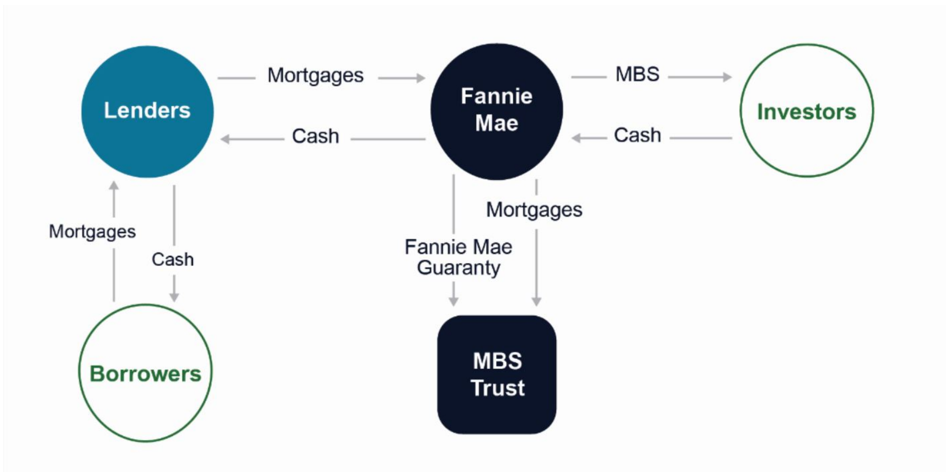


Our Multifamily business generally creates multifamily Fannie Mae MBS in lender swap transactions in a manner similar to our Single-Family business. Our multifamily lender customers typically deliver only one mortgage loan to back each multifamily Fannie Mae MBS. The characteristics of each mortgage loan are used to establish guaranty fees on a risk-adjusted basis. Securitizing a multifamily mortgage loan into a Fannie Mae MBS facilitates its sale into the secondary market.

Portfolio Securitization Transactions

We also purchase mortgage loans and mortgage-related securities for securitization and sale at a later date through our "portfolio securitization transactions." Most of our portfolio securitization transactions are driven by our single-family whole loan conduit activities, pursuant to which we purchase single-family whole loans from a large group of typically smaller lenders principally for the purpose of securitizing the loans into Fannie Mae MBS, which may then be sold to dealers and investors.

Portfolio Securitization Transaction



Structured Securitization Transactions

In a "structured securitization transaction," we create structured Fannie Mae MBS, typically for our lender customers or securities dealer customers, in exchange for a transaction fee. In these transactions, the customer "swaps" a mortgage-related asset that it owns (typically a mortgage security) in exchange for a structured Fannie Mae MBS we issue. The process for issuing Fannie Mae MBS in a structured securitization is similar to the process involved in our lender swap securitizations described above.

We also issue structured transactions backed by multifamily Fannie Mae MBS through the Fannie Mae Guaranteed Multifamily Structures ("Fannie Mae GeMS™") program, which provides additional liquidity and stability to the multifamily market, while expanding the investor base for multifamily Fannie Mae MBS.

Uniform Mortgage-Backed Securities, or UMBS

Overview

In May 2019, we began using the common securitization platform operated by Common Securitization Solutions, LLC ("CSS"), a limited liability company we own jointly with Freddie Mac, to perform certain aspects of the securitization process for our single-family Fannie Mae MBS issuances. In June 2019, we and Freddie Mac began issuing UMBS®. The uniform mortgage-backed security is intended to maximize liquidity for both Fannie Mae and Freddie Mac mortgage-backed securities in the to-be-announced ("TBA") market.

UMBS and Structured Securities

Each of Fannie Mae and Freddie Mac issues and guarantees UMBS and structured securities backed by UMBS and other securities, as described below.

- **UMBS.** Each of Fannie Mae and Freddie Mac issues and guarantees UMBS that are directly backed by the mortgage loans it has acquired, referred to as "first-level securities." UMBS issued by Fannie Mae are backed only by mortgage loans that Fannie Mae has acquired, and similarly UMBS issued by Freddie Mac are backed only by mortgage loans that Freddie Mac has acquired. There is no commingling of Fannie Mae- and Freddie Mac-acquired loans within UMBS.

  Mortgage loans backing UMBS are limited to fixed-rate mortgage loans eligible for financing through the TBA market. We continue to issue some types of Fannie Mae MBS that are not TBA-eligible and therefore are not issued as UMBS, such as single-family Fannie Mae MBS backed by adjustable-rate mortgages and all multifamily Fannie Mae MBS.

- **Structured Securities.** Each of Fannie Mae and Freddie Mac also issues and guarantees structured mortgage-backed securities, referred to as "second-level securities," that are resecuritizations of UMBS or previously-issued structured securities. In contrast to UMBS, second-level securities can be commingled—that is, they can include both Fannie Mae securities and Freddie Mac securities as the underlying collateral for the security. These structured securities include Supers®, which are single-class resecuritizations, and REMICs, which are multi-class resecuritizations. While Supers are backed only by TBA-eligible securities, REMICs can be backed by TBA-eligible or non-TBA-eligible securities.

The key features of UMBS are the same as those of legacy single-family Fannie Mae MBS. Accordingly, all single-family Fannie Mae MBS that are directly backed by fixed-rate loans and generally eligible for trading in the TBA market are UMBS, whether issued before or after June 3, 2019, when we began issuing UMBS. In this report, we use the term "Fannie Mae-issued UMBS" to refer to single-family Fannie Mae MBS that are directly backed by fixed-rate mortgage loans and generally eligible for trading in the TBA market. We use the term "Fannie Mae MBS" or "our MBS" to refer to any type of mortgage-backed security that we issue, including UMBS, Supers, REMICs and other types of single-family or multifamily mortgage-backed securities. References to our single-family guaranty book of business in this report exclude Freddie Mac-acquired mortgage loans underlying Freddie Mac mortgage-related securities that we have resecuritized.

Common Securitization Platform

The common securitization platform operated by CSS has replaced certain elements of Fannie Mae's and Freddie Mac's proprietary systems for securitizing single-family mortgages and performing associated back-office and administrative functions. The design of the common securitization platform also allows for the potential integration of additional market participants in the future. We no longer use our individual proprietary securitization function for our single-family MBS issuances. In addition to using the common securitization platform for our newly issued UMBS issuances, we are also now using the common securitization platform for certain ongoing administrative functions for our previously issued and outstanding single-family Fannie Mae MBS. We do not use the common securitization platform operated by CSS for securitizing or performing associated administrative functions for our multifamily Fannie Mae MBS.

We discuss risks posed by our reliance on CSS in "Risk Factors—GSE and Conservatorship Risk."

Managing Mortgage Credit Risk

Effectively pricing and managing credit risk is key to our business. Below we discuss key elements of how we are compensated for and manage the risk of credit losses through the life cycle of our loans and how we measure our credit risk.

Loan Acquisition Policies

Loans we acquire must be underwritten in accordance with our guidelines and standards.

- In Single-family, the vast majority of loans we acquire are assessed by Desktop Underwriter® (DU®), our proprietary single-family automated underwriting system. DU performs a comprehensive evaluation of the primary risk factors of a mortgage. We regularly review DU's underlying models to determine whether its risk analysis and eligibility assessment appropriately reflect current market conditions and loan performance data to ensure the loans we acquire are consistent with our risk appetite and FHFA guidance. New business restrictions recently added to our senior preferred stock purchase agreement with Treasury impose additional risk criteria on the loans we acquire and will also be considered in future reviews of DU's underlying models.
- In Multifamily, we acquire the vast majority of our loans through our Delegated Underwriting and Servicing (DUS®) Program. DUS lenders, who must be pre-approved by us, are delegated the authority to underwrite and service loans for delivery to us in accordance with our standards and requirements. Based on a given loan's unique characteristics and our established delegation criteria, lenders assess whether a loan must be reviewed by us. If review is required, our internal credit team will assess the loan's risk profile to determine if it meets our risk tolerances. DUS lenders also share with us the risk of loss on our multifamily loans, thereby aligning our

interests throughout the life of the loan. FHFA has instructed us to limit the volume and nature of multifamily loans we acquire, and the recent amendments to our senior preferred stock purchase agreement with Treasury include new covenants with respect to our multifamily loan acquisition volume. We will continue to closely monitor our multifamily loan acquisitions and market conditions and, as appropriate, make changes to our standards and requirements to ensure the multifamily loans we acquire are consistent with our risk appetite, the senior preferred stock purchase agreement, and FHFA guidance.

For more information about our mortgage acquisition policies and underwriting standards, see "MD&A—Single-family Business—Single-family Mortgage Credit Risk Management" and "MD&A—Multifamily Business—Multifamily Mortgage Credit Risk Management." For information on the restrictions on our single-family and multifamily loan acquisitions, see "Conservatorship, Treasury Agreements and Housing Finance Reform—Treasury Agreements—Covenants under Treasury Agreements" and "MD&A—Multifamily Business—Multifamily Business Metrics."

In exchange for managing credit risk on the loans we acquire, we receive guaranty fees that take into account, among other factors, the credit risk characteristics of the loans we acquire. We provide information about our guaranty fees in MD&A—Single-family Business—Single-family Business Metrics" and in "MD&A—Multifamily Business—Multifamily Business Metrics."

Loan Performance Management

We closely monitor the performance of loans in our guaranty book of business and we work to reduce defaults and mitigate the severity of credit losses through our servicing policies and practices.

Single-family Loans

- For single-family loans, the most important loan performance criteria we monitor are (1) serious delinquency rates, which are typically strong indicators of loans that are at a heightened risk of default, and (2) mark-to-market LTV ratios, which affect both the likelihood of losses and the potential severity of any losses we may ultimately realize. While mark-to-market LTV ratios are significantly impacted by changes in home prices, which are outside our control, we have an array of loss mitigation tools to try to reduce defaults on delinquent loans and to minimize the severity of the losses we do incur.
- We consider single-family loans to be seriously delinquent when they are 90 days or more past due or in the foreclosure process. Once a single-family loan becomes 36 days past due, the servicer is required to make weekly attempts, for the next six months, to contact the borrower to try to engage in steps to prevent default. Our loss mitigation tools include payment forbearance, repayment plans, payment deferrals and loan modification options. We describe these tools and discuss them further in "MD&A—Single-Family Business—Single-Family Mortgage Credit Risk Management—Single-Family Problem Loan Management—Loan Workout Metrics." Successful loan reperformance is heavily influenced by the effective use of these tools and the amount of equity the borrower has in their home.
- Some loans that become seriously delinquent subsequently become current or repay in full without a modification or other loan workout. However, we modify a substantial portion of our seriously delinquent loans. For example, of the single-family loans that became seriously delinquent from 2017 to 2019, through December 31, 2020, 33% became current or fully repaid without a loan workout, while we performed loan workouts, including modifications, on 38% of them. Of these loans that received a workout, 70% became current or fully repaid as of December 31, 2020, including loans that became current and were subsequently sold in a reperforming loan sale, and 1% defaulted through foreclosure, a short sale or a deed-in-lieu of foreclosure. The reperformance of these previously worked-out loans has been negatively impacted in 2020 by the COVID-19 pandemic, with approximately 13% of the population in a forbearance plan as of December 31, 2020 and past due. When a loan does not cure on its own and we are not able to provide a workout for it, the likelihood of default increases. See "MD&A—Single-Family Business—Single-Family Mortgage Credit Risk Management" for performance statistics on our single-family completed loan modifications during 2019 and 2018.
- In 2020 our loss mitigation pivoted to payment forbearance, providing up to a year to borrowers affected by the COVID-19 pandemic. For loans already in a COVID-19-related forbearance as of February 28, 2021, forbearance can be extended to a total of up to 15 months, provided that the forbearance does not result in the loan becoming greater than 15 months delinquent. Forbearance is typically used in instances where the duration and impact of a borrower's hardship are uncertain, such as disasters like hurricanes and flooding, to give the borrower time to understand whether, and to what extent, a loss mitigation solution will be needed to return to paying status. We estimate that, through December 31, 2020, our single-family cumulative forbearance take-up rate was approximately 8%. We discuss this rate in "MD&A—Single-Family Business—Single-Family Mortgage Credit Risk Management—Single-Family Problem Loan Management—Single-Family

Loans in Forbearance." As of December 31, 2020, 3.4% of our single-family conventional book of business, based on unpaid principal balance, and 3.0% based on loan count, remained in active forbearance, the vast majority of which were related to COVID-19, and 12% of these loans in forbearance, based on loan count, were still current. The majority of our single-family loans that exited forbearance during the year either repaid all missed payments or received a payment deferral solution. We expect the ultimate performance of these loans will be influenced by the success of these payment deferrals as well as our other loss mitigation options. Because payments are not required during forbearance, our serious delinquency rate has increased.

- For delinquent loans that are unable to reperform, we use alternatives to foreclosure where possible, such as short sales, which reduce our credit losses while helping borrowers avoid foreclosure. We provide more information on short sales and our other foreclosure alternatives in "MD&A—Single-Family Business—Single-Family Mortgage Credit Risk Management—Single-Family Problem Loan Management—Loan Workout Metrics—Foreclosure Alternatives." We work to obtain the highest price possible for the properties sold in short sales. When we acquire properties, including through foreclosure, our primary objectives are both to minimize the severity of loss to Fannie Mae by maximizing sales prices and to stabilize neighborhoods by preventing empty homes from depressing home values. The value of the underlying property relative to the loan's unpaid principal balance has a significant impact on the severity of loss we incur as a result of loan default. As of December 31, 2020, the estimated weighted average mark-to-market LTV ratio of loans in our single-family conventional book of business was 58%, and less than 0.5% of these loans had an estimated mark-to-market LTV ratio above 100%.
- In recent years, our credit loss mitigation strategy has also involved selling nonperforming and reperforming loans thereby removing them from our guaranty book of business. We suspended new sales of nonperforming and reperforming loans in the second quarter of 2020, as investor interest in purchasing these loans was severely impacted by the COVID-19 pandemic. However, market conditions for the sale of these loans, particularly reperforming loans, improved following the second quarter, and we resumed sales of reperforming loans in the third quarter. FHFA is currently examining issues relating to sales of nonperforming and reperforming loans during the COVID-19 national emergency and has instructed us to refrain from engaging in such sales until at least February 28, 2021, or later if directed by FHFA, while FHFA evaluates what additional loss mitigation requirements will apply to any future sales. For instance, although we already require purchasers to perform workout solutions like modifications to try to avoid foreclosure, we may attach additional terms to these sales that would require purchasers to offer borrowers protections included in existing legislation.

We present information on the credit characteristics and performance of our single-family loans in "MD&A—Single-Family Business—Single-Family Mortgage Credit Risk Management—Single-Family Portfolio Diversification and Monitoring" and "Single-Family Problem Loan Management" and "Note 13, Concentrations of Credit Risk—Risk Characteristics of our Guaranty Book of Business."

Multifamily Loans

- For multifamily loans, key indicators of heightened risk of default are debt service coverage ratios ("DSCRs"), particularly loans with an estimated current DSCR below 1.0, and serious delinquency rates. We consider a multifamily loan seriously delinquent when it is 60 days or more past due.
- For loans with indicators of heightened default risk, our DUS lenders, through their delegated authority, work with us to maintain the credit quality of the multifamily book of business and prevent foreclosures through loss mitigation strategies such as payment forbearance or loan modification.
- For loans that ultimately default, we work to minimize the severity of loss in several ways, including pursuing contractual remedies through our DUS loss-sharing arrangements and with providers of additional credit enhancements where available.
- Similar to single-family, we have relied heavily on payment forbearance, up to six months of which may be provided by lenders under delegated authority. For any forbearance request extending beyond six months, Fannie Mae does not delegate the decision and will determine whether to extend relief. As of December 31, 2020, 0.4% of our Multifamily guaranty book of business based on unpaid principal balance was in an active forbearance, the vast majority of which were related to COVID-19.
- We present information on the credit characteristics and performance of our multifamily loans in "MD&A—Multifamily Business—Multifamily Mortgage Credit Risk Management—Multifamily Portfolio Diversification and Monitoring" and "Note 13, Concentrations of Credit Risk—Risk Characteristics of our Guaranty Book of Business."

Sharing and Selling Credit Risk

In addition to managing credit risk through our selling and servicing practices, we also share and transfer credit risk to third parties through a variety of credit enhancement products and programs.

- For single-family loans we acquire with an LTV ratio over 80% our charter requires credit enhancement, which we typically meet through third-party primary mortgage insurance.
- Our Multifamily business uses a shared-risk business model that distributes credit risk to the private markets, primarily through our DUS program. Under DUS, our lenders typically share with us approximately one-third of the credit risk on these loans, aligning the interests of lenders and Fannie Mae. DUS lenders receive credit risk-related compensation in exchange for sharing risk. The lender risk-sharing we obtain through our DUS program accompanies our multifamily loans at the time we acquire them.
- We use other types of credit enhancements, including pool mortgage insurance and credit risk transfer transactions. In our credit risk transfer transactions, we use risk-sharing capabilities we have developed to obtain credit enhancement by transferring portions of our single-family and multifamily mortgage credit risk on reference pools of mortgage loans to the private market. In most of our credit risk transfer transactions, investors receive payments, which effectively reduce the guaranty fee income we retain on the loans. In exchange for these payments, our credit risk transfer transactions are designed to transfer to the investors a portion of the losses we expect would be incurred in an economic downturn or a stressed credit environment. We did not enter into new credit risk transfer transactions in the second quarter of 2020 due to adverse market conditions resulting from the COVID-19 pandemic. Market conditions improved in the second half of 2020, but we have not entered into any new transactions as we evaluate their costs and benefits. We may engage in credit risk transfer transactions in the future.

For more information about our loans with credit enhancement, see “MD&A—Single-Family Business—Single-Family Mortgage Credit Risk Management—Single-Family Credit Enhancement and Transfer of Mortgage Credit Risk” and “MD&A—Multifamily Business—Multifamily Mortgage Credit Risk Management—Transfer of Multifamily Mortgage Credit Risk.”

Measuring Credit Risk and the Impact of Changes on Our Quarterly Results

Our best estimate of future credit losses is reflected in our single-family and multifamily loss reserves, which for periods on or after January 1, 2020 is calculated using a lifetime credit loss methodology under the CECL standard. We update our estimate of credit losses quarterly based on the credit profile of our loans as well as certain actual and forecasted economic data. Changes in our estimate affect our benefit or provision for credit losses, which, combined with foreclosed property expense, comprises our credit-related income or expense each quarter.

We provide information on our loss reserves in “Selected Financial Data” and in “MD&A—Single-Family Business—Single-Family Mortgage Credit Risk Management—Single-Family Problem Loan Management—Other Single-Family Credit information” and “MD&A—Multifamily Business—Multifamily Mortgage Credit Risk Management—Multifamily Problem Loan Management and Foreclosure Prevention—Other Multifamily Credit information.” We provide information on our credit related income or expense in “MD&A—Consolidated Results of Operations—Credit-Related Income (Expense).”

Conservatorship, Treasury Agreements and Housing Finance Reform

Conservatorship

On September 6, 2008, the Director of FHFA appointed FHFA as our conservator, pursuant to authority provided by the Federal Housing Enterprises Financial Safety and Soundness Act of 1992, as amended, including by the Federal Housing Finance Regulatory Reform Act of 2008 (together, the “GSE Act”). The conservatorship is a statutory process designed to preserve and conserve our assets and property and put the company in a sound and solvent condition.

The conservatorship has no specified termination date. For more information on the risks to our business relating to the conservatorship and uncertainties regarding the future of our company and business, as well as the adverse effects of the conservatorship on the rights of holders of our common and preferred stock, see “Risk Factors—GSE and Conservatorship Risk.”

Our conservatorship could terminate through a receivership. For information on the circumstances under which FHFA is required or permitted to place us into receivership and the potential consequences of receivership, see “Legislation and

Regulation—GSE Act and Other Legislative and Regulatory Matters—Receivership and Resolution Planning" and "Risk Factors—GSE and Conservatorship Risk."

Management of the Company during Conservatorship

Upon its appointment, the conservator immediately succeeded to (1) all rights, titles, powers and privileges of Fannie Mae, and of any shareholder, officer or director of Fannie Mae with respect to Fannie Mae and its assets, and (2) title to the books, records and assets of any other legal custodian of Fannie Mae. The conservator subsequently issued an order that provided for our Board of Directors to exercise specified authorities. The conservator also provided instructions regarding matters for which conservator decision or notification is required. The conservator retains the authority to amend or withdraw its order and instructions at any time. For more information on the authorities of our Board of Directors during conservatorship, see "Directors, Executive Officers and Corporate Governance—Corporate Governance—Conservatorship and Board Authorities."

Our directors serve on behalf of the conservator and exercise their authority as directed by and with the approval, where required, of the conservator. Our directors have no fiduciary duties to any person or entity except to the conservator. Accordingly, our directors are not obligated to consider the interests of the company, the holders of our equity or debt securities, or the holders of Fannie Mae MBS unless specifically directed to do so by the conservator.

Because we are in conservatorship, our common stockholders currently do not have the ability to elect directors or to vote on other matters. The conservator eliminated common and preferred stock dividends (other than dividends on the senior preferred stock issued to Treasury) during the conservatorship.

Powers of the Conservator under the GSE Act

FHFA has broad powers when acting as our conservator. As conservator, FHFA can direct us to enter into contracts or enter into contracts on our behalf. Further, FHFA may transfer or sell any of our assets or liabilities (subject to limitations and post-transfer notice provisions for transfers of certain types of financial contracts), without any approval, assignment of rights or consent of any party. However, mortgage loans and mortgage-related assets that have been transferred to a Fannie Mae MBS trust must be held by the conservator for the beneficial owners of the Fannie Mae MBS and cannot be used to satisfy the general creditors of the company. Neither the conservatorship nor the terms of our agreements with Treasury change our obligation to make required payments on our debt securities or perform under our mortgage guaranty obligations.

Treasury Agreements

On September 7, 2008, we, through FHFA in its capacity as conservator, and Treasury entered into a senior preferred stock purchase agreement, pursuant to which we issued to Treasury one million shares of Variable Liquidation Preference Senior Preferred Stock, Series 2008-2, which we refer to as the "senior preferred stock," and a warrant to purchase shares of common stock equal to 79.9% of the total number of shares of our common stock outstanding on a fully diluted basis at the time the warrant is exercised for a nominal price.

The senior preferred stock purchase agreement and the dividend and liquidation provisions of the senior preferred stock were amended in January 2021 pursuant to a letter agreement between us, through FHFA in its capacity as conservator, and Treasury. The terms of the agreement, including Treasury's funding commitment, and the dividend and liquidation provisions of the senior preferred stock are described more fully below.

The January 2021 letter agreement made a number of significant changes to the covenants in the senior preferred stock purchase agreement, as well as to the terms of the senior preferred stock, including the following:

- The dividend provisions of the senior preferred stock were amended to permit us to retain increases in our net worth until our net worth exceeds the amount of adjusted total capital necessary for us to meet the capital requirements and buffers under the enterprise regulatory capital framework discussed in "Legislation and Regulation—GSE Act and Other Legislative and Regulatory Matters—Capital." We estimate that, had the enterprise regulatory capital framework been applicable to us as of December 31, 2020, we would have been required to hold approximately $185 billion in adjusted total capital, of which approximately $135 billion must be in the form of common equity tier 1 capital. After the "capital reserve end date," which is defined as the last day of the second consecutive fiscal quarter during which we have maintained capital equal to, or in excess of, all of the capital requirements and buffers under the enterprise regulatory capital framework, the amount of quarterly dividends to Treasury will be equal to the lesser of any quarterly increase in our net worth and a 10% annual rate on the then-current liquidation preference of the senior preferred stock. As a result of these changes, our ability to retain earnings in excess of the capital requirements and buffers set forth in the enterprise regulatory capital framework will be limited.

- At the end of each fiscal quarter, through and including the capital reserve end date, the liquidation preference of the senior preferred stock will be increased by an amount equal to the increase in our net worth, if any, during the immediately prior fiscal quarter.
- We may issue and retain up to $70 billion in proceeds from the sale of common stock without Treasury's prior consent, provided that (1) Treasury has already exercised its warrant in full, and (2) all currently pending significant litigation relating to the conservatorship and to an amendment to the senior preferred stock purchase agreement made in August 2012 has been resolved, which may require Treasury's assent.
- FHFA may release us from conservatorship without Treasury's consent after (1) all currently pending significant litigation relating to our conservatorship and the August 2012 amendment to the senior preferred stock purchase agreement has been resolved, and (2) our common equity tier 1 capital, together with any other common stock that we may issue in a public offering, equals or exceeds 3% of our "adjusted total assets" under our enterprise regulatory capital framework. We estimate that, had the new framework been applicable to us as of December 31, 2020, 3% of our adjusted total assets would have been approximately $124 billion.
- New restrictive covenants were added that will impact both our single-family and multifamily business activities.

See "Risk Factors" for a description of the risks to our business relating to the senior preferred stock purchase agreement, as well as the adverse effects of the senior preferred stock and the warrant on the rights of holders of our common stock and other series of preferred stock.

Senior Preferred Stock Purchase Agreement

The senior preferred stock purchase agreement provides that, on a quarterly basis, we may draw funds up to the amount, if any, by which our total liabilities exceed our total assets, as reflected in our consolidated balance sheet, prepared in accordance with generally accepted accounting principles in the United States of America ("GAAP"), for the applicable fiscal quarter (referred to as the "deficiency amount"), up to the maximum amount of remaining funding under the agreement. As of the date of this filing, the maximum amount of remaining funding under the agreement is $113.9 billion. If we were to draw additional funds from Treasury under the agreement with respect to a future period, the amount of remaining funding under the agreement would be reduced by the amount of our draw. The senior preferred stock purchase agreement provides that the deficiency amount will be calculated differently if we become subject to receivership or other liquidation process.

The senior preferred stock purchase agreement provides for the payment of an unspecified quarterly commitment fee to Treasury to compensate Treasury for its ongoing support under the senior preferred stock purchase agreement. As amended by the January 2021 letter agreement, the agreement provides that (1) through and continuing until the capital reserve end date, the periodic commitment fee will not be set, accrue, or be payable, and (2) not later than the capital reserve end date, we and Treasury, in consultation with the Chair of the Federal Reserve, will agree to set the periodic commitment fee. Treasury's funding commitment under the senior preferred stock purchase agreement has no expiration date. The agreement provides that Treasury's funding commitment will terminate under any of the following circumstances: (1) the completion of our liquidation and fulfillment of Treasury's obligations under its funding commitment at that time; (2) the payment in full of, or reasonable provision for, all of our liabilities (whether or not contingent, including mortgage guaranty obligations); or (3) the funding by Treasury of the maximum amount that may be funded under the agreement. In addition, Treasury may terminate its funding commitment and declare the agreement null and void if a court vacates, modifies, amends, conditions, enjoins, stays or otherwise affects the appointment of the conservator or otherwise curtails the conservator's powers.

In the event of our default on payments with respect to our debt securities or guaranteed Fannie Mae MBS, if Treasury fails to perform its obligations under its funding commitment and if we and/or the conservator are not diligently pursuing remedies with respect to that failure, the agreement provides that any holder of such defaulted debt securities or Fannie Mae MBS may file a claim in the United States Court of Federal Claims for relief requiring Treasury to fund us up to (1) the amount necessary to cure the payment defaults on our debt and Fannie Mae MBS, (2) the deficiency amount, or (3) the amount of remaining funding under the senior preferred stock purchase agreement, whichever is the least. Any payment that Treasury makes under those circumstances will be treated for all purposes as a draw under the agreement that will increase the liquidation preference of the senior preferred stock.

Most provisions of the senior preferred stock purchase agreement may be waived or amended by mutual agreement of the parties; however, no waiver or amendment of the agreement is permitted that would decrease Treasury's aggregate funding commitment or add conditions to Treasury's funding commitment if the waiver or amendment would adversely affect in any material respect the holders of our debt securities or guaranteed Fannie Mae MBS.

Senior Preferred Stock

Shares of the senior preferred stock have no par value and have a stated value and initial liquidation preference equal to $1,000 per share, for an aggregate initial liquidation preference of $1 billion. As a result of the January 2021 letter agreement, the dividend rate and liquidation preference of the senior preferred stock depend on whether we have reached the capital reserve end date.

Treasury, as the holder of the senior preferred stock, is entitled to receive, when, as and if declared, out of legally available funds, cumulative quarterly cash dividends. The dividends we have paid to Treasury on the senior preferred stock during conservatorship have been declared by, and paid at the direction of, our conservator, acting as successor to the rights, titles, powers and privileges of the Board of Directors. Dividend payments we make to Treasury do not restore or increase the amount of funding available to us under the senior preferred stock purchase agreement.

Dividend amount prior to capital reserve end date. The terms of the senior preferred stock provide for dividends each quarter in the amount, if any, by which our net worth as of the end of the immediately preceding fiscal quarter exceeds an applicable capital reserve amount. The January 2021 letter agreement increased the applicable capital reserve amount, starting with the quarterly dividend period ending on December 31, 2020, from $25 billion to the amount of adjusted total capital necessary for us to meet the capital requirements and buffers set forth in enterprise regulatory capital framework. If our net worth does not exceed this amount as of the end of the immediately preceding fiscal quarter, then dividends will neither accumulate nor be payable for such period. Our net worth is defined as the amount, if any, by which our total assets (excluding Treasury's funding commitment and any unfunded amounts related to the commitment) exceed our total liabilities (excluding any obligation with respect to capital stock), in each case as reflected on our balance sheet prepared in accordance with GAAP.

Dividend amount following capital reserve end date. Beginning on the first dividend period following the capital reserve end date, the applicable quarterly dividend amount on the senior preferred stock will be the lesser of:

(1) a 10% annual rate on the then-current liquidation preference of the senior preferred stock; and

(2) an amount equal to the incremental increase in our net worth during the immediately prior fiscal quarter.

However, the applicable quarterly dividend amount will immediately increase to a 12% annual rate on the then-current liquidation preference of the senior preferred stock if we fail to timely pay dividends in cash to Treasury. This increased dividend amount will continue until the dividend period following the date we have paid, in cash, full cumulative dividends to Treasury (including any unpaid dividends), at which point the applicable quarterly dividend amount will revert to the prior calculation method.

Liquidation preference. Under the terms governing the senior preferred stock, the aggregate liquidation preference is increased by the following:

- any amounts Treasury pays to us pursuant to its funding commitment under the senior preferred stock purchase agreement (a total of $119.8 billion as of the date of this filing),
- any quarterly commitment fees that are payable but not paid in cash (no such fees have become payable, nor will they under the current terms of the senior preferred stock purchase agreement and the senior preferred stock); and
- any dividends that are payable but not paid in cash to Treasury, regardless of whether or not they are declared.

In addition:

- amendments to the terms of the senior preferred stock made in December 2017 increased the aggregate liquidation preference of the senior preferred stock by $3 billion as of December 31, 2017;
- amendments to the terms of the senior preferred stock made in September 2019 letter agreement provides that, beginning on September 30, 2019, and at the end of each fiscal quarter thereafter, the liquidation preference shall be increased by an amount equal to the increase in our net worth, if any, during the immediately prior fiscal quarter, until such time as the liquidation preference has increased by $22 billion pursuant to this provision; and
- the January 2021 letter agreement revised these terms to provide that, at the end of each fiscal quarter through and including the capital reserve end date, the liquidation preference shall be increased by an amount equal to the increase in our net worth, if any, during the immediately prior fiscal quarter.

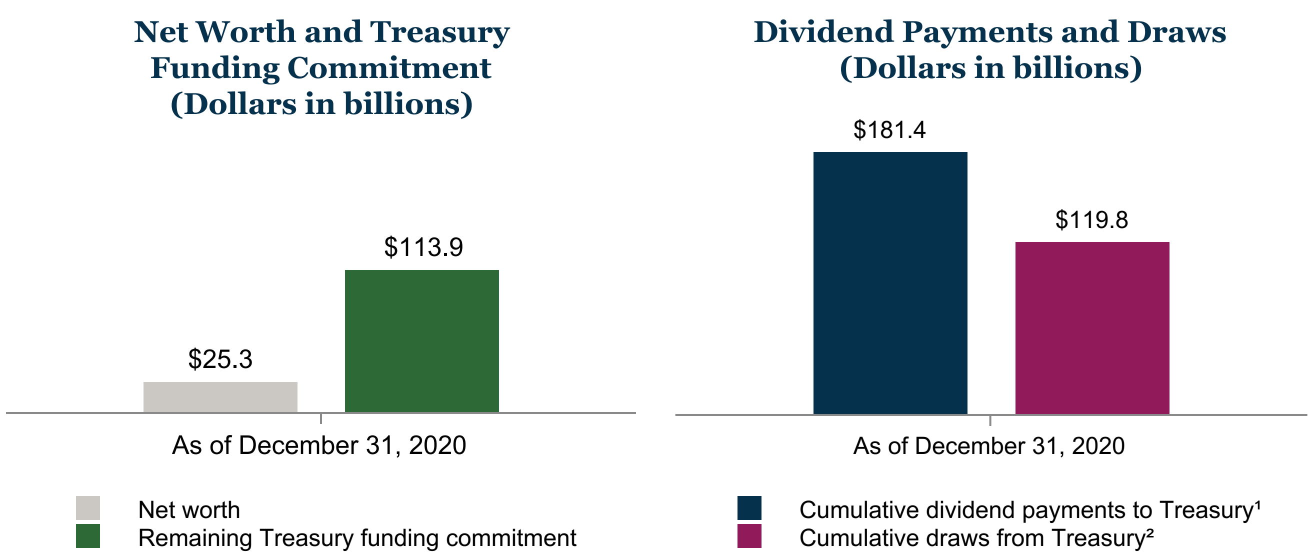
The senior preferred stock ranks ahead of our common stock and all other outstanding series of our preferred stock, as well as any capital stock we issue in the future, as to both dividends and rights upon liquidation. As a result, if we are liquidated, the holder of the senior preferred stock is entitled to its then current liquidation preference before any distribution is made to the holders of our common stock or other preferred stock. The aggregate liquidation preference of the senior preferred stock was $142.2 billion as of December 31, 2020. It will increase to $146.8 billion as of March 31, 2021 due to the increase in our net worth during the fourth quarter of 2020.

The senior preferred stock provides that we may not, at any time, declare or pay dividends on, make distributions with respect to, or redeem, purchase or acquire, or make a liquidation payment with respect to, any common stock or other securities ranking junior to the senior preferred stock unless (1) full cumulative dividends on the outstanding senior preferred stock (including any unpaid dividends added to the liquidation preference) have been declared and paid in cash, and (2) all amounts required to be paid with the net proceeds of any issuance of capital stock for cash (as described in the following paragraph) have been paid in cash. Shares of the senior preferred stock are not convertible. Shares of the senior preferred stock have no general or special voting rights, other than those set forth in the certificate of designation for the senior preferred stock or otherwise required by law. The consent of holders of at least two-thirds of all outstanding shares of senior preferred stock is generally required to amend the terms of the senior preferred stock or to create any class or series of stock that ranks prior to or on parity with the senior preferred stock.

We are not permitted to redeem the senior preferred stock prior to the termination of Treasury's funding commitment under the senior preferred stock purchase agreement. Moreover, we are not permitted to pay down the liquidation preference of the outstanding shares of senior preferred stock except to the extent of (1) accumulated and unpaid dividends previously added to the liquidation preference and not previously paid down; and (2) quarterly commitment fees previously added to the liquidation preference and not previously paid down. In addition to these exceptions, if we issue any shares of capital stock for cash while the senior preferred stock is outstanding, the net proceeds of the issuance, with the exception of up to $70 billion in aggregate gross cash proceeds from the issuance of common stock, must be used to pay down the liquidation preference of the senior preferred stock. The liquidation preference of each share of senior preferred stock may not be paid down below $1,000 per share prior to the termination of Treasury's funding commitment. Following the termination of Treasury's funding commitment, we may pay down the liquidation preference of all outstanding shares of senior preferred stock at any time, in whole or in part.

Net Worth, Treasury Funding and Senior Preferred Stock Dividends

The charts below show information about our net worth, the remaining amount of Treasury's funding commitment to us, senior preferred stock dividends we have paid Treasury and funds we have drawn from Treasury pursuant to its funding commitment.



(1) Aggregate amount of dividends we have paid to Treasury on the senior preferred stock from 2008 through December 31, 2020. Under the terms of the senior preferred stock purchase agreement, dividend payments we make to Treasury do not offset our draws of funds from Treasury.

(2) Aggregate amount of funds we have drawn from Treasury pursuant to the senior preferred stock purchase agreement from 2008 through December 31, 2020.

Common Stock Warrant

Pursuant to the senior preferred stock purchase agreement, on September 7, 2008, we, through FHFA in its capacity as conservator, issued to Treasury a warrant to purchase shares of our common stock equal to 79.9% of the total number of shares of our common stock outstanding on a fully diluted basis on the date the warrant is exercised, for an exercise price of $0.00001 per share. The warrant may be exercised in whole or in part at any time on or before September 7, 2028.

Covenants under Treasury Agreements

The senior preferred stock purchase agreement contains covenants that prohibit us from taking a number of actions without the prior written consent of Treasury, including:

- paying dividends or other distributions on or repurchasing our equity securities (other than the senior preferred stock or warrant);
- issuing equity securities, except for stock issuances made (1) to Treasury, (2) pursuant to obligations that existed at the time we entered conservatorship, and (3) as amended by the January 2021 letter agreement, for common stock ranking pari passu or junior to the common stock issued to Treasury in connection with the exercise of its warrant, provided that (i) Treasury has already exercised its warrant in full, and (ii) all currently pending significant litigation relating to the conservatorship and the August 2012 amendment to the senior preferred stock purchase agreement has been resolved, which may require Treasury's assent. Net proceeds of the issuance of any shares of capital stock for cash while the senior preferred stock is outstanding, except for up to $70 billion in aggregate gross cash proceeds from the issuance of common stock, must be used to pay down the liquidation preference of the senior preferred stock;
- terminating or seeking to terminate our conservatorship, other than through a receivership, except that, as revised by the January 2021 letter agreement, FHFA can terminate our conservatorship without the prior consent of Treasury if several conditions are met, including (1) all currently pending significant litigation relating to the conservatorship and the August 2012 amendment to the senior preferred stock purchase agreement has been resolved, and (2) for two or more consecutive quarters, our common equity tier 1 capital (as defined in the enterprise regulatory capital framework), together with any stockholder equity that would result from a firm commitment public underwritten offering of common stock which is fully consummated concurrent with the termination of conservatorship, equals or exceeds at least 3% of our adjusted total assets (as defined in the enterprise regulatory capital framework);
- selling, transferring, leasing or otherwise disposing of any assets, except for dispositions for fair market value in limited circumstances including if (a) the transaction is in the ordinary course of business and consistent with past practice or (b) the assets have a fair market value individually or in the aggregate of less than $250 million; and
- issuing subordinated debt.

Covenants in the senior preferred stock purchase agreement also subject us to limits on the amount of mortgage assets that we may own and the total amount of our indebtedness.

- *Mortgage Asset Limit.* The amount of mortgage assets we are permitted to own is $250 billion and, as a result of the January 2021 letter agreement, will decrease to $225 billion on December 31, 2022. We are currently managing our business to a $225 billion cap pursuant to instructions from FHFA. Our mortgage assets as of December 31, 2020 were $165.0 billion. Our mortgage asset calculation also includes 10% of the notional value of interest-only securities we hold. We disclose the amount of our mortgage assets each month in the "Endnotes" to our Monthly Summaries, which are available on our website and announced in a press release.
- *Debt Limit*. Our debt limit under the senior preferred stock purchase agreement is set at 120% of the amount of mortgage assets we were allowed to own under the agreement on December 31 of the immediately preceding calendar year. This debt limit is currently $300 billion, and it will decrease to $270 billion as of December 31, 2022. As calculated for this purpose, our indebtedness as of December 31, 2020 was $290.0 billion. We disclose the amount of our indebtedness on a monthly basis under the caption "Total Debt Outstanding" in our Monthly Summaries, which are available on our website and announced in a press release.

Another covenant prohibits us from entering into any new compensation arrangements or increasing amounts or benefits payable under existing compensation arrangements with any of our executive officers (as defined by Securities and Exchange Commission ("SEC") rules) without the consent of the Director of FHFA, in consultation with the Secretary of the Treasury.

In addition to the changes described above to covenants already in the senior preferred stock purchase agreement, the January 2021 letter agreement added additional covenants:

- We are required to comply with the terms of the enterprise regulatory capital framework as published by FHFA in the Federal Register on December 17, 2020, disregarding any subsequent amendments or modifications.

- ***New Business Restrictions.*** New restrictive covenants impact both our single-family and multifamily business activities:
  - *Limit on Multifamily Volume.* We may not acquire more than $80 billion in multifamily mortgage assets in any 52-week period. FHFA will adjust the dollar amount of this limitation on multifamily mortgage purchase activity up or down at the end of each calendar year based on changes to the consumer price index. Additionally, at least 50% of our multifamily acquisitions in any calendar year must, at the time of acquisition, be classified as mission-driven, consistent with FHFA guidelines. In the fourth quarter of 2020, FHFA established a 2021 multifamily volume cap of $70 billion in new business volume over the four-quarter period from January 1, 2021 through December 31, 2021. FHFA also announced the requirement that at least 50% of our 2021 multifamily business volume must be mission-driven, focused on certain affordable and underserved market segments. For more information about our multifamily new business volume, see "MD&A—Multifamily Business—Multifamily Business Metrics." We understand that the $70 billion multifamily volume cap and related requirements established by FHFA in the fourth quarter of 2020 remain in effect for calendar year 2021, and that the $80 billion limit on multifamily mortgage purchase activity established under the January 2021 letter agreement operates as an independent limit on our prospective multifamily loan acquisitions.
  - *Requirement to Provide Equitable Access for Single-Family Acquisitions*. We:
    - may not vary our pricing or acquisition terms for single-family loans based on the business characteristics of the seller, including the seller's size, charter type, or volume of business with us; and
    - must offer to purchase at all times, for equivalent cash consideration and on substantially the same terms, any single-family mortgage loan that (1) is of a class of loans that we then offer to acquire for inclusion in our mortgage-backed securities or for other non-cash consideration, (2) is offered by a seller that has been approved to do business with us, and (3) has been originated and sold in compliance with our underwriting standards.
  - *Single Counterparty Volume Cap on Single-Family Acquisitions for Cash*. Beginning on January 1, 2022, and thereafter, we may not acquire more than $1.5 billion in single-family loans for cash consideration from any single seller (including its affiliates) during any period comprising four calendar quarters.
  - *Limit on Specified Higher-Risk Single-Family Acquisitions.* We may not acquire a single-family mortgage loan if, following the acquisition, more than 3% of our single-family loans that result from a refinancing, or 6% of our single family loans that do not result from a refinancing, in each case, that we have acquired during the preceding 52-week period, would have two or more of the following higher-risk characteristics at origination:
    - a combined loan-to-value ratio greater than 90%;
    - a debt-to-income ratio greater than 45%; and
    - a FICO credit score (or equivalent credit score) less than 680.
  - *Limit on Acquisitions of Single-Family Mortgage Loans Backed by Second Homes and Investment Properties.* We must limit our acquisitions of single-family mortgage loans secured by either second homes or investment properties to not more than 7% of the single-family mortgage loans we have acquired during the preceding 52-week period.
  - *Single-Family Loan Eligibility Requirements Program*. Beginning on or prior to July 1, 2021, we must implement a program reasonably designed to ensure that the single-family loans we acquire are limited to:
    - qualified mortgages, except government-backed loans;
    - loans exempt from the Consumer Financial Protection Bureau's (the "CFPB's") ability-to-repay and qualified mortgage rule, except timeshares and home equity lines of credit;
    - loans secured by an investment property;
    - refinancing loans with streamlined underwriting originated in accordance with our eligibility criteria for high loan-to-value refinancings;
    - loans originated with temporary underwriting flexibilities during times of exigent circumstances, as determined in consultation with FHFA;

- loans secured by manufactured housing; and
- such other loans that FHFA may designate that were eligible for purchase by us as of the date of the January 2021 letter agreement.

We are assessing the operational and business impacts of these new covenants and our compliance with them, including how these new limitations will impact, and may require changes to, our underwriting standards and requirements for acquisitions of single-family and multifamily loans. These changes may impact the overall volume and types of loans we acquire in 2021. As of the date of this filing, based on interpretive guidance we have received from FHFA to date and an initial assessment of our acquisition activities, we are not currently in compliance with the new covenants that restrict our acquisitions of purchase money single-family loans with higher-risk characteristics and our acquisitions of single-family loans backed by investment properties and second homes, measured during the preceding 52-week period. We are working with FHFA on resolving any remaining interpretive issues and discussing a timetable to be fully compliant with these covenants.

Annual Risk Management Plan Covenant. Each year we remain in conservatorship we are required to provide Treasury a risk management plan that sets out our strategy for reducing our risk profile, describes the actions we will take to reduce the financial and operational risk associated with each of our business segments, and includes an assessment of our performance against the planned actions described in the prior year's plan. We submitted our most recent annual risk management plan to Treasury in December 2020.

Although the senior preferred stock purchase agreement does not specify penalties for failure to comply with the covenants in the agreement, FHFA, as our conservator and regulator, has the authority to direct compliance and to impose consequences for noncompliance.

Housing Finance Reform

Policymakers and others have focused significant attention in recent years on how to reform the nation's housing finance system, including what role, if any, Fannie Mae and Freddie Mac should play in that system. Congress may consider proposed housing finance reform legislation that could result in significant changes in our structure and role in the future, including proposals that would result in Fannie Mae's liquidation or dissolution. The January 2021 letter agreement includes a commitment for us and Treasury to work toward developing a proposal to restructure Treasury's interests in us in a manner that meets three goals: (1) facilitating an orderly exit from conservatorship, (2) ensuring that Treasury is appropriately compensated, and (3) permitting us to raise third-party capital and make distributions as appropriate. The January 2021 letter agreement states that Treasury, in consultation with FHFA, should endeavor to transmit this proposal to both Houses of Congress by September 30, 2021. At the same time the January 2021 letter agreement was announced, Treasury issued a Blueprint on Next Steps for GSE Reform. Indicating that "Congress is best positioned to adopt comprehensive housing finance reform," Treasury addressed five key considerations in the blueprint that should inform Treasury's continued work with FHFA to meet the goals described above: build GSE equity capital, determine GSE capital structure, set commitment fee for ongoing government support, establish appropriate pricing oversight, and assess appropriate market concentration. In the blueprint, Treasury indicated that, among other things, consideration should be given to whether consolidating our and Freddie Mac's operations into a single entity would more efficiently fulfill our mission and promote the interests of stakeholders, including taxpayers. It is unclear how or whether Treasury in the current Administration will prioritize or act on the commitments set forth in the letter agreement or the considerations set forth in the Blueprint. There continues to be significant uncertainty regarding the timing, content and impact of future legislative and regulatory actions affecting us, including the enactment of housing finance reform legislation. See "Risk Factors—GSE and Conservatorship Risk" for a description of risks associated with our future and potential housing finance reform.

Legislation and Regulation

U.S. Government Response to COVID-19

Congress has passed several pieces of legislation to address the economic dislocation and other burdens resulting from the COVID-19 pandemic:

- The Coronavirus Aid, Relief, and Economic Security Act, referred to as the CARES Act, was enacted in March 2020.
- The Consolidated Appropriations Act of 2021 was enacted in December 2020.

Relief for Individuals and Businesses; Federal Eviction Moratoriums

The CARES Act included a number of provisions aimed at providing relief for individuals and businesses that applied to the loans we guarantee, including provisions requiring that our servicers:

- provide forbearance (that is, a temporary suspension of the borrower's monthly mortgage payments) for up to 360 days upon the request of any single-family borrower experiencing a financial hardship caused by the COVID-19 pandemic, regardless of the borrower's delinquency status and with no additional documentation required other than the borrower's attestation to a financial hardship caused by the COVID-19 pandemic;
- through December 31, 2020, provide forbearance for up to 90 days upon the request of any multifamily borrower experiencing a documented financial hardship due to the COVID-19 pandemic that was current on its payments as of February 1, 2020; during the forbearance period, multifamily borrowers may not evict tenants for nonpayment, issue notices to vacate, or charge fees for late payment of rent; and
- suspend foreclosures and foreclosure-related evictions for single-family properties through May 17, 2020, other than for vacant or abandoned properties.

The CARES Act instituted a temporary moratorium, through July 25, 2020, on tenant evictions for nonpayment of rent that applied to any single-family or multifamily property that secures a mortgage loan we own or guarantee. To prevent the further spread of COVID-19 the Centers for Disease Control and Prevention (the "CDC") issued an order in September 2020 prohibiting the eviction of any tenant, lessee or resident of a residential property for nonpayment of rent, if such person provides a specified declaration attesting that they meet the requirements to obtain the protection of the order. The CDC's moratorium's initially expired on December 31, 2020, but it was subsequently extended by the Consolidated Appropriations Act of 2021 through January 31, 2021. In January 2021, the CDC extended the eviction moratorium through March 31, 2021. The requirements to obtain the protection of the order include a specified income cap and an inability to pay full rent. The CDC order does not apply in any jurisdiction with a moratorium on residential evictions that provides the same or greater level of public-health protection. While the CDC order does not impose any obligations on Fannie Mae or its servicers to ensure compliance by borrowers, a borrower's income may be impacted by tenants who do not pay their rent while under the protection of the CDC order. As a result and as described in "Risk Factors," these eviction moratoriums could adversely affect the ability of some of our borrowers to make payments on their loans.

See "MD&A—Single-Family Business—Single-Family Mortgage Credit Risk Management" and "MD&A—Multifamily Business—Multifamily Mortgage Credit Risk Management" for more information on the actions we have taken and are taking to provide forbearance and suspend foreclosures and evictions, including beyond the requirements under the CARES Act.

Accounting for Troubled Debt Restructurings

The CARES Act also allows financial institutions to elect temporary relief relating to the accounting for troubled debt restructurings ("TDRs"). The CARES Act provides that a financial institution may elect to suspend the TDR requirements under U.S. generally accepted accounting principles ("GAAP") for certain loss mitigation activities, including forbearance and loan modifications, related to the COVID-19 pandemic that occur between March 1, 2020 through the earlier of December 31, 2020 or 60 days after the date on which the COVID-19 outbreak national emergency terminates, as long as the loan was not more than 30 days delinquent as of December 31, 2019. The Consolidated Appropriations Act of 2021 extended the period of the TDR relief until the earlier of January 1, 2022 or 60 days after the date on which the COVID-19 outbreak national emergency terminates. As described in "Note 1, Summary of Significant Accounting Policies," we have elected this option for temporary TDR relief for COVID-19-related loss mitigation activities.

Economic Stimulus

The Consolidated Appropriations Act of 2021 and the CARES Act also contain many provisions designed to mitigate the negative economic impact of the COVID-19 pandemic, including direct cash payments to eligible taxpayers below specified income limits, expanded unemployment insurance benefits and eligibility, and relief designed to prevent layoffs and business closures at small businesses. While these provisions mostly expired by December 2020, the Consolidated Appropriations Act of 2021, which was signed into law in December 2020, replaced many of these with similar provisions. The Consolidated Appropriations Act of 2021 also included $25 billion in rental assistance funds for eligible households living in single-family or multifamily properties. We believe these payments, expanded benefits, and other relief have increased the ability of impacted borrowers to pay their mortgage loans and renters to pay their rent.

State and Local Government Responses to COVID-19

In 2020, many states and localities issued executive orders or enacted legislation requiring mortgage forbearance, foreclosure and eviction moratoriums, and rent flexibilities. As the pandemic continues into 2021, some states have taken action or are considering actions to extend foreclosure and eviction protections further into 2021. The terms of these new and proposed requirements vary significantly in duration and scope. Actions taken by federal, state or local lawmakers to provide additional relief to borrowers and renters during the COVID-19 pandemic, depending on their scope and whether and to what extent they apply to our business, could have a material adverse effect on our business and financial results.

GSE Act and Other Legislative and Regulatory Matters

As a federally chartered corporation, we are subject to government regulation and oversight. FHFA, our primary regulator, regulates our safety and soundness and our mission. FHFA is an independent agency of the federal government with general supervisory and regulatory authority over Fannie Mae, Freddie Mac and the Federal Home Loan Banks ("FHLBs"). The U.S. Department of Housing and Urban Development ("HUD") is our regulator with respect to fair lending matters. Our regulators also include the SEC and Treasury.

We describe below regulations applicable to us pursuant to the GSE Act, other legislation and related regulatory matters. We also describe some regulations applicable to the mortgage industry and the securities markets that may indirectly affect us.

Capital

The GSE Act sets forth minimum and critical capital requirements for Fannie Mae and Freddie Mac and provides that the Director of FHFA shall establish risk-based capital requirements and may establish higher minimum capital requirements. FHFA has suspended the statute's capital classifications during conservatorship. Although existing statutory and regulatory capital requirements are not binding during conservatorship, we continue to submit capital reports to FHFA and FHFA monitors our capital levels. See "Note 12, Regulatory Capital Requirements" for information on the amount of regulatory capital we held as of December 31, 2020.

Conservatorship Capital Framework

In 2017, FHFA directed Fannie Mae and Freddie Mac to implement an aligned risk measurement framework for evaluating business decisions and performance during conservatorship. The conservatorship capital framework includes specific requirements relating to risk on our book of business and modeled returns on our new acquisitions. We are required to submit quarterly reports to FHFA relating to the framework's requirements. We discuss below our transition from the conservatorship capital framework to our new enterprise regulatory capital framework.

Enterprise Regulatory Capital Framework

In November 2020, FHFA adopted a final rule establishing a new regulatory capital framework for the GSEs, which was published in the Federal Register on December 17, 2020. The new regulatory capital framework implements the statutory capital requirements and establishes supplemental risk-based and leverage-based capital requirements beyond what is expressly required in the GSE Act. The framework provides a granular assessment of credit risk specific to different mortgage loan categories, as well as components for market risk and operational risk. The regulatory capital framework set forth in the final rule includes the following:

- Supplemental capital requirements relating to the amount and form of the capital we hold, based largely on definitions of capital used in U.S. banking regulators' regulatory capital framework. The final rule specifies complementary leverage-based and risk-based requirements, which together determine the requirements for each tier of capital;
- A requirement that we hold prescribed capital buffers that can be drawn down in periods of financial stress and then rebuilt over time as economic conditions improve. If we fall below the prescribed buffer amounts, we must restrict capital distributions such as stock repurchases and dividends, as well as discretionary bonus payments to executives, until the buffer amounts are restored;
- A requirement to file quarterly public capital reports starting in 2022, regardless of our status in conservatorship;
- Specific minimum percentages, or "floors," on the risk-weights applicable to single-family and multifamily exposures, which has the effect of increasing the capital required to be held for loans otherwise subject to lower risk weights;
- Specific floors on the risk-weights applicable to retained portions of credit risk transfer transactions, which has the effect of decreasing the capital relief obtained from these transactions; and
- Additional elements based on U.S. banking regulators' regulatory capital framework, including the planned eventual introduction of an advanced approach to complement the standardized approach for measuring risk-weighted assets.

FHFA's adoption of the enterprise regulatory capital framework followed an announcement by the Financial Stability Oversight Council (the "FSOC") in September 2020 that it had completed an activities-based review of the secondary mortgage market. The FSOC's review focused in particular on the activities of Fannie Mae and Freddie Mac (the "GSEs"), including an analysis of the extent to which FHFA's regulatory framework would adequately mitigate potential stability risks. The FSOC indicated that much of its analysis centered on FHFA's then recently proposed capital rule. The FSOC also referenced FHFA's implementation of other significant enhancements to the GSEs' regulatory framework that would help mitigate the potential risk to financial stability, including efforts to strengthen GSE liquidity regulation, stress testing, supervision and resolution planning. The FSOC's announcement stated, "Should these reforms be implemented appropriately, they will lead to a more durable secondary mortgage market that helps provide sustainable access to mortgage credit across the economic cycle and is more resistant to shocks that could impair financial intermediation or financial market functioning to a degree that would be sufficient to inflict significant damage on the broader economy." The FSOC indicated that it will continue to monitor the secondary mortgage market activities of the GSEs and FHFA's implementation of the GSEs' regulatory framework to ensure potential risks to financial stability are adequately addressed. If the FSOC determines that such risks to financial stability are not adequately addressed by FHFA's capital and other regulatory requirements or other risk mitigants, the FSOC may consider more formal recommendations or other actions.

The enterprise regulatory capital framework goes into effect in February 2021, but the dates on which we must comply with the requirements of the capital framework are staggered and largely dependent on whether we remain in conservatorship. Under the final rule, our compliance with the capital buffers will be required upon exit from conservatorship, and our compliance with the base regulatory requirements will be required by the later of our exit from conservatorship or such later date as may be specified by FHFA. Further, the compliance date for advanced approaches of the final rule will be January 1, 2025, or such later date as may be specified by FHFA. Reporting requirements under the enterprise regulatory capital framework take effect on January 1, 2022, including public reporting of our calculations of regulatory capital levels, buffers, adjusted total assets, and total risk-weighted assets. See "Note 12, Regulatory Capital Requirements" for information on existing reporting requirements relating to our regulatory capital as of December 31, 2020.

As amended by the January 2021 letter agreement, our senior preferred stock purchase agreement includes a covenant requiring us to comply with the terms of the enterprise regulatory capital framework as published by FHFA in the Federal Register on December 17, 2020, disregarding any subsequent amendments or modifications. In addition, the dividend provisions as amended by the January 2021 letter agreement provide that, after the capital reserve end date, the amount of quarterly dividends on the senior preferred stock will be equal to the lesser of any quarterly increase in our net worth and a 10% annual rate on the then-current liquidation preference of the senior preferred stock. As a result of this change, our ability to retain earnings in excess of the capital requirements and buffers set forth in the enterprise regulatory capital framework, including to build management buffers, will be limited.

When it is fully applicable to Fannie Mae, this framework will require us to hold significantly more capital than the statutory requirement and prior FHFA proposed capital rules. See "MD&A—Liquidity and Capital Management—Regulatory Capital" for information on the amount of regulatory capital we held as of December 31, 2020.

Currently, we review our business decisions continuously as they relate to the new capital requirements and the conservatorship capital framework, because we measure our risk and returns on our current business against the conservatorship capital framework, but the loans we acquire now and any credit-risk sharing transactions we enter into will also impact our future capital requirements. We expect to cease using the conservatorship capital framework to make business and risk decisions sometime in 2021 and to use instead the new enterprise capital regulatory framework and certain risk measures. Managing our business to take into account our new capital requirements and measures of risk requires balancing potentially competing business objectives, including furthering our mission objectives, prudently managing risk, and earning a competitive return. We expect that the enterprise regulatory capital framework will have a significant impact on our business, but we cannot measure the impact at this time because we do not know when many of the provisions of the new framework will become applicable. We are developing our ongoing business strategy to align our business activities with our new capital requirements and measures of risk.

Portfolio Standards

The GSE Act requires FHFA to establish standards governing our portfolio holdings, to ensure that they are backed by sufficient capital and consistent with our mission and safe and sound operations. FHFA is also required to monitor our portfolio and, in some circumstances, may require us to dispose of or acquire assets. In 2010, FHFA adopted, as the standard for our portfolio holdings, the portfolio limits specified in the senior preferred stock purchase agreement described under "Conservatorship, Treasury Agreements and Housing Finance Reform—Treasury Agreements—Covenants under Treasury Agreements," as it may be amended from time to time. The rule is effective for as long as we remain subject to the terms and obligations of the senior preferred stock purchase agreement.

New Products and Activities

The GSE Act requires us to obtain prior approval from FHFA before initially offering new products and to provide advance notice to FHFA of new activities, subject to certain exceptions. FHFA adopted an interim final rule implementing these provisions in July 2009, but subsequently concluded that permitting us to engage in new products was inconsistent with the goals of the conservatorship and instructed us not to submit new product requests under the rule. In October 2020, FHFA issued a proposed rule that, if adopted as final, would replace the interim final rule. The proposed rule establishes a process for the review of new products and activities by FHFA, including providing for a public notice and comment period with respect to new products. The proposed rule also establishes revised criteria for determining what constitutes a new activity that requires notice to FHFA and describes the activities that are excluded from the requirements of the proposed rule. The proposed rule, if adopted as a final rule, would apply to Fannie Mae, and any affiliates of Fannie Mae, both during and after a transition from conservatorship. In January 2021, we submitted a comment letter recommending various modifications to the proposed rule to streamline FHFA's review of new products and activities.

Receivership and Resolution Planning

Under the GSE Act, FHFA must place us into receivership if the Director of FHFA makes a written determination that our assets are less than our obligations (that is, we have a net worth deficit) or if we have not been paying our debts as they become due, in either case, for a period of 60 days. FHFA has notified us that the measurement period for any mandatory receivership determination with respect to our assets and liabilities would commence no earlier than the SEC public filing deadline for our quarterly or annual financial statements and would continue for 60 calendar days thereafter. FHFA has advised us that if, during that 60-day period, we receive funds from Treasury in an amount at least equal to the deficiency amount under the senior preferred stock purchase agreement, the Director of FHFA will not make a mandatory receivership determination.

In addition, we could be put into receivership at the discretion of the Director of FHFA at any time for other reasons set forth in the GSE Act. The statutory grounds for discretionary appointment of a receiver include: a substantial dissipation of assets or earnings due to unsafe or unsound practices; the existence of an unsafe or unsound condition to transact business; an inability to meet our obligations in the ordinary course of business; a weakening of our condition due to unsafe or unsound practices or conditions; critical undercapitalization; undercapitalization and no reasonable prospect of becoming adequately capitalized; the likelihood of losses that will deplete substantially all of our capital; or by consent.

In December 2020, FHFA issued a directive and a proposed rule requiring us to develop a plan to facilitate a rapid and orderly resolution in the event FHFA is appointed as our receiver. The stated goals of our resolution planning are to minimize disruption in the national housing finance markets, preserve the value of our franchise and assets, facilitate the division of assets and liabilities between the limited-life regulated entity and the receivership estate, ensure that creditors bear losses in the order of their priority under the GSE Act, and foster market discipline by making clear that no extraordinary government support will be available to indemnify investors against losses or fund the resolution.

The appointment of FHFA as receiver would immediately terminate the conservatorship. In the event of receivership, the GSE Act requires FHFA, as the receiver, to organize a limited-life regulated entity with respect to Fannie Mae. Among other requirements, the GSE Act provides that this limited-life regulated entity:

- would succeed to Fannie Mae's charter and thereafter operate in accordance with and subject to such charter;
- would assume, acquire or succeed to our assets and liabilities to the extent that such assets and liabilities are transferred by FHFA to the entity; and
- would not be permitted to assume, acquire or succeed to any of our obligations to shareholders.

Placement into receivership would likely have a material adverse effect on holders of our common stock and preferred stock, and could have a material adverse effect on holders of our debt securities and Fannie Mae MBS. Should we be placed into receivership, different assumptions would be required to determine the carrying value of our assets, which could lead to substantially different financial results. For more information on the risks to our business relating to receivership and uncertainties regarding the future of our business, see "Risk Factors—GSE and Conservatorship Risk."

Affordable Housing Allocations

The GSE Act requires us to set aside in each fiscal year an amount equal to 4.2 basis points for each dollar of the unpaid principal balance of our new business purchases and to pay this amount to specified HUD and Treasury funds in support of affordable housing. New business purchases consist of single-family and multifamily whole mortgage loans purchased during the period and single-family and multifamily mortgage loans underlying Fannie Mae MBS issued during the period pursuant to lender swaps, which we describe in "Mortgage Securitizations." We are prohibited from passing through the cost of these allocations to the originators of the mortgage loans that we purchase or securitize. For each year's new business purchases since 2015, we have set aside amounts for these contributions and transferred the funds when directed by FHFA to do so. See "Certain Relationships and Related Transactions, and Director Independence—Transactions with Related Persons—Treasury Interest in Affordable Housing Allocations" for information on our contribution for 2020 new business purchases.

Executive Compensation

The amount of compensation we may pay our executives is subject to a number of legal and regulatory restrictions, particularly while we are in conservatorship. For a description of our executive compensation program and legal and regulatory requirements that affect our executive compensation, see "Executive Compensation."

Fair Lending

The GSE Act requires the Secretary of HUD to assure that Fannie Mae and Freddie Mac meet their fair lending obligations. Among other things, HUD periodically reviews and comments on our underwriting and appraisal guidelines to ensure consistency with the Fair Housing Act.

Stress Testing

The Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act") requires certain financial companies to conduct annual stress tests to determine whether the companies have the capital necessary to absorb losses as a result of adverse economic conditions. Under FHFA regulations implementing this requirement, each year we are required to conduct a stress test using two different scenarios of financial conditions provided by FHFA—baseline and severely adverse—and to publish a summary of our stress test results for the severely adverse scenario by August 15.

FHFA regulation requires that the scenarios provided by FHFA be generally consistent with and comparable to those established by the Federal Reserve Board. Following the onset of the COVID-19 pandemic, the Federal Reserve Board considered alternative scenarios that were not included among the scenarios initially issued by FHFA. Accordingly, on August 13, 2020, FHFA issued a waiver to delay publication of our stress test results for 2020 so that we may include the alternative scenarios considered by the Federal Reserve Board in the summary of our results, with such other supporting analysis that the Director of FHFA may deem necessary. In September 2020, in light of the continued uncertainty posed by the COVID-19 pandemic, the Federal Reserve Board published alternative hypothetical scenarios featuring severe recessions. We will publish our 2020 stress test results after FHFA provides us with a revised publication timeframe.

FHFA Proposed Liquidity Requirements

In June 2020, FHFA instructed us to meet prescriptive liquidity requirements. In December 2020, those requirements became effective and FHFA issued a proposed rule in line with the updated requirements. The proposed rule, if adopted as a final rule, will be effective as of September 2021. Under the requirements, we must hold more liquid assets than under our previous framework, which negatively impacts our net interest income.

The proposed rule and our current liquidity requirements have four components we must meet:

- a short-term cash flow metric that requires us to meet our expected cash outflows and continue to provide liquidity to the market over a 30-day period of stress, plus an additional $10 billion buffer;
- an intermediate cash flow metric that requires us to meet our expected cash outflows and continue to provide liquidity to the market over a 365-day period of stress;
- a specified minimum long-term debt to less-liquid asset ratio. Less-liquid assets are those that are not eligible to be pledged as collateral to the Fixed Income Clearing Corporation; and
- a requirement that we fund our assets with liabilities that have a specified minimum term relative to the term of the assets.

As of December 31, 2020, we were in compliance with these requirements.

Guaranty Fees and Pricing

Our guaranty fees and pricing are subject to regulatory, legislative and conservatorship requirements:

- FHFA, in its capacity as conservator, has provided guidance relating to our guaranty fee pricing for new single-family acquisitions. FHFA's guidance requires that we meet a specified minimum return on equity target based on the conservatorship capital framework.

- In 2016, FHFA in its regulatory capacity, established minimum base guaranty fees that generally apply to our acquisitions of 30-year and 15-year single-family fixed-rate loans in lender swap transactions.
- In December 2011, Congress enacted the Temporary Payroll Tax Cut Continuation Act of 2011 ("TCCA") under which, at the direction of FHFA, we increased the guaranty fee on all single-family residential mortgages delivered to us by 10 basis points effective April 1, 2012. The revenue generated by this fee increase is paid to Treasury and helps offset the cost of a two-month extension of the payroll tax cut in early 2012. In 2012, FHFA and Treasury advised us to remit this fee increase to Treasury with respect to all loans acquired by us on or after April 1, 2012 and before January 1, 2022, and to continue to remit these amounts to Treasury on and after January 1, 2022 with respect to loans we acquired before this date until those loans are paid off or otherwise liquidated.

FHFA Rule on Uniform Mortgage-Backed Securities

We and Freddie Mac are required to align our programs, policies and practices that affect the prepayment rates of TBA-eligible MBS pursuant to an FHFA rule. The rule is intended to ensure that Fannie Mae and Freddie Mac programs, policies and practices that individually have a material effect on cash flows (including policies that affect prepayment speeds) are and will remain aligned regardless of whether we and Freddie Mac are in conservatorship. The rule provides a non-exhaustive list of covered programs, policies and practices, including management decisions or actions about: single-family guaranty fees; the spread between the note rate on the mortgage and the pass-through coupon on the MBS; eligibility standards for sellers, servicers, and private mortgage insurers; distressed loan servicing requirements; removal of mortgage loans from securities; servicer compensation; and proposals that could materially change the credit risk profile of the single-family mortgages securitized by a GSE.

Prior to this FHFA rule, we, Freddie Mac and FHFA undertook alignment efforts with the goal of ensuring consistency of prepayment speeds between Fannie Mae-issued and Freddie Mac-issued securities. In response to this rule, we also created a process aimed at ensuring any changes to our programs, policies and practices do not have a material effect on cash flows. Accordingly, we believe that our policies and practices are generally aligned with the requirements specified by FHFA pursuant to the rule. FHFA may mandate further alignment efforts in the future, and the impact of any such efforts on our business or our MBS is uncertain.

Housing Goals

Our housing goals, which are established by FHFA in accordance with the GSE Act, require that a specified amount of mortgage loans we acquire meet standards relating to affordability or location. For single-family goals, our acquisitions are measured against the lower of benchmarks set by FHFA or the level of goals-qualifying originations in the primary mortgage market. Multifamily goals are established as a number of units to be financed.

In October 2020, FHFA determined that we met all of our 2019 single-family and multifamily housing goals. We will report our 2020 housing goals performance to FHFA in March 2021, and FHFA will make a final determination regarding our 2020 performance later in the year, after data regarding the share of goals-qualifying originations in the primary mortgage market, reported under the Home Mortgage Disclosure Act, becomes available. The tables below display information about our housing goals and performance against our goals.

Single-Family Housing Goals[(1)]

	2019			2020
	FHFA Benchmark	Single-Family Market Level	Result	FHFA Benchmark
Low-income (≤80% of area median income) families home purchases	24 %	26.6 %	27.8 %	24 %
Very low-income (≤50% of area median income) families home purchases	6	6.6	6.5	6
Low-income areas home purchases[(2)]	19	22.9	24.5	19
Low-income and high-minority areas home purchases[(3)]	14	18.1	19.5	14
Low-income families refinances	21	24.0	23.8	21

(1) The FHFA benchmarks and our results are expressed as a percentage of the total number of eligible single-family mortgages acquired during the period. The Single-Family Market level is the percentage of eligible single-family mortgages originated in the primary mortgage market.

(2) These mortgage loans must be secured by a property that is (a) in a low-income census tract, (b) in a high-minority census tract and affordable to moderate-income families (those with incomes less than or equal to 100% of area median income), or (c) in a designated disaster area and affordable to moderate-income families.

(3) These mortgage loans must be secured by a property that is (a) in a low-income census tract or (b) in a high-minority census tract and affordable to moderate-income families.

Multifamily Housing Goals

	2019		2020
	Goal	Result	Goal
		(in units)	
Low-income families	315,000	385,763	315,000
Very low-income families	60,000	79,649	60,000
Small affordable multifamily properties[1]	10,000	17,832	10,000

(1) Small affordable multifamily properties are those with 5 to 50 units that are affordable to low-income families.

In December 2020, FHFA established single-family and multifamily housing goals for Fannie Mae and Freddie Mac for 2021. In the past, FHFA has established housing goals for a three-year period, but due to the COVID-19 pandemic and associated economic uncertainty, FHFA established benchmark levels for only the 2021 calendar year. The benchmark levels for our single-family and multifamily housing goals remain the same as those applicable for 2020. As described in "Risk Factors—GSE and Conservatorship Risk," actions we may take to meet our housing goals and duty to serve requirements described below may increase our credit losses and credit-related expense.

Duty to Serve Underserved Markets

The GSE Act requires that we serve very low-, low-, and moderate-income families in three specified underserved markets: manufactured housing, affordable housing preservation and rural housing. In December 2016, FHFA published a final rule implementing our duty to serve these underserved markets. Under the rule, we are required to adopt an underserved markets plan for each underserved market covering a three-year period that sets forth the activities and objectives we will undertake to meet our duty to serve that market. Our underserved markets plans, which are effective for 2018 to 2020, received non-objections from FHFA, were initially finalized and published in December 2017 and have been updated since that time.

The types of activities that are eligible for duty to serve credit in each underserved market are summarized below:

- *Manufactured housing market.* For the manufactured housing market, duty to serve credit is available for eligible activities relating to manufactured homes (whether titled as real property or personal property (known as chattel)) and loans for specified categories of manufactured housing communities.
- *Affordable housing preservation market.* For the affordable housing preservation market, duty to serve credit is available for eligible activities relating to preserving the affordability of housing for renters and buyers under specified programs enumerated in the GSE Act and other comparable affordable housing programs administered by state and local governments, subject to FHFA approval. Duty to serve credit also is available for activities related to small multifamily rental properties, energy efficiency improvements on existing multifamily rental and single-family first lien properties, certain shared equity homeownership programs, the purchase or rehabilitation of certain distressed properties, and activities under HUD's Choice Neighborhoods Initiative and Rental Assistance Demonstration programs.
- *Rural housing market.* For the rural housing market, duty to serve credit is available for eligible activities related to housing in rural areas, including activities related to housing in high-needs rural regions and for high-needs rural populations.

FHFA's evaluation guidance communicates FHFA's expectations regarding the development of the underserved markets plans and describes the annual process by which FHFA will evaluate our achievements under the plans, with performance results to be reported to Congress annually. If FHFA determines that we failed to meet the requirements of an underserved markets plan, it may result in the imposition of a housing plan that could require us to take additional steps. In October 2020, FHFA reported its determination that we complied with our 2019 duty to serve requirements and its finding that we performed a satisfactory job of increasing the liquidity and distribution of available capital in each of the three underserved markets. FHFA will determine in 2021 our performance with respect to our 2020 duty to serve obligations.

In December 2020, FHFA advised us that it has no objection to our 2021 duty-to-serve plan.

Swap Transactions; Minimum Capital and Margin Requirements

As a result of the Dodd-Frank Act, we are required to submit new swap transactions for clearing to a derivatives clearing organization. Additionally, in October 2015, an inter-agency body of regulators issued a final rule under the act governing margin and capital requirements applicable to entities that are subject to their oversight. The rule is effective in two phases and each phase requires that we implement operational changes and changes relating to the collateral we collect and provide for swap transactions. The first phase of the rule became effective in 2017. Effectiveness of the second phase of the rule was scheduled for September 2020, but was delayed to September 2021 in light of exigent circumstances caused by the COVID-19 pandemic. This phase will require additional operational changes and changes to collateral requirements, which may increase the costs associated with hedging our retained mortgage portfolio.

Risk Retention

In 2014, an inter-agency body of regulators issued a final rule implementing the Dodd-Frank Act's credit risk retention requirement. The final rule generally requires sponsors of securitization transactions to retain a 5% economic interest in the credit risk of the securitized assets. The rule offers several compliance options, one of which is to have either Fannie Mae or Freddie Mac (so long as they remain in conservatorship or receivership with capital support from the United States) securitize and fully guarantee the assets, in which case no further retention of credit risk is required. A potential exit from conservatorship, or changes we make in our business upon any potential exit from conservatorship to comply with the rule, could reduce our market share or adversely impact our business. Securities backed solely by mortgage loans meeting the definition of a "qualified residential mortgage" are exempt from the risk retention requirements of the rule. The rule currently defines "qualified residential mortgage" to have the same meaning as the term "qualified mortgage" as defined by the CFPB in connection with its ability-to-repay rule discussed below.

Ability-to-Repay Rule and the Qualified Mortgage Patch

The Dodd-Frank Act amended the Truth in Lending Act ("TILA") to require creditors to determine that borrowers have a "reasonable ability to repay" most mortgage loans prior to making such loans. If a creditor fails to comply, a borrower may be able to offset a portion of the amount owed in a foreclosure proceeding or recoup monetary damages. The rule offers several options for complying with the ability-to-repay requirement, including making loans that meet certain terms and characteristics (referred to as "qualified mortgages"), which may provide creditors and their assignees with special protection from liability. A loan will be a standard qualified mortgage under the rule if, among other things, (1) the points and fees paid in connection with the loan do not exceed 3% of the total loan amount, (2) the loan term does not exceed 30 years, (3) the loan is fully amortizing with no negative amortization, interest-only or balloon features and (4) the debt-to-income ("DTI") ratio on the loan does not exceed 43% at origination and is underwritten according to Appendix Q in the rule. The CFPB also created the qualified mortgage "patch," pursuant to which a special class of conventional mortgage loans are considered qualified mortgages if they (1) meet the points and fees, term and amortization requirements of qualified mortgages generally and (2) are eligible for sale to Fannie Mae or Freddie Mac. In 2013, FHFA directed Fannie Mae and Freddie Mac to limit our acquisition of single-family loans to those loans that meet the points and fees, term and amortization requirements for qualified mortgages, or to loans that are exempt from the ability-to-repay rule, such as loans made to investors.

In December 2020, the CFPB published a final rule that eliminates the qualified mortgage patch and replaces the current 43% DTI ratio limit and Appendix Q requirements for a standard qualified mortgage with a pricing and underwriting framework. The pricing framework hinges on the difference between a loan's annual percentage rate ("APR") and the average prime offer rate ("APOR") for comparable transactions. A loan will receive a conclusive presumption—a safe harbor for lenders—that the consumer had the ability to repay if the APR does not exceed the APOR by 1.50 percentage points. A loan will receive a rebuttable presumption that the consumer had the ability to repay if the APR exceeds the APOR by 1.50 percentage points but by less than 2.25 percentage points. Higher pricing thresholds exist for smaller loan amounts and manufactured housing loans. The underwriting framework requires lenders to consider and verify the borrower's current or reasonably expected income, assets, debt obligations, alimony, child support, and monthly DTI ratio or residual income before originating a loan.

The final rule is scheduled to go into effect in March 2021, with lenders required to comply beginning in July 2021. Between March and July 1, 2021 lenders can choose to comply with either the qualified mortgage patch or the new qualified mortgage rule. On February 4, 2021, the Acting Director of the CFPB indicated that he may seek to delay implementation of the new rule to preserve flexibility for President Biden's nominee for CFPB Director, once confirmed. If the rule's implementation is delayed, the qualified mortgage patch will continue in place until the mandatory compliance date of the final rule or a replacement rule. We do not expect the final rule, as published, to impact our business significantly, but it may increase competition. We cannot predict the impact of any replacement rule that may be adopted in its stead. See "Risk Factors—GSE and Conservatorship Risk" and "—Legal, Regulatory and Other Risks" for more information on risks presented by regulatory changes in the financial services industry.

TILA-RESPA Integrated Disclosure ("TRID")

The Dodd-Frank Act required the CFPB to streamline and simplify the disclosures required under TILA and the Real Estate Settlement Procedures Act. In October 2015, the CFPB's final rule implementing these changes went into effect. Although this rule applies to mortgage originators and is not directly applicable to us, we could face potential liability for certain errors in the required disclosures in connection with the loans we acquire from lenders. It remains unclear what sorts of errors will give rise to liability. Also in October 2015, FHFA directed us and Freddie Mac not to conduct post-purchase loan file reviews for technical compliance with TRID. Consistent with FHFA's directive, we currently do not intend to exercise our contractual remedies, including requiring the lender to repurchase the loan, for noncompliance with the provisions of TRID, except in two limited circumstances: if the required form is not used; or if a particular practice would impair enforcement of the note or mortgage or would result in assignee liability, and a court of law, regulator or other authoritative body has determined that such practice violates TRID.

FHFA Rule on Credit Score Models

Under an FHFA rule that became effective in October 2019, we are required to validate and approve third-party credit score models and obtain FHFA's approval of our determination. We must evaluate the models for factors such as accuracy, reliability and integrity, as well as impacts on fair lending and the mortgage industry. In November 2020, we announced our determination that the "classic FICO® Score" from Fair Isaac Corporation should be approved for our continued use as a credit score model and FHFA's approval of this determination. This validation was an incremental step while we continue to assess additional credit score model applications in accordance with the rule. Fannie Mae uses credit scores to establish a minimum credit threshold for mortgage lending, provide a foundation for risk-based pricing, and support disclosures to investors

Single-Counterparty Credit Limit

The Federal Reserve Board has adopted rules to restrict the counterparty credit exposures of U.S.-based global systemically important banks ("U.S. GSIBs") and certain large bank holding companies, large savings and loan holding companies, and U.S. intermediate holding companies that are subsidiaries of foreign banking organizations. These rules, which have various implementation dates depending on the type of covered organization, generally limit the exposure of a covered organization to any counterparty and its affiliates to no more than 25% of the covered organization's tier 1 capital. U.S. GSIBs must adhere to a stricter limit of 15% of their tier 1 capital for exposures to any other U.S. GSIB or non-bank entity supervised by the Federal Reserve.

While Fannie Mae is in conservatorship, a covered organization's exposures involving claims on or directly and fully guaranteed by Fannie Mae are exempt from these restrictions and Fannie Mae MBS and debt can be used as collateral to reduce a banking organization's counterparty exposure. At this time, we do not know what impact, if any, these rules will have on our customers' business practices, or whether and to what extent this rule may adversely affect demand for or the liquidity of securities we issue.

In the discussion of a recent amendment to these rules, the Federal Reserve Board noted that a change in the conservatorship status of the GSEs could affect aspects of the Federal Reserve Board's regulatory framework, and that it "will continue to monitor and take into consideration any future changes to the conservatorship status of the GSEs, including the extent and type of support received by the GSEs."

The Future of LIBOR and Alternative Reference Rates

In 2017, the United Kingdom's Financial Conduct Authority, which regulates the London Inter-bank Offered Rate ("LIBOR"), announced its intention to stop persuading or compelling the group of major banks that sustains LIBOR to submit rate quotations after 2021. In November 2020, ICE Benchmark Administration, the administrator of LIBOR, stated its intention to cease publication of one-week and two-month U.S. dollar LIBOR after 2021, and to cease publication of overnight, one-month, three-month, six-month and one-year U.S. dollar LIBOR tenors after June 2023. We have exposure to one-month, three-month, six-month and one-year LIBOR, including in financial instruments that mature after June 2023. Our exposure arises from our acquisitions of loans and securities, our sales of securities, and our entry into derivative transactions that reference LIBOR. The markets for alternative reference rates are developing and, as they develop, we expect to transition to these alternative reference rates. The transition from LIBOR will require action by many market participants and leadership from organizations such as Alternative Reference Rates Committee (the "ARRC") member firms, FHFA, our advisors and regulators, and may involve action by one or more legislatures in the U.S and abroad. We are actively seeking to facilitate an orderly transition from LIBOR.

We have established an internal office focused on LIBOR transition issues that is overseen by our LIBOR Enterprise Steering Council, which includes members of senior management. We also coordinate with FHFA on our LIBOR transition efforts. As part of these efforts, we have sought to identify the risks inherent in this transition and engaged external business and legal consultants focused on LIBOR and alternative indices. We continue to analyze potential risks associated with the LIBOR transition, including financial, operational, legal, reputational and compliance risks.

In addition to the work we are doing on an enterprise level to facilitate an orderly transition from LIBOR, we also are a voting member of the ARRC and participate in its working groups. The ARRC is a group of private-market participants convened by the Federal Reserve Board and the Federal Reserve Bank of New York to identify a set of alternative U.S. dollar reference interest rates and an adoption plan for those alternative rates. Banking and financial regulators, including FHFA, also participate in the ARRC as ex-officio members. In 2017, the ARRC recommended an alternative reference rate, referred to as the Secured Overnight Financing Rate ("SOFR"). The Federal Reserve Bank of New York began publishing SOFR in 2018. In support of the ARRC's efforts to develop SOFR as a key market index, we issued the market's first SOFR securities in 2018, and through December 31, 2020 we have issued a total of $136.1 billion in SOFR-indexed floating-rate corporate debt. We created SOFR-indexed adjustable rate mortgage products for new originations for our single-family business and our multifamily business during 2020. We ceased purchasing any LIBOR adjustable-rate mortgage loans at the end of 2020. We also started issuing SOFR-indexed REMIC securities and ceased issuing new LIBOR REMIC securities in 2020. In addition, we have entered into SOFR-indexed interest rate swaps and futures transactions to further support the development of this emerging index.

Currently, our LIBOR-indexed derivative contracts represent a substantial portion of our LIBOR exposure. In fall 2020, we announced that we agreed to industry-adopted amendments aimed at an orderly transition to SOFR upon any LIBOR cessation for our derivatives contracts. Another principal source of our exposure to LIBOR arises from (1) single-family and multifamily LIBOR-based adjustable-rate mortgage loans that we have securitized or own and (2) LIBOR-indexed REMIC structured securities that we have issued. Each of those products allow us to select a replacement index if LIBOR ceases to be published. In addition, we implemented fallback language based on the recommendations of the ARRC for new issuances of these products during 2020.

See "Risk Factors—Market and Industry Risk" for a discussion of the risks to our results of operations, financial condition, liquidity and net worth posed by the potential discontinuance of LIBOR.

Human Capital

Our employees are key to ensuring our long-term success. They are essential to our goals of being a return-oriented company able to attract private capital while managing risk, increasing our operational agility and undertaking a digital transformation. As of December 31, 2020, we had approximately 7,700 employees. Because we design, build and maintain complex systems to support our specialized role in the secondary mortgage market, approximately 38% of our employees work in technology-related jobs. Competition is high for employees with technology skills in the Washington, DC and Dallas metropolitan areas, where most of our employees work. Despite conservatorship, an uncertain future, and limitations on the compensation we are able to offer, we believe many employees and potential recruits are attracted by our mission and the compelling nature of our work. As of December 31, 2020, approximately 4% of positions across the company were vacant, and approximately 6% of our technology-related positions were vacant.

Employee Engagement

We are committed to maintaining an engaged workforce as we believe engagement is critical to the ongoing achievement of the company's and the conservator's goals. We monitor employee engagement through regular surveys. In 2020 the vast majority of our employees agreed with statements such as whether they would recommend Fannie Mae as a great place to work, which we consider to be strong indicators of their engagement. We believe our ability to recruit and retain employees and keep them engaged is influenced by the opportunity to do interesting work that supports our mission. We also offer employee benefits to encourage involvement in socially positive efforts, including those that echo our mission. Specifically, we offer employees up to $5,000 per year in matching charitable gifts (subject to overall available funding) and 10 hours of paid leave each month to engage in volunteer activities. We have also established a relief fund to which our employees can make charitable donations to assist employees who have suffered losses as a result of a natural disaster or other catastrophic event.

Employee Development

We invest in our employees' development, because we believe doing so supports the success of the company as well as our employees. We seek to provide training and opportunities that enable employees to develop digital, leadership and other critical skills we need to achieve our strategy and fulfill our mission. In recent years, we have worked on instilling lean management techniques, practices and behaviors throughout our workforce and Agile development principles for employees engaged in product development. We also emphasize to our employees their responsibility for and role in managing risk through our risk-assessment and monitoring activities, training and corporate messaging. In

2020, these efforts enabled us to respond to demands created by the COVID-19 pandemic and record-high volumes resulting from historically low interest rates with commercial speed and agility.

Safety and Resiliency

We took a number of steps in 2020 to protect the safety and resiliency of our workforce. From the onset of the COVID-19 pandemic in mid-March through early October 2020, we required nearly all of our workforce to work remotely. Recognizing that our employees were balancing a number of competing obligations, we focused on employee wellness and, with the help of a campaign to spotlight flexible work options, we created an environment that supports our business needs while helping employees better meet their personal obligations. We also increased the amount of family sick leave available to employees and made other adjustments to support employees. In early October 2020, we began allowing employees, on a voluntary basis, to request approval to return to work at some of our office locations and established mandatory COVID-19 safety protocols at those locations. We expect a significant majority of our employees will continue to work remotely for the foreseeable future. To date, our business resiliency plans and technology systems have effectively supported this remote work arrangement.

Diversity and Inclusion

We seek to foster an environment in which all employees are treated with dignity and respect, have the opportunity to contribute to meaningful work, and perform that work in an inclusive environment free from discrimination, harassment, and retaliation. We believe this commitment helps us attract and retain a skilled, diverse workforce. As of December 31, 2020, racial or ethnic minorities constituted 55% of our overall workforce and 24% of our officer-level employees, and women constituted 44% of our overall workforce and 37% of our officer-level employees. Supporting our role in the secondary mortgage market requires employees with specialized technology skills. As a result, we consider our workforce diversity in the context of fintech companies, whose operations are based on a blend of financial services products and technology platforms, rather than financial services firms or other companies that have significant retail operations or a large number of administrative roles. We sponsor programs and activities to cultivate a diverse and inclusive work environment by focusing on inclusive leadership principles, talent development, enterprise accessibility, team and group dynamics, and a consistent communications strategy that reinforces the practice of driving inclusion to achieve innovative solutions. We also support voluntary, grassroots employee resource groups that are open to all employees, support diversity and inclusion, and provide a forum for members to come together for professional growth and development, cultural awareness, education, community service, and networking across the organization. In 2020, our senior management also sponsored a series of “Courageous Conversations” to facilitate safe-space discussions for employees to gain an understanding of and share differing viewpoints on issues related to social justice.

See “Corporate Governance—Human Capital Management Oversight” for information on oversight of human capital management by our Board of Directors’ Compensation and Human Capital Committee. See “Risk Factors—GSE and Conservatorship Risk” for a discussion of how restrictions on our compensation and uncertainty with respect to our future negatively affects our ability to retain and recruit executives and other employees.

Where You Can Find Additional Information

We make available free of charge through our website our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and all other SEC reports and amendments to those reports as soon as reasonably practicable after we electronically file the material with, or furnish it to, the SEC. Our website address is www.fanniemae.com. Materials that we file with the SEC are also available from the SEC’s website, www.sec.gov. You may also request copies of any filing from us, at no cost, by calling the Fannie Mae Investor Relations & Marketing Helpline at 1-800-2FANNIE (1-800-232-6643), or by writing to Fannie Mae, Attention: Investor Relations & Marketing, 1100 15th Street, NW, Washington, DC 20005.

References in this report to our website or to the SEC’s website do not incorporate information appearing on those websites unless we explicitly state that we are incorporating the information.

Forward-Looking Statements

This report includes statements that constitute forward-looking statements within the meaning of Section 21E of the Exchange Act. In addition, we and our senior management may from time to time make forward-looking statements in our other filings with the SEC, our other publicly available written statements and orally to analysts, investors, the news media and others. Forward-looking statements often include words such as “expect,” “anticipate,” “intend,” “plan,” “believe,” “seek,” “estimate,” “forecast,” “project,” “would,” “should,” “could,” “likely,” “may,” “will” or similar words. Examples of forward-looking statements in this report include, among others, statements relating to our expectations regarding the following matters:

- our future financial performance, financial condition and net worth, and the factors that will affect them;
- the impact of the COVID-19 pandemic, and the actions that we and federal, state, and local governments are taking in response to it, on our business, financial results, financial condition, returns on capital, debt funding needs, business plans, and on mortgage market and economic conditions, and the factors that will affect the pandemic's impact;
- our expectations for, and the impact of fluctuations in, our acquisition volumes, market share, guaranty fees, acquisition credit characteristics, or the pace at which loans in our book of business turn over;
- our plans relating to and the effects of our credit risk transfer transactions, as well as the factors that will affect our engagement in future transactions;
- our loss mitigation activity and its impact;
- our business plans and strategies, their development, and their impact;
- our work and plans to build capital to meet the requirements of the enterprise regulatory capital framework as well as to build management buffers;
- the impact of the enterprise regulatory capital framework and the January 2021 letter agreement with Treasury on our business and our financial performance and condition;
- future increases in our net worth and in the liquidation preference of the senior preferred stock, and attainment of the capital reserve end date;
- the impact of the CFPB's final rule eliminating the qualified mortgage patch on our business;
- volatility in our future financial results and efforts we may make to address volatility, including our expectations relating to our hedge accounting program and its impact;
- the size and composition of our retained mortgage portfolio;
- the amount and timing of our purchases of loans from MBS trusts;
- the impact on our business or financial results and the timing of legislation and regulation;
- our payments to HUD and Treasury funds under the GSE Act;
- mortgage market and economic conditions (including U.S. GDP, unemployment rates, mortgage rates, home price growth, housing demand, housing activity, housing starts, home sales, rent growth, multifamily vacancy rates, and the future volume of and characteristics of mortgage originations) and the impact of mortgage market and economic conditions on our business and financial results;
- our future off-balance sheet exposure to Freddie Mac-issued securities;
- the risks to our business;
- future delinquency rates, default rates, forbearances and other loss mitigation activity, foreclosures, and credit losses relating to the loans in our guaranty book of business and the factors that will affect them, including the impact of the COVID-19 pandemic;
- our expectations relating to our TDRs;
- the performance of loans in our book of business and the factors that will affect such performance;
- our loan acquisitions, the credit risk profile of such acquisitions, and the factors that will affect them;
- our expectations regarding our employees' remote work arrangements;
- our future liquidity, liquidity requirements, the amount of our outstanding debt, and expectations for how we will meet our debt obligations; and
- our response to legal and regulatory proceedings and their impact on our business or financial condition.

Forward-looking statements reflect our management's current expectations, forecasts or predictions of future conditions, events or results based on various assumptions and management's estimates of trends and economic factors in the markets in which we are active and that otherwise impact our business plans. Forward-looking statements are not guarantees of future performance. By their nature, forward-looking statements are subject to significant risks and uncertainties and changes in circumstances. Our actual results and financial condition may differ, possibly materially, from the anticipated results and financial condition indicated in these forward-looking statements.

There are a number of factors that could cause actual conditions, events or results to differ materially from those described in our forward-looking statements, including, among others, the following:

- uncertainty regarding our future, our exit from conservatorship and our ability to raise or earn the capital needed to meet our capital requirements;
- uncertainty surrounding the duration, spread and severity of COVID-19 pandemic; the actions taken to contain the virus or treat its impact, including government actions to mitigate the economic impact of the pandemic and the widespread availability and public acceptance of a COVID-19 vaccine; the extent to which consumers, workers and families feel safe resuming pre-pandemic activities; the nature, extent and success of the forbearance, payment deferrals, modifications and other loss mitigation options we provide to borrowers affected by the pandemic; accounting elections and estimates relating to the impact of the COVID-19 pandemic; borrower and renter behavior in response to the pandemic and its economic impact; how quickly and to what extent normal economic and operating conditions can resume, including whether any future outbreaks or increases in the daily number of new COVID-19 cases interrupt economic recovery; and how quickly and to what extent affected borrowers, renters and counterparties can recover from the negative economic impact of the pandemic;
- the market and regulatory changes we anticipate and our readiness for them, including changes relating to an eventual exit from conservatorship, the competitive landscape, and the need to attract private investment;
- the impact of the senior preferred stock purchase agreement and the enterprise regulatory capital framework, as well as future legislative and regulatory requirements or changes affecting us, such as the enactment of housing finance reform legislation, including changes that limit our business activities or our footprint;
- actions by FHFA, Treasury, HUD, the CFPB or other regulators, Congress, or state or local governments that affect our business, including our new capital requirements and recent changes or potential further changes in the ability-to-repay rule that eliminates the qualified mortgage patch for GSE-eligible loans;
- changes in the structure and regulation of the financial services industry;
- the timing and level of, as well as regional variation in, home price changes;
- future interest rates and credit spreads;
- developments that may be difficult to predict, including: market conditions that result in changes in our net amortization income from our guaranty book of business, fluctuations in the estimated fair value of our derivatives and other financial instruments that we mark to market through our earnings; and developments that affect our loss reserves, such as changes in interest rates, home prices or accounting standards, or events such as natural disasters or the emergence of widespread health emergencies or pandemics;
- uncertainties relating to the discontinuance of LIBOR, or other market changes that could impact the loans we own or guarantee or our MBS;
- credit availability;
- disruptions or instability in the housing and credit markets;
- the size and our share of the U.S. mortgage market and the factors that affect them, including population growth and household formation;
- growth, deterioration and the overall health and stability of the U.S. economy, including U.S. GDP, unemployment rates, personal income and other indicators thereof;
- changes in the fiscal and monetary policies of the Federal Reserve;
- our and our competitors' future guaranty fee pricing and the impact of that pricing on our competitive environment and guaranty fee revenues;
- the volume of mortgage originations;
- the size, composition, quality and performance of our guaranty book of business and retained mortgage portfolio;
- the competitive environment in which we operate, including the impact of legislative, regulatory or other developments on levels of competition in our industry and other factors affecting our market share;
- how long loans in our guaranty book of business remain outstanding;
- challenges we face in retaining and hiring qualified executives and other employees;
- the effectiveness of our business resiliency plans and systems;

- changes in the demand for Fannie Mae MBS, in general or from one or more major groups of investors;
- our conservatorship, including any changes to or termination (by receivership or otherwise) of the conservatorship and its effect on our business;
- the investment by Treasury, including the impact of recent changes or potential future changes to the terms of the senior preferred stock purchase agreement, and its effect on our business, including restrictions imposed on us by the terms of the senior preferred stock purchase agreement, the senior preferred stock, and Treasury's warrant, as well as the extent that these or other restrictions on our business and activities are applied to us through other mechanisms even if we cease to be subject to these agreements and instruments;
- adverse effects from activities we undertake to support the mortgage market and help borrowers, renters, lenders and servicers;
- actions we may be required to take by FHFA, in its role as our conservator or as our regulator, such as actions in response to the COVID-19 pandemic, changes in the type of business we do, or actions relating to UMBS or our resecuritization of Freddie Mac-issued securities;
- limitations on our business imposed by FHFA, in its role as our conservator or as our regulator;
- our future objectives and activities in support of those objectives, including actions we may take to reach additional underserved creditworthy borrowers;
- the possibility that changes in leadership at FHFA or the Administration may result in changes in FHFA's or Treasury's willingness to pursue our exit from conservatorship;
- our reliance on CSS and the common securitization platform for a majority of our single-family securitization activities, our reduced influence over CSS as a result of recent changes to the CSS limited liability company agreement, and any additional changes FHFA may require in our relationship with or in our support of CSS;
- a decrease in our credit ratings;
- limitations on our ability to access the debt capital markets;
- constraints on our entry into new credit risk transfer transactions;
- significant changes in forbearance, modification and foreclosure activity;
- our resumption of and the volume and pace of future nonperforming and reperforming loan sales and their impact on our results and serious delinquency rates;
- changes in borrower behavior;
- actions we may take to mitigate losses, and the effectiveness of our loss mitigation strategies, management of our REO inventory and pursuit of contractual remedies;
- defaults by one or more institutional counterparties;
- resolution or settlement agreements we may enter into with our counterparties;
- our need to rely on third parties to fully achieve some of our corporate objectives;
- our reliance on mortgage servicers;
- changes in GAAP, guidance by the Financial Accounting Standards Board and changes to our accounting policies;
- changes in the fair value of our assets and liabilities;
- the stability and adequacy of the systems and infrastructure that impact our operations, including ours and those of CSS, our other counterparties and other third parties;
- the impact of increasing interdependence between the single-family mortgage securitization programs of Fannie Mae and Freddie Mac in connection with UMBS;
- operational control weaknesses;
- our reliance on models and future updates we make to our models, including the assumptions used by these models;
- domestic and global political risks and uncertainties;
- natural disasters, environmental disasters, terrorist attacks, widespread health emergencies or pandemics, or other major disruptive events;

- severe weather events, fires, floods or other events for which we may be uninsured or under-insured or that may affect our counterparties, and other risks resulting from climate change and efforts to address climate change;
- cyber attacks or other information security breaches or threats; and
- the other factors described in “Risk Factors.”

Readers are cautioned not to unduly rely on the forward-looking statements we make and to place these forward-looking statements into proper context by carefully considering the factors discussed in “Risk Factors” in this report. These forward-looking statements are representative only as of the date they are made, and we undertake no obligation to update any forward-looking statement as a result of new information, future events or otherwise, except as required under the federal securities laws.

Item 1A. Risk Factors

Risk Factors Summary:

The summary of risks below provides an overview of the principal risks we are exposed to in the normal course of our business activities. This summary does not contain all of the information that may be important to you, and you should read the more detailed discussion of risks that follows this summary.

GSE and Conservatorship Risk

- The future of our company is uncertain.
- Our business activities are significantly affected by the conservatorship and the senior preferred stock purchase agreement and could be significantly impacted by the enterprise regulatory capital framework.
- Our regulator is authorized or required to place us into receivership under specified conditions, which would result in our liquidation, and FHFA, acting as receiver, proceeding to realize on our assets. Amounts recovered by our receiver from these actions may not be sufficient to repay the liquidation preference of any series of our preferred stock or to provide any proceeds to common shareholders.
- Our business and results of operations may be materially adversely affected if we are unable to retain and recruit well-qualified executives and other employees. The conservatorship, the uncertainty of our future and limitations on our executive and employee compensation put us at a disadvantage compared to many other companies with which we compete for talent.
- Pursuing our housing goals and duty to serve obligations may adversely affect our business, results of operations and financial condition.
- The conservatorship and agreements with Treasury adversely affect our common and preferred shareholders.
- The liquidity and market value of our MBS could be adversely affected by developments in the UMBS market, including those connected with our or Freddie Mac’s exit from conservatorship.
- Our issuance of UMBS and structured securities backed by Freddie Mac-issued securities has increased our operational and counterparty credit risk.
- Our reliance on CSS and the common securitization platform has increased our counterparty and third-party risk.
- We are limited in our ability to diversify our business and may be prohibited from undertaking activities that management believes would benefit our business.
- An active trading market in our equity securities may cease to exist, which would adversely affect the market price and liquidity of our common and preferred stock.

COVID-19 Pandemic Risk

- We expect the COVID-19 pandemic to continue to adversely affect our business and financial results.

Credit Risk

- We may incur significant credit losses and credit-related expenses on the loans in our book of business.
- One or more of our institutional counterparties may fail to fulfill their contractual obligations to us, resulting in financial losses, business disruption and decreased ability to manage risk.

- Our financial condition or results of operations may be adversely affected if mortgage servicers fail to perform their obligations to us.
- We may incur losses as a result of claims under our mortgage insurance policies not being paid in full or at all.
- Mortgage fraud could result in significant financial losses and harm to our reputation.
- We may suffer losses if borrowers are unable to obtain property or flood insurance, if their claims under insurance policies are not paid, or if they suffer property damage as a result of a hazard for which we do not require insurance, such as flooding outside of certain areas.
- The occurrence of major natural or other disasters in the United States or its territories and the impact of climate change could negatively impact our credit losses and credit-related expenses.

Operational Risk

- A failure in our operational systems or infrastructure, or those of third parties, could materially adversely affect our business, impair our liquidity, cause financial losses and harm our reputation.
- A breach of the security of our systems or facilities, or those of third parties with which we do business, including as a result of cyber attacks, could damage or disrupt our business or result in the disclosure or misuse of confidential information, which could damage our reputation, result in regulatory sanctions and/or increase our costs and cause losses.
- Our concurrent implementation of multiple new initiatives may increase our operational risk and result in one or more material weaknesses in our internal control over financial reporting.
- Material weaknesses in our internal control over financial reporting could result in errors in our reported results or disclosures that are not complete or accurate.
- Failure of our models to produce reliable results may adversely affect our ability to manage risk and make effective business decisions.

Liquidity and Funding Risk

- Limitations on our ability to access the debt capital markets could have a material adverse effect on our ability to fund our operations, and our liquidity contingency plans may be difficult or impossible to execute during a sustained liquidity crisis.
- A decrease in the credit ratings on our senior unsecured debt could have an adverse effect on our ability to issue debt on reasonable terms, particularly if such a decrease were not based on a similar action on the credit ratings of the U.S. government. A decrease in our credit ratings also could require that we post additional collateral for our derivatives contracts.

Market and Industry Risk

- Changes in interest rates or our loss of the ability to manage interest-rate risk successfully could adversely affect our financial results and condition, and increase interest-rate risk.
- Changes in spreads could materially impact our results of operations, net worth and the fair value of our net assets.
- Uncertainty relating to the potential discontinuance of LIBOR may adversely affect our results of operations, financial condition, liquidity and net worth.
- A deterioration in general economic conditions, particularly home prices and employment trends or the financial markets may materially adversely affect our business and financial condition.
- A decline in activity in the U.S. housing market or increasing interest rates could lower our business volumes or otherwise adversely affect our results of operations, net worth and financial condition.

Legal and Regulatory Risk

- Regulatory changes in the financial services industry may negatively impact our business.
- Legislative, regulatory or judicial actions could negatively impact our business, results of operations, financial condition or net worth.

General Risk

- Our business and financial results could be materially adversely affected by legal or regulatory proceedings.
- Changes in accounting standards and policies can be difficult to predict and can materially impact how we record and report our financial results.
- In many cases, our accounting policies and methods, which are fundamental to how we report our financial condition and results of operations, require management to make judgments and estimates about matters that are inherently uncertain. Management also relies on models in making these estimates.

Risk Factors

Refer to “MD&A—Key Market Economic Indicators,” “MD&A—Risk Management,” “MD&A—Single-Family Business” and “MD&A—Multifamily Business” for more detailed descriptions of the primary risks to our business and how we seek to manage those risks.

The risks we face could materially adversely affect our business, results of operations, financial condition, liquidity and net worth, and could cause our actual results to differ materially from our past results or the results contemplated by any forward-looking statements we make. We believe the risks described below and in the other sections of this report referenced above are the most significant we face; however, these are not the only risks we face. We face additional risks and uncertainties not currently known to us or that we currently believe are immaterial.

GSE and Conservatorship Risk

The future of our company is uncertain.

The company faces an uncertain future, including how long we will continue to exist in our current form, the extent of our role in the market, the level of government support of our business, how long we will be in conservatorship, what form we will have, what ownership interest, if any, our current common and preferred stockholders will hold in us after the conservatorship is terminated, and whether we will continue to exist following conservatorship. The conservatorship is indefinite in duration and the timing, conditions and likelihood of our emerging from conservatorship are uncertain. Our conservatorship could terminate through a receivership. Termination of the conservatorship, other than in connection with a receivership, requires Treasury’s consent under the senior preferred stock purchase agreement; unless (i) the pending significant lawsuits relating to the amendment of the senior preferred stock purchase agreement and/or the conservatorship have been resolved, and (ii) for two or more consecutive quarters, our common equity tier 1 capital, together with any other common stock that we may issue in a public offering, equals or exceeds 3% of our “adjusted total assets” under our enterprise regulatory capital framework. We estimate that, had the new framework been applicable to us as of December 31, 2020, we would have been required to hold approximately $185 billion in adjusted total capital, of which approximately $135 billion must be in the form of common equity tier 1 capital.

The current Administration has not articulated a formal position on housing finance reform or the future of Fannie Mae and Freddie Mac, although FHFA’s strategic plan for conservatorship, issued in 2019, includes as an objective preparing Fannie Mae and Freddie Mac for their eventual exits from conservatorship. Actions taken to reform the housing finance system could have a significant impact on our structure, our role in the secondary mortgage market, our capitalization, our business and our competitive environment.

Congress may consider legislation, or federal agencies such as FHFA may consider regulations or administrative actions, to increase the competition we face, reduce our market share, expand our obligations to provide funds to Treasury, constrain our business operations, or subject us to other obligations that may adversely affect our business. We cannot predict the timing or final content of housing finance reform legislation or other legislation, regulations or administrative actions that will impact our activities, nor can we predict the extent of such impact.

Our business activities are significantly affected by the conservatorship and the senior preferred stock purchase agreement and could be significantly impacted by the enterprise regulatory capital framework.

In conservatorship our business is not managed with a strategy to maximize shareholder returns while fulfilling our mission. As conservator, FHFA can direct us to enter into contracts or enter into contracts on our behalf, and generally has the power to transfer or sell any of our assets or liabilities. In addition, our directors have no fiduciary duties to any person or entity except to the conservator. Accordingly, our directors are not obligated to consider the interests of the company, the holders of our equity or debt securities, or the holders of Fannie Mae MBS in making or approving a decision unless specifically directed to do so by the conservator.

As conservator, FHFA can prevent us from engaging in business activities or transactions that we believe would benefit our business and financial results. For example, because FHFA must approve changes to the national loan-level price adjustments we charge and can direct us to make other changes to our guaranty fee pricing, our ability to address changing market conditions, pursue certain strategic objectives, or manage the mix of loans we acquire is constrained. Additionally, FHFA may require us to undertake activities that are costly or difficult to implement.

In November 2020, FHFA adopted a final rule establishing a new regulatory capital framework for the GSEs. The new regulatory capital framework implements statutory capital requirements and establishes supplemental risk-based and leverage-based capital requirements. Our capital requirements under the enterprise regulatory capital framework may require us to change or limit certain business activities. We may be required to take actions to maintain appropriate risk-adjusted returns, which could adversely affect our competitive position. Additionally, these requirements depend upon the timing of exiting conservatorship.

Even if we are released from conservatorship, we remain subject to the terms of the senior preferred stock purchase agreement with Treasury, under which we issued the senior preferred stock and warrant. The senior preferred stock purchase agreement can only be canceled or modified with the consent of Treasury. The agreement includes a number of covenants that significantly restrict our business activities, and new restrictive covenants were added in the January 2021 letter agreement with Treasury that impact both our single-family and multifamily business activities. For example, one covenant provides that we may not acquire a single-family loan if, following its acquisition, in the prior 52-week period, we have acquired single-family loans with specified higher-risk characteristics in excess of the covenant's thresholds. In addition, we are currently subject to a $300 billion debt limit under our senior preferred stock purchase agreement, which will decrease to $270 billion as of December 31, 2022. The unpaid principal balance of our aggregate indebtedness was $290.0 billion as of December 31, 2020. Because of our debt limit, our business activities may be constrained. For more information about the covenants in the senior preferred stock purchase agreement and their potential impact on our business, see "Business—Conservatorship, Treasury Agreements and Housing Finance Reform—Treasury Agreements—Covenants under Treasury Agreements."

Our regulator is authorized or required to place us into receivership under specified conditions, which would result in our liquidation, and FHFA, acting as receiver, proceeding to realize on our assets. Amounts recovered by our receiver from these actions may not be sufficient to repay the liquidation preference of any series of our preferred stock or to provide any proceeds to common shareholders.

FHFA is required to place us into receivership if the Director of FHFA makes a written determination that our assets are less than our obligations or if we have not been paying our debts as they become due, in either case, for a period of 60 days after the SEC filing deadline for any of our Form 10-Ks or Form 10-Qs. Although Treasury committed to providing us funds in accordance with the terms of the senior preferred stock purchase agreement, if we need funding from Treasury to avoid triggering FHFA's obligation, Treasury may not be able to provide sufficient funds to us within the required 60 days if it has exhausted its borrowing authority, if there is a government shutdown, or if the funding we need exceeds the amount available to us under the agreement. In addition, we could be put into receivership at the discretion of the Director of FHFA at any time for the reasons set forth in the GSE Act, including if our Board or shareholders consent to the appointment of a receiver or, if under the definitions in the GSE Act, we are undercapitalized with no reasonable prospect of becoming adequately capitalized or critically undercapitalized. Under the GSE Act, FHFA succeeded to all of the rights, titles, powers and privileges of our board of directors and shareholders. In addition, we have not held sufficient core or total capital to meet the critical capital requirements in the GSE Act since 2008.

A receivership would terminate the conservatorship. In addition to the powers FHFA has as our conservator, the appointment of FHFA as our receiver would terminate all rights and claims that our shareholders and creditors may have against our assets or under our charter arising from their status as shareholders or creditors, except for their right to payment, resolution or other satisfaction of their claims as permitted under the GSE Act. If we are placed into receivership and do not or cannot fulfill our MBS guaranty obligations, there may be significant delays of any payments to our MBS holders, and the MBS holders could become unsecured creditors of ours with respect to claims made under our guaranty to the extent the mortgage collateral underlying the Fannie Mae MBS is insufficient to satisfy the claims of the MBS holders.

In the event of a liquidation of our assets, only after payment of the administrative expenses of the receiver and the immediately preceding conservator, the secured and unsecured claims against the company (including repaying all outstanding debt obligations), and the liquidation preference of the senior preferred stock, would any liquidation proceeds be available to repay the liquidation preference on any other series of preferred stock. Finally, only after the liquidation preference on all series of preferred stock is repaid would any liquidation proceeds be available for distribution to the holders of our common stock. In the event of such a liquidation, we can make no assurances that there would be sufficient proceeds to make any distribution to holders of our preferred stock or common stock, other than to Treasury as the holder of our senior preferred stock.

Our business and results of operations may be materially adversely affected if we are unable to retain and recruit well-qualified executives and other employees. The conservatorship, the uncertainty of our future and limitations on our executive and employee compensation put us at a disadvantage compared to many other companies with which we compete for talent.

Our business is highly dependent on the talents and efforts of our executives and other employees. The conservatorship, the uncertainty of our future and limitations on executive and employee compensation have had, and are likely to continue to have, an adverse effect on our ability to retain and recruit talent. Attrition in key management positions and challenges in hiring new management could harm our ability to manage our business effectively, to successfully implement strategic initiatives, and ultimately could adversely affect our financial performance.

Actions taken by Congress, FHFA and Treasury to date, or that may be taken by them or other government agencies in the future, have had, and may continue to have, an adverse effect on our retention and recruitment of executives and other employees. We are subject to significant restrictions on the amount and type of compensation we may pay while under conservatorship. For example:

- The Equity in Government Compensation Act of 2015 limits the compensation and benefits for our Chief Executive Officer to the same level in effect as of January 1, 2015 while we are in conservatorship or receivership. Accordingly, annual direct compensation for our Chief Executive Officer is limited to base salary at an annual rate of $600,000.
- The Stop Trading on Congressional Knowledge Act of 2012, known as the STOCK Act, and related FHFA regulations prohibit our senior executives from receiving bonuses during conservatorship.
- As our conservator, FHFA has the authority to approve the terms and amount of our executive compensation and may require changes to our executive compensation program. For example:
    - In 2019, FHFA directed us, for so long as we are in conservatorship, to:
        - increase the mandatory deferral period for at-risk deferred salary received by senior vice presidents and above from one year to two years, effective January 1, 2022 for executives hired before January 1, 2020 and effective January 1, 2020 for executives hired or promoted to senior vice president on or after January 1, 2020; and
        - limit base salaries for all employees to no more than $600,000.
    - In 2019, FHFA directed us to submit for conservator decision any compensation arrangement for a newly hired employee where the proposed total target direct compensation is $600,000 or above, or any increase in total target direct compensation for an existing employee where the proposed total target direct compensation is $600,000 or above. This directive continues for so long as we are in conservatorship.
    - For new executive hires and compensation increase requests for executives, FHFA has requested that we target annual direct compensation to the 25th percentile of the market to the extent practicable and subject to appropriate exceptions.
- The terms of our senior preferred stock purchase agreement with Treasury contain specified restrictions relating to compensation, including a prohibition on selling or issuing equity securities without Treasury's prior written consent except under limited circumstances, which effectively eliminates our ability to offer equity-based compensation to our employees.

As a result of the restrictions on our compensation, we have not been able to incent and reward excellent performance with compensation structures that provide upside potential to our executives, which places us at a disadvantage compared to many other companies in attracting and retaining executives. In addition, the restrictions on our compensation and the uncertainty of potential action by Congress or the Administration with respect to our future—including whether we will exit conservatorship, how long it may take before we exit conservatorship, or whether housing finance reform will result in a significant restructuring of the company or the company no longer continuing to exist—also negatively affects our ability to retain and recruit executives and other employees.

The cap on our Chief Executive Officer compensation continues to make retention and succession planning for this position difficult, and it may make it difficult to attract qualified candidates for this critical role in the future.

We face competition from the financial services and technology industries, and from businesses outside of these industries, for qualified executives and other employees. If we are unable to retain, promote and attract executives and other employees with the necessary skills and talent, we would face increased risks for operational failures. If there were several high-level departures at approximately the same time, our ability to conduct our business could be materially adversely affected, which could have a material adverse effect on our results of operations and financial condition.

Pursuing our housing goals and duty to serve obligations may adversely affect our business, results of operations and financial condition

We are required by the GSE Act to support the housing market in ways that could adversely affect our financial results and condition. For example, we are subject to housing goals that require a portion of the mortgage loans we acquire to be for low- and very low-income families, families in low-income census tracts and moderate-income families in minority census tracts or designated disaster areas. We also have a duty to serve very low-, low- and moderate-income families in three underserved markets: manufactured housing, affordable housing preservation and rural areas. We may take actions to meet our housing goals and duty to serve obligations that could adversely affect our profitability. For example, we may acquire loans that offer lower expected returns or increase our credit losses and credit-related expenses. If we do not meet our housing goals or duty to serve requirements, and FHFA finds that the goals or requirements were feasible, we may become subject to a housing plan with additional requirements that could have an adverse effect on our results of operations and financial condition. The potential penalties for failure to comply with housing plan requirements include a cease-and-desist order and civil money penalties. See "Business—Legislation and Regulation—GSE Act and Other Legislative and Regulatory Matters" for more information on our housing goals and duty to serve underserved markets.

The conservatorship and agreements with Treasury adversely affect our common and preferred shareholders.

The material adverse effects of the conservatorship on our shareholders under our agreements with Treasury include the following:

No voting rights during conservatorship. During conservatorship, our common shareholders do not have the ability to elect directors or to vote on other matters unless the conservator delegates this authority to them.

No dividends to common or preferred shareholders, other than to Treasury. Our conservator announced in September 2008 that we would not pay any dividends on the common stock or on any series of preferred stock, other than the senior preferred stock, while we are in conservatorship. In addition, under the terms of the senior preferred stock purchase agreement, dividends may not be paid to common or preferred shareholders (other than on the senior preferred stock) without the prior written consent of Treasury, regardless of whether we are in conservatorship.

Our profits directly increase the liquidation preference of Treasury's senior preferred stock and, once they exceed our capital reserve amount, will be payable to Treasury as dividends. The senior preferred stock ranks senior to our common stock and all other series of our preferred stock, as well as any capital stock we issue in the future, as to both dividends and distributions upon liquidation. Accordingly, if we are liquidated, the senior preferred stock is entitled to its then-current liquidation preference, before any distribution is made to the holders of our common stock or other preferred stock. See "Business—Conservatorship, Treasury Agreements and Housing Finance Reform—Senior Preferred Stock" for more information on the aggregate liquidation preference of the senior preferred stock.

Exercise of the Treasury warrant would substantially dilute the investment of current shareholders. If Treasury exercises its warrant to purchase shares of our common stock equal to 79.9% of the total number of shares of our common stock outstanding on a fully diluted basis, the ownership interest in the company of our then-existing common shareholders will be substantially diluted, and we would thereafter have a controlling shareholder.

We are not managed for the benefit of shareholders. Because we are in conservatorship, we are not managed with a strategy to maximize shareholder returns.

The senior preferred stock purchase agreement, senior preferred stock and warrant can only be canceled or modified with the consent of Treasury. For additional description of the conservatorship and our agreements with Treasury, see "Business—Conservatorship, Treasury Agreements and Housing Finance Reform."

The liquidity and market value of our MBS could be adversely affected by developments in the UMBS market, including those connected with our or Freddie Mac's exit from conservatorship.

In 2019, we began issuing UMBS. The issuance of UMBS represented a significant change for the mortgage market and for our securitization operations and business. The success of UMBS is largely predicated on the fungibility of UMBS issued by Fannie Mae and Freddie Mac. If investors stop viewing Fannie Mae-issued UMBS and Freddie Mac-issued UMBS as fungible, or if investors prefer Freddie Mac-issued UMBS over Fannie Mae-issued UMBS, it could adversely affect the liquidity and market value of Fannie Mae MBS, the volume of our UMBS issuances and our guaranty fee revenues. FHFA adopted a rule to align Fannie Mae and Freddie Mac programs, policies and practices that affect the prepayment rates of TBA-eligible mortgage-backed securities to support the fungibility of Fannie Mae-issued UMBS and Freddie Mac-issued UMBS. However, these alignment efforts may not be successful over the long term and the prepayment rates on Fannie Mae-issued UMBS and Freddie Mac-issued UMBS could diverge in a manner that is disadvantageous for us.

The continued support of FHFA, Treasury, the Securities Industry and Financial Markets Association, and certain other regulatory bodies is critical to the success of UMBS. If any of these entities were to cease its support, the liquidity and market value of Fannie Mae-issued UMBS could be adversely affected. Furthermore, if either we or Freddie Mac exits conservatorship, it is unclear whether our and Freddie Mac's programs, policies and practices in support of UMBS and resecuritizations of each other's securities would be sustained.

Our issuance of UMBS and structured securities backed by Freddie Mac-issued securities has increased our operational and counterparty credit risk.

Issuing UMBS has increased our operational and counterparty credit risk exposure to Freddie Mac. When we resecuritize Freddie Mac-issued UMBS or other Freddie Mac securities, our guaranty of principal and interest extends to the underlying Freddie Mac security. We expect this risk exposure to increase as we issue more structured securities backed directly or indirectly by Freddie Mac-issued securities going forward. Although we have an indemnification agreement with Freddie Mac, in the event Freddie Mac were to fail (for credit or operational reasons) to make a payment due on its securities underlying a Fannie Mae-issued structured security, we would be obligated under our guaranty to fund any shortfall and make the entire payment on the related Fannie Mae-issued structured security on that payment date. Our pricing does not currently reflect any incremental credit, liquidity or operational risk associated with our guaranty of resecuritized Freddie Mac securities. As a result, a failure by Freddie Mac to meet its obligations under the terms of its securities that back structured securities we issue could have a material adverse effect on our earnings and financial condition, and we could be dependent on Freddie Mac and on the senior preferred stock purchase agreements that we and Freddie Mac each have with Treasury to avoid a liquidity event or a default under our guaranty.

UMBS have created significant interdependence between the single-family mortgage securitization programs of Fannie Mae and Freddie Mac. Accordingly, the market value of single-family Fannie Mae MBS could be affected by financial and operational incidents relating to Freddie Mac, even if those incidents do not directly relate to Fannie Mae or Fannie Mae MBS. Similarly, any disruption in Freddie Mac's securitization activities or any adverse events affecting Freddie Mac's significant mortgage sellers and servicers also could adversely affect the market value of single-family Fannie Mae MBS.

Our reliance on CSS and the common securitization platform has increased our counterparty and third-party risk.

We are reliant on CSS and its common securitization platform for the operation of a majority of our single-family securitization activities. In January 2020, at FHFA's direction we entered into an amended limited liability company agreement for CSS. The amendment reduced our and Freddie Mac's ability to control CSS Board decisions, even after conservatorship, including decisions about strategy, business operations and funding. The amendment expanded the CSS Board of Managers from two members designated by each GSE to include the Board Chair, CSS CEO and up to three additional FHFA-designated Board members. In January 2021, FHFA designated two additional Board members, as a result the four members designated by Fannie Mae and Freddie Mac constitute a minority of the Board and could be outvoted by non-GSE designated Board members on any matter during conservatorship and on a number of significant matters following either our or Freddie Mac's exit from conservatorship. Although the amended agreement would require our approval for certain "material decisions" if either we or Freddie Mac have exited conservatorship, the Board may approve a number of actions even after conservatorship over the objection of the members we and Freddie Mac designate, including: approval of the annual budget and strategic plan for CSS (so long as it does not involve a material business change); withdrawal of capital by a member; and requiring capital contributions necessary to support CSS's ordinary business operations. It is possible that FHFA may require us to make additional changes to the CSS limited liability company agreement, or may otherwise impose restrictions or provisions relating to CSS or UMBS, that may adversely affect us.

We do not currently pay service fees to CSS under our customer services agreement; its operations are funded entirely through capital contributions from Fannie Mae and Freddie Mac pursuant to the limited liability company agreement. We expect this arrangement may change, but we do not know how the eventual arrangement will be structured, or what control we will have in establishing those fees. During conservatorship, FHFA can direct us to enter into an amendment of the customer services agreement or enter such an amendment on our behalf, that could provide for a fee structure that would survive an exit from conservatorship absent a further amendment to the customer services agreement, which a majority of the Board would have to approve. Although implementation of any fee changes could require a further amendment to the customer services agreement, we might not have significant leverage to negotiate that amendment and the associated fee changes given our dependence on CSS.

Our securitization activities are complex and present significant operational and technological challenges and risks. Any measures we take to mitigate these challenges and risks might not be sufficient to prevent a disruption to our securitization activities. Our business activities could be adversely affected and the market for single-family Fannie Mae MBS could be disrupted if the common securitization platform were to fail or otherwise become unavailable to us or if CSS were unable to perform its obligations to us. Any such failure or unavailability could have a significant adverse impact on our business and could adversely affect the liquidity or market value of our single-family MBS. In addition, a failure by CSS to maintain effective controls and procedures could result in material errors in our reported results or disclosures that are not complete or accurate.

We are limited in our ability to diversify our business and may be prohibited from undertaking activities that management believes would benefit our business.

As a federally chartered corporation, we are subject to the limitations imposed by the Charter Act, extensive regulation, supervision and examination by FHFA and regulation by other federal agencies, including Treasury, HUD and the SEC. The Charter Act defines our permissible business activities. For example, we may not originate mortgage loans or purchase single-family loans in excess of the conforming loan limits, and our business is limited to the U.S. housing finance sector. FHFA, as our regulator, may impose additional limitations on our business. For example, the GSE Act requires us to obtain prior approval from FHFA for new products and to provide prior notice to FHFA of new activities that we consider not to be products. FHFA recently proposed a rule to implement these requirements that, if adopted, would permit FHFA to establish terms, conditions, or limitations with respect to any new product or new activity. In addition, as described in a previous risk factor, our business activities are subject to significant restrictions as a result of the conservatorship and the senior preferred stock purchase agreement. These limitations and requirements may cause us to delay or prevent us from undertaking new business activities management believes would benefit our business. Further, as a result of these limitations and requirements on our ability to diversify our operations, our financial condition and results of operations depend almost entirely on conditions in a single sector of the U.S. economy, specifically, the U.S. housing market. Weak or unstable conditions in the U.S. housing market can therefore have a significant adverse effect on our business that we cannot mitigate through diversification.

An active trading market in our equity securities may cease to exist, which would adversely affect the market price and liquidity of our common and preferred stock.

Our common stock and preferred stock are now traded exclusively in the over-the-counter market, and are not currently listed on any securities exchanges. We cannot predict the actions of market makers, investors or other market participants, and can offer no assurances that the market for our securities will be stable. If there is no active trading market in our equity securities, the market price and liquidity of the securities will be adversely affected. In addition, the market price of our common stock and preferred stock is subject to significant volatility, which may be due to other factors described in these “Risk Factors,” as well as speculation regarding our future, economic and political conditions generally, liquidity in the over-the-counter market in which our stock trades, and other factors, many of which are beyond our control. Such factors could cause the market price of our common stock and preferred stock to decline significantly, which may result in significant losses to holders of our common stock and preferred stock.

COVID-19 Pandemic Risk

We expect the COVID-19 pandemic to continue to adversely affect our business and financial results.

The COVID-19 pandemic caused substantial financial market volatility and has significantly adversely affected both the U.S. and global economies. As described in “Business—Executive Summary—COVID-19 Impact—Economic Impact,” although the economy has improved significantly since the second quarter of 2020, business activity remains below the level before the onset of the pandemic, and unemployment remains substantially higher than pre-pandemic levels. Continued high levels of new daily cases of COVID-19 in the U.S., combined with concerns about the emergence of new, more infectious variants of the coronavirus, have led to new shut-downs in various locales and reductions in business activity, with increased risk of additional public-health measures.

The disruption caused by the pandemic differs from previous economic downturns because of the high level of uncertainty related to the health and safety of consumers and workers. We expect the path and timing of economic recovery will be impacted by the success of vaccination efforts and fiscal stimulus. We believe that sustained economic recovery depends on continued growth in consumer spending, increased business activity, and an associated reduction in unemployment, all of which impact the ability of borrowers and renters to make their monthly payments. We expect the impact of the COVID-19 pandemic to continue to negatively affect our financial results and our returns on capital.

Our current forecasts and expectations relating to the impact of the COVID-19 pandemic are subject to many uncertainties and may change, perhaps substantially. It is difficult to assess or predict the impact of this unprecedented event on our business, financial results or financial condition. Factors that will impact the extent to which the COVID-19 pandemic affects our business, financial results and financial condition include: the duration, spread and severity of the COVID-19 pandemic; the actions taken to contain the virus or treat its impact, including government actions to mitigate the economic impact of the pandemic and the widespread availability and public acceptance of the COVID-19 vaccines; the extent to which consumers, workers and families feel safe resuming pre-pandemic activities; the nature, extent and success of the forbearance, payment deferrals, modifications and other loss mitigation options we provide to borrowers affected by the pandemic; accounting elections and estimates relating to the impact of the COVID-19 pandemic; borrower and renter behavior in response to the pandemic and its economic impact; how quickly and to what extent normal economic and operating conditions can resume, including whether any future outbreaks or increases in the daily number of new COVID-19 cases interrupt economic recovery; and how quickly and to what extent affected borrowers, renters and counterparties can recover from the negative economic impact of the pandemic. While we are unable to predict the future course of these events or their longer-term effects on our business, key areas we have identified where the COVID-19 pandemic is negatively affecting or may negatively affect our business, financial results and financial condition are described below:

- *Increased borrower credit risk.* Among other factors, income growth and unemployment levels affect borrowers' ability to repay their mortgage loans. We expect the economic dislocation caused by the COVID-19 pandemic and elevated unemployment rates to result in continued higher serious delinquency rates and possibly in significantly higher defaults on the mortgage loans in our guaranty book of business. Because of this expectation, we had substantial credit-related expenses in 2020. As there is significant uncertainty associated with the impact of the COVID-19 pandemic, we may ultimately experience greater losses than we currently expect and also may have high credit-related expenses in future periods. Moreover, we are taking a number of actions to help borrowers affected by the COVID-19 pandemic that we expect will continue to adversely affect our financial results and financial condition, including:

    - providing forbearance to single-family borrowers impacted by COVID-19-related financial hardships who request forbearance;
    - providing forbearance to eligible multifamily borrowers impacted by COVID-19-related financial hardships on the condition that such borrowers suspend evictions and other penalties relating to late rent payments during the forbearance period; and
    - temporarily suspending foreclosures and certain foreclosure-related activities for single-family properties (other than for vacant or abandoned properties).

    A number of federal, state and local authorities have implemented limitations on evictions, including the CDC eviction moratorium described in "Business—Legislation and Regulation—U.S. Government Response to COVID-19—Relief for Individuals and Businesses; Federal Eviction Moratoriums." We believe that applicable eviction restrictions could have adversely affected, and could continue to adversely affect, the ability of some of our borrowers to make payments on their loans. We discuss the actions we have taken and their impact in more detail in "MD&A—Single-Family Business—Single-Family Mortgage Credit Risk Management" and in "MD&A—Multifamily Business—Multifamily Mortgage Credit Risk Management."

    Certain states and localities have implemented COVID-19-related borrower and renter protections that are more extensive than federal or our requirements. States and localities may continue to consider such proposals in the future or extend the time period of existing protections. These additional protections, depending on their scope and whether and to what extent they apply to our business, could contribute to a higher number of single-family and multifamily borrowers becoming delinquent on their loans or could limit our ability to take enforcement actions with respect to our loans.

    In addition, while home price appreciation was positive in 2020, the economic dislocation resulting from the COVID-19 pandemic could result in declines in home prices in the future. Similarly, economic dislocation resulting from the COVID-19 pandemic could result in declines in multifamily property valuations. Declines in multifamily property valuations would increase the amount of our loss in the event a borrower defaults on their loan. The magnitude of the impact would likely vary significantly across geographic regions and based on the credit characteristics of the loans.

The COVID-19 pandemic may also affect the credit quality of our new loan acquisitions. For example, CARES Act provisions prohibiting lenders from reporting previously-current borrowers receiving COVID-19-related payment accommodations as delinquent to the credit bureaus may result in our not having accurate data on a borrower's credit history when we are determining the eligibility of the single-family loans we acquire.

- *Increased human capital and business resiliency risk.* COVID-19 continues to spread in the U.S. and the rate of new daily cases may increase from current levels. If a significant number of our executives or other employees, or their family members for whom they provide care, contract COVID-19 during the same time period, it could materially adversely affect our ability to manage our business, which could have a material adverse effect on our results of operations and financial condition. The risk of executives, other employees or their family members contracting COVID-19 may increase with the resumption of business activity and the reopening of workplaces and schools. We are now allowing employees, on a voluntary basis, to request approval to return to work at some of our office locations. Although we have established COVID-19 safety protocols, the return of some employees to the office may increase the risk of our employees contracting COVID-19.

  We expect a significant majority of our employees will continue to work remotely for the foreseeable future, driven by safety concerns, childcare obligations and other factors. The strain on our workforce caused by this shift to a remote work environment and the uncertainty and stressors associated with the COVID-19 pandemic may result in business interruptions, reduced productivity and other adverse impacts on our operations. While our technological systems to date have continued to function with our workforce working remotely, this telework arrangement increases the risk of technological or cybersecurity incidents that negatively affect our business operations. This telework arrangement, as well as the risk that employees or their family members could contract COVID-19 and our reliance on third parties for some functions, also could adversely affect our ability to maintain effective controls and procedures, which could result in material errors in our reported results or disclosures that are not complete or accurate.

- *Increased counterparty credit and operational risk.* The economic dislocation caused by the COVID-19 pandemic could lead to default by one or more of our institutional counterparties on their obligations to us, which could result in significant financial losses.

  In addition, if multiple single-family or multifamily servicers were to fail to meet their obligations to us, it could cause substantial disruption to our business, borrowers and the mortgage industry. We may not be able to transfer the servicing of loans to new servicers without significant operational disruptions and financial losses, and there may not be sufficient industry capacity to take on large servicing transfers.

  As noted above, the economic dislocation caused by the COVID-19 pandemic could lead to significantly higher defaults on mortgage loans. A substantially higher level of mortgage defaults could affect our mortgage insurer counterparties' ability to fully meet their payment obligations to us.

- *Increased liquidity risk.* As described in "MD&A—Liquidity and Capital Management," while market conditions have improved since the first quarter of 2020, adverse market conditions in March limited our ability to issue debt with a maturity greater than two years. If the COVID-19 pandemic results in a sustained market liquidity crisis, our liquidity contingency plans may be difficult or impossible to execute. In this event, our alternative source of liquidity, our other investments portfolio, may not be sufficient to meet our liquidity needs.

  In addition, as described in "MD&A—Liquidity and Capital Management," our debt funding needs increased in 2020 driven in part by the impact of the COVID-19 pandemic.

- *Increased market risk*. Market dislocations relating to the COVID-19 pandemic have made it more challenging to manage our interest-rate risk. Furthermore, with the decline in borrower performance due to impact of the COVID-19 pandemic and increased uncertainty regarding the value of mortgage-related assets in the current environment, we may have higher investment losses in future periods relating to decreases in the fair value of our loans that are held for sale.

- *Increased model and accounting estimate risk.* Given the unprecedented nature and timing of the COVID-19 pandemic and its uncertain impact, we believe our model results relating to our allowance for loan losses currently cannot accurately capture the entirety of loan losses we will ultimately incur relating to COVID-19. The unprecedented nature of the COVID-19 pandemic may also negatively affect our ability to rely on models to effectively manage the risks to our business. Moreover, the CARES Act provisions prohibiting lenders from reporting some borrowers receiving COVID-19-related payment accommodations as delinquent may also impact the stability of the interpretation and predictiveness of borrower credit data and therefore the reliability of our models in the future.

- *Increased risk of additional government action affecting our business.* Federal, state and local governments have taken many actions that have or that we expect will adversely affect our financial results, such as stay-at-home orders and business shut-downs, and the loan forbearance requirements of the CARES Act. The U.S. Congress, Treasury, the Federal Reserve, FHFA or other national, state or local government agencies or legislatures may take additional steps in response to the COVID-19 pandemic that could adversely affect our business, financial results and financial condition, such as expanding or extending our obligations to help borrowers, renters or counterparties affected by the pandemic or imposing new or expanded business shut-downs.
- *Increased risk of mortgage fraud.* In response to the COVID-19 pandemic, we are offering certain temporary flexibilities relating to our Single-Family Selling Guide requirements. This could increase the risk of mortgage fraud relating to the loans we acquire during the COVID-19 pandemic. In addition, the CARES Act provides that a single-family borrower may obtain mortgage payment forbearance with no additional documentation required other than the borrower's attestation to a financial hardship caused by COVID-19, which creates the risk that borrowers who are not experiencing financial hardship may request a forbearance.

The impacts of COVID-19 to our business have generally amplified, or reduced our ability to mitigate, these and the other risks discussed herein.

Credit Risk

We may incur significant credit losses and credit-related expenses on the loans in our book of business.

We are exposed to a significant amount of mortgage credit risk on our $3.7 trillion guaranty book of business. Borrowers may fail to make required payments on mortgage loans we own or guaranty. This exposes us to the risk of credit losses and credit-related expenses.

As we describe earlier in this section under “COVID-19 Pandemic Risk,” the COVID-19 pandemic has exposed us to substantial credit-related expenses and risk of credit losses. Our serious delinquency rate increased in 2020 compared with 2019 with increased borrower participation in forbearance plans. Our loans currently in forbearance generally have a somewhat weaker credit profile than our overall guaranty book of business. If a large number of borrowers cannot repay the amounts owed at the end of their forbearance plans or over time, or fail to qualify for repayment plans, payment deferrals or modifications, this could result in significantly higher defaults on the mortgage loans in our guaranty book of business. We expect the COVID-19 pandemic to result in a continued higher serious delinquency rate over the next several quarters compared to pre-pandemic levels in recent periods exposing us to greater credit risk.

The credit performance of loans in our book of business could deteriorate further, particularly if we experience home price declines, continued economic dislocation and elevated unemployment, resulting in significantly higher credit losses and credit-related expenses. Although we strengthened our underwriting and eligibility standards over the last decade, we continue to have loans in our book of business that were originated prior to the financial market crisis of 2008, and these loans continue to generate a disproportionate percentage of our credit losses. We present detailed information about the risk characteristics of our single-family conventional guaranty book of business in “MD&A—Single-Family Business” and our multifamily guaranty book of business in “MD&A—Multifamily Business.”

While we use certain credit enhancements to mitigate some of our potential future credit losses, we may not be able to obtain as much protection from our credit enhancements as we would like, for a number of reasons:

- Some of the credit enhancements we use, such as mortgage insurance, credit insurance risk transfer transactions and DUS lender loss-sharing arrangements, are subject to the risk that the counterparties may not meet their obligations to us.
- Our credit risk transfer transactions have limited terms, after which they provide limited or no further credit protection on the covered loans.
- Generally, our credit risk transfer transactions do not cover losses from principal forgiveness.
- Our credit risk transfer transactions are not designed to shield us from all losses because we retain a portion of the risk of future losses on loans covered by these transactions, including all or a portion of the first loss risk in most transactions.
- In the event of a sufficiently severe economic downturn, we may not be able to enter into new back-end credit risk transfer transactions for our recent acquisitions on economically advantageous terms.
- Mortgage insurance does not protect us from all losses on covered loans. For example, mortgage insurance does not cover property damage that is not already covered by the hazard or flood insurance we require, and such damage may result in a reduction to, or a denial of mortgage insurance benefits. A property damaged by a flood that was outside a Federal Emergency Management Agency (“FEMA”)-designated Special Flood Hazard

Area, where we require coverage, or a property damaged by an earthquake are the most likely scenarios where property damage may result in a default not covered by hazard insurance.

For the last several years we have used credit risk transfer transactions as an important tool to manage the credit risk of our loan acquisitions. We did not enter into new credit risk transfer transactions in the second quarter of 2020 due to adverse market conditions resulting from the COVID-19 pandemic. Market conditions improved in the second half of 2020, but we have not entered into any new transactions. As a result, the portion of our single-family book covered by credit enhancement decreased from 53% in 2019 to 42% as of December 31, 2020. We continue to evaluate the costs and benefits of credit risk transfer transactions, including a reduction in capital relief these transactions provide under FHFA's enterprise regulatory capital framework. We may engage in credit risk transfer transactions in the future, which could help us manage capital and manage within our risk appetite, particularly given the growth and turnover in our book in 2020. The structure of and extent to which we engage in any additional credit risk transfer transactions will be affected by the enterprise regulatory capital framework, our risk appetite, the strength of future market conditions, including the cost of these transactions, and the review of our overall business and capital plan.

One or more of our institutional counterparties may fail to fulfill their contractual obligations to us, resulting in financial losses, business disruption and decreased ability to manage risk.

We rely on our institutional counterparties to provide services and credit enhancements that are critical to our business. We face the risk that one or more of our institutional counterparties may fail to fulfill their contractual obligations to us. If an institutional counterparty defaults on its obligations to us, it could also negatively impact our ability to operate our business, as we outsource some of our critical functions to third parties, such as mortgage servicing, single-family Fannie Mae MBS issuance and administration, and certain technology functions.

Our primary exposures to institutional counterparty risk are with credit guarantors that provide credit enhancements on the mortgage assets that we hold in our retained mortgage portfolio or that back our Fannie Mae MBS, including;

- mortgage insurers and reinsurers, including those that participate in our Credit Insurance Risk Transfer™ ("CIRT™") transactions, and multifamily lenders with risk sharing arrangements;
- mortgage servicers that service the loans we hold in our retained mortgage portfolio or that back our Fannie Mae MBS;
- mortgage sellers and servicers that are obligated to repurchase loans from us or reimburse us for losses in certain circumstances;
- the financial institutions that issue the investments, including overnight bank deposits, held in our other investments portfolio; and
- derivatives counterparties.

We also have counterparty exposure to custodial depository institutions; mortgage originators, investors and dealers; debt security dealers; central counterparty clearing institutions; and document custodians.

The concentration of our counterparties in similar or related businesses heightens our counterparty risk exposure. We routinely enter into a high volume of transactions with counterparties in the financial services industry, including brokers and dealers, mortgage lenders and commercial banks, and mortgage insurers, resulting in a significant credit concentration with respect to this industry. We may also have multiple exposures to particular counterparties, as many of our counterparties perform several types of services for us. For example, our lender customers or their affiliates may also act as derivatives counterparties, mortgage servicers, custodial depository institutions or document custodians. Accordingly, if one of these counterparties were to become insolvent or otherwise default on its obligations to us, it could harm our business and financial results in a variety of ways.

An institutional counterparty may default on its obligations to us for a number of reasons, such as changes in financial condition that affect its credit rating, changes in its servicer rating, a reduction in liquidity, operational failures or insolvency. The economic dislocation from the COVID-19 pandemic increases the risk that these conditions may arise. In the event of a bankruptcy or receivership of one of our counterparties, we may be required to establish our ownership rights to the assets these counterparties hold on our behalf to the satisfaction of the bankruptcy court or receiver, which could result in a delay in accessing these assets causing a decline in their value. Counterparty defaults or limitations on their ability to do business with us could result in significant financial losses or hamper our ability to do business or manage the risks to our business. In addition, if we are unable to replace a defaulting counterparty that performs services critical to our business, it could adversely affect our ability to conduct our operations and manage risk.

We have significant exposure to institutions in the financial services industry relating to derivatives, funding, short-term lending, securities, and other transactions. We depend on our ability to enter into derivatives transactions with our derivatives counterparties in order to manage the duration and prepayment risk of our retained mortgage portfolio. If we lose access to our derivatives counterparties, it could adversely affect our ability to manage these risks.

We use clearinghouses to facilitate many of our derivative trades. If the clearinghouse or the clearing member we use to access the clearinghouse defaults, we could lose margin that we have posted with the clearing member or clearinghouse. We are also a clearing member of two divisions of the Fixed Income Clearing Corporation ("FICC"), a central counterparty ("CCP"). One FICC division clears our trades involving securities purchased under agreements to resell, securities sold under agreements to repurchase, and other non-mortgage related securities. The other division clears our forward purchase and sale commitments of mortgage-related securities, including dollar roll transactions. As a clearing member of FICC, we could be exposed to the losses if the CCP or one or more of the CCP's clearing members fails to perform its obligations, because each FICC clearing member is required to absorb a portion of the losses incurred by other clearing members if they fail to meet their obligations to the clearinghouse. For more information, see "MD&A—Risk Management—Institutional Counterparty Credit Risk Management—Other Counterparties—Central Counterparty Clearing Institutions."

Our financial condition or results of operations may be adversely affected if mortgage servicers fail to perform their obligations to us.

We delegate the servicing of the mortgage loans in our guaranty book of business to mortgage servicers; we do not have our own servicing function. Functions performed by mortgage servicers on our behalf include collecting and delivering principal and interest payments, administering escrow accounts, monitoring and reporting delinquencies, performing default prevention activities and other functions. The inability of a mortgage servicer to perform these functions could negatively impact our ability to, among other things:

- manage our book of business;
- collect amounts due to us;
- actively manage troubled loans; and
- implement our homeownership assistance, foreclosure prevention and other loss mitigation efforts.

A large portion of our single-family guaranty book is serviced by non-depository servicers. The potentially lower financial strength, liquidity and operational capacity of non-depository mortgage sellers and servicers compared with depository mortgage sellers and servicers may negatively affect their ability to fully satisfy their financial obligations or to properly service the loans on our behalf.

If we replace a mortgage servicer, we likely would incur costs and potential increases in servicing fees and could also face operational risks. If a mortgage servicer fails, it could result in a temporary disruption in servicing and loss mitigation activities relating to the loans serviced by that mortgage servicer, particularly if there is a loss of experienced servicing personnel. We may also face challenges in transferring a large servicing portfolio.

Multifamily mortgage servicing is typically performed by the lenders who sell the mortgages to us. We are exposed to the risk that multifamily servicers could come under financial pressure, which could potentially result in a decline in the quality of the servicing they provide us.

For the majority of the loans in our single-family guaranty book of business and nearly all of the loans in our multifamily guaranty book of business, we require servicers to advance missed borrower principal and interest payments for up to four months. Single-family servicers are also required to advance property tax and insurance payments to taxing authorities, hazard insurers and mortgage insurers. If a large number of single-family or multifamily borrowers do not pay their mortgages as a result of the economic dislocation caused by the COVID-19 pandemic, our servicers may not have sufficient liquidity to advance these missed payments. In such case, we would be required to make the payments, which could require us to obtain substantial additional funding. The actions we have taken to mitigate our credit risk exposure to mortgage servicers may not be sufficient to prevent us from experiencing significant financial losses or business interruptions in the event they cannot fulfill their obligations to us.

We may incur losses as a result of claims under our mortgage insurance policies not being paid in full or at all.

We rely heavily on mortgage insurers to provide insurance against borrower defaults on single-family conventional mortgage loans with LTV ratios over 80% at the time of acquisition. Although the financial condition of our primary mortgage insurer counterparties currently approved to write new business has improved in recent years and they must meet risk-based asset requirements, there is still a risk that these counterparties may fail to fulfill their obligations to pay our claims under insurance policies.

With respect to primary mortgage insurers that we have approved to write coverage on loans sold to us, we currently do not differentiate pricing based on counterparty strength or operational performance. Additionally, we would not revoke a primary mortgage insurer's status as an eligible insurer unless there was a material violation of our private mortgage insurer eligibility requirements. Further, we do not generally select the provider of primary mortgage insurance on a specific loan, because the selection is usually made by the lender at the time the loan is originated. Accordingly, we have limited ability to manage our concentration risk with respect to primary mortgage insurers.

Three of our mortgage insurer counterparties that are currently not approved to write new business—PMI Mortgage Insurance Co. ("PMI"), Triad Guaranty Insurance Corporation ("Triad") and Republic Mortgage Insurance Company ("RMIC")—are currently in run-off. Mortgage insurers that are in run-off continue to collect renewal premiums and process claims on their existing insurance business, but are no longer approved to write new insurance with us, which increases the risk that the mortgage insurer will fail to pay claims fully. Entering run-off may limit sources of profits and liquidity for the mortgage insurer and could also cause the quality and speed of its claims processing to deteriorate. PMI and Triad have been paying only a portion of policyholder claims and deferring the remaining portion and it is uncertain whether they will be permitted in the future to pay their deferred policyholder claims or increase or decrease the amount of cash they pay on claims. RMIC is no longer deferring payments on policyholder claims, but remains in run-off. For more information on mortgage insurers in run-off and our risk in force mortgage insurance coverage see "Notes to Consolidated Financial Statements—Concentrations of Credit Risk—Other Concentrations."

On at least a quarterly basis, we assess our mortgage insurer counterparties' respective abilities to fulfill their obligations to us, and our loss reserves take into account this assessment. If our assessment indicates their ability to pay claims has deteriorated significantly or if our projected claim amounts have increased, we could experience an increase credit-related expenses and credit losses.

Mortgage fraud could result in significant financial losses and harm to our reputation.

We use a process of delegated underwriting in which lenders make specific representations and warranties about the characteristics of the mortgage loans we purchase and securitize. As a result, we do not independently verify most borrower information that is provided to us. This exposes us to the risk that one or more of the parties involved in a transaction (the borrower, seller, broker, appraiser, title agent, lender or servicer) will engage in fraud by misrepresenting facts about a mortgage loan. Similarly, we rely on delegated servicing of loans and use of a variety of external resources to manage our REO inventory. We have experienced financial losses resulting from mortgage fraud, including institutional fraud perpetrated by counterparties. In the future, we may experience additional financial losses or reputational damage as a result of mortgage fraud.

We may suffer losses if borrowers are unable to obtain property or flood insurance, if their claims under insurance policies are not paid, or if they suffer property damage as a result of a hazard for which we do not require insurance, such as flooding outside of certain areas.

In general, we require borrowers to obtain property insurance to cover the risk of damage to their homes resulting from hazards such as fire, wind and, for properties in a Special Flood Hazard Area as designated by FEMA, flooding. As of December 31, 2020, 3.4% of loans in our single-family guaranty book of business and 6.9% of loans in our multifamily guaranty book of business are located in a Special Flood Hazard Area. For flood insurance, single-family borrowers generally rely on the National Flood Insurance Program ("NFIP"), which was recently extended through September 2021. If Congress fails to extend or re-authorize the program upon future expirations, FEMA may not have sufficient funds to pay claims for flood damage, and borrowers may not be able to renew their flood insurance coverage or obtain new policies through the NFIP. In addition, NFIP insurance does not cover temporary living expenses, and the maximum limit of coverage available under NFIP for a single-family residential property is $250,000, which may not be sufficient to cover all losses.

The risk of significant flooding in places outside of a Special Flood Hazard Area (that is, in places where we do not require flood insurance) is expected to increase in the coming years as a result of climate change. Increases in the intensity or frequency of floods or other weather-related disasters as a result of climate change will intensify the foregoing risks. To the extent that borrowers are unable to obtain property or flood insurance and suffer property damage, their claims under insurance policies are not paid, or they suffer property damage as a result of a hazard for which we do not generally require insurance, such as earthquake damage or flood damage on a property located outside a Special Flood Hazard Area, they may not pay their mortgage loans, which negatively impacts our credit losses and credit-related expenses.

In addition, insurers may become less willing to continue writing coverage in certain areas for certain perils, which may depress home prices in those areas and may limit the loans that Fannie Mae is able to acquire in those areas. Ultimately, the desirability of areas that frequently experience hurricanes, wildfires or other natural disasters may diminish over time, which can depress home prices or adversely affect the region's economy, which may negatively impact our financial results.

The occurrence of major natural or other disasters in the United States or its territories and the impact of climate change could negatively impact our credit losses and credit-related expenses.

We conduct our business in the single-family and multifamily residential mortgage markets and own or guarantee the performance of mortgage loans throughout the United States and its territories. The occurrence of a major natural or environmental disaster, terrorist attack, cyber attack, pandemic, or similar event (a "major disruptive event") in the

United States or its territories could negatively impact our credit losses and credit-related expenses in the affected geographic area or, depending on the magnitude, scope and nature of the event, nationally, in a number of ways. As we describe earlier in this section under "COVID-19 Pandemic Risk," the COVID-19 pandemic has exposed us to substantial credit-related expenses and risk of credit losses. A major disruptive event that either damages or destroys residential or multifamily real estate securing mortgage loans in our book of business or negatively impacts the ability of borrowers to make principal and interest payments on mortgage loans in our book of business could increase our delinquency rates, default rates and average loan loss severity of our book of business in the affected region or regions. Further, a major disruptive event or a long-lasting increase in the vulnerability of an area to disasters that affects borrowers' ability make payments on their mortgages, discourages housing activity, including homebuilding or home buying, or causes a deterioration in housing conditions in the affected region could lower the volume of originations in the mortgage market, influence home prices and property values in the affected region or in adjacent regions and increase delinquency rates and default rates. Any of these outcomes could generate significant credit losses and credit-related expenses.

Recent years have seen frequent and severe natural disasters in the U.S., including hurricanes, wildfires and floods. The frequency and intensity of major weather-related events is indicative of the impact of climate change and this change is expected to persist for the foreseeable future. Population growth and an increase in people living in high-risk areas, such as coastal areas vulnerable to severe storms and flooding, have also increased the impact of these events. Although our financial exposure from these events is mitigated to the extent our book of business is geographically diverse, we remain exposed to risk, particularly in connection with the risk of geographically widespread weather events and changes in weather patterns. In addition, the increasing unpredictability of major natural disasters negatively affects our ability to forecast losses from such events, which may negatively impact our ability to accurately address the likelihood of such losses in the guaranty fees that we charge. As a result, any continuation or increase in recent weather trends or their unpredictability, or any single natural disaster of significant scope or intensity, could have a material impact on our results of operations and financial condition.

Further, legal or regulatory responses to concerns about global climate change may impact the housing markets and, as a result, our business. Steps to address the risk of more frequent or severe weather events resulting from climate change could result in a potentially disruptive transition away from carbon-intense industries. Such a transition could negatively impact certain industries and regional economies, affecting the ability of borrowers in those industries or regions to pay their mortgage loans. President Biden has indicated that addressing climate change will be a priority for his administration.

Operational Risk

A failure in our operational systems or infrastructure, or those of third parties, could materially adversely affect our business, impair our liquidity, cause financial losses and harm our reputation.

Shortcomings or failures in our internal processes, people, data management or systems could disrupt our business or have a material adverse effect on our risk management, liquidity, financial statement reliability, financial condition and results of operations. Such a failure could result in legislative or regulatory intervention or sanctions, liability to customers, financial losses, business disruptions and damage to our reputation. For example, our business is highly dependent on our ability to manage and process, on a daily basis, an extremely large number of transactions, many of which are highly complex, across numerous and diverse markets that continuously and rapidly change and evolve. These transactions are subject to various legal, accounting and regulatory standards. Our financial, accounting, data processing or other operating systems and facilities may fail to operate properly or become disabled or damaged as a result of a number of factors, including events that are wholly or partially beyond our control, adversely affecting our ability to process these transactions or manage associated data with reliability and integrity. In addition, we rely on information provided by third parties in processing many of our transactions; that information may be incorrect or we may fail to properly manage or analyze it or properly monitor its data quality.

We rely upon business processes that are highly dependent on people, technology and equipment, data and the use of numerous complex systems and models to manage our business and produce books and records upon which our financial statements and risk reporting are prepared. This reliance increases the risk that we may be exposed to financial, reputational or other losses as a result of inadequately designed internal processes or data management architecture, inflexible technology or the failure of our systems. While we continue to enhance our technology, infrastructure, operational controls and organizational structure in order to reduce our operational risk, these actions may not be effective to manage these risks and may create additional operational risk as we execute these enhancements. In addition, our use of third-party service providers for some of our business and technology functions increases the risk that an operational failure by a third party will adversely affect us.

Our ability to manage and aggregate data may be limited by the effectiveness of our policies, programs, processes, systems and practices that govern how data is acquired, validated, stored, protected, processed and shared. Failure to manage data effectively and to aggregate data in an accurate and timely manner may limit our ability to manage current and emerging risks, as well as to manage changing business needs.

We also face the risk of operational failure, termination or capacity constraints of any of the clearing agents, paying agents, exchanges, clearinghouses or other financial intermediaries, including CSS and Freddie Mac, we use to facilitate our securities and derivatives transactions. In recent years, there has been significant consolidation among clearing agents, exchanges and clearing houses. This consolidation and interconnectivity increases the risk of operational failure, on both an individual basis and an industry-wide basis, as disparate complex systems need to be integrated, often on an accelerated basis. Any such failure, termination or constraint could adversely affect our ability to effect transactions or manage our exposure to risk.

Substantially all of our employees and business operations functions are consolidated in two metropolitan areas: Washington, DC and Dallas, Texas. As a result of this concentration of our employees and facilities, a major disruptive event at either location could impact our ability to operate notwithstanding the business continuity plans and facilities that we have in place, including our out-of-region data center for disaster recovery. Moreover, because of the concentration of our employees in the Washington, DC and Dallas metropolitan areas, a regional disruption in one of these areas could prevent our employees from occupying our facilities, working remotely, or communicating with or traveling to other locations. Further, if the frequency, severity or unpredictability of weather-related events in the Washington, DC or Dallas regions increases as a result of changing weather patterns, then these disruptions could occur regularly or last for longer periods of time. Accordingly, the occurrence of one or more major disruptive events could materially adversely affect our ability to conduct our business and lead to financial losses.

A breach of the security of our systems or facilities, or those of third parties with which we do business, including as a result of cyber attacks, could damage or disrupt our business or result in the disclosure or misuse of confidential information, which could damage our reputation, result in regulatory sanctions and/or increase our costs and cause losses.

Our operations rely on the secure receipt, processing, storage and transmission of confidential and other information in our computer systems and networks and with our business partners, including proprietary, confidential or personal information that is subject to privacy laws, regulations or contractual obligations. Information security risks for large institutions like us have significantly increased in recent years in part because of the proliferation of new technologies and the use of the Internet and telecommunications technologies to conduct or automate financial transactions. A number of financial services companies, consumer-based companies and other organizations have reported the unauthorized disclosure of client, customer or other confidential information, as well as cyber attacks involving the dissemination, theft and destruction of corporate information, intellectual property, cash or other valuable assets. There have also been several highly publicized cases where hackers have requested “ransom” payments in exchange for not disclosing stolen customer information or for not disabling the target company’s computer or other systems.

We have been, and likely will continue to be, the target of cyber attacks, computer viruses, malicious code, phishing attacks, denial of service attacks and other information security threats. To date, cyber attacks have not had a material impact on our financial condition, results or business; however, we could suffer material financial or other losses in the future and we are not able to predict the severity of these attacks. Our risk and exposure to these matters remains heightened because of, among other things:

- the evolving nature of these threats;
- the current global economic and political environment;
- our prominent size and scale and our role in the financial services industry;
- the outsourcing of some of our business operations;
- the ongoing shortage of qualified cybersecurity professionals;
- our migration to cloud-based systems;
- our increased use of employee-owned devices for business communication;
- the large number of our employees working remotely; and
- the interconnectivity and interdependence of third parties to our systems.

Despite our efforts to ensure the integrity of our software, computers, systems and information, we may not be able to anticipate, detect or recognize threats to our systems and assets, or to implement effective preventive measures against all cyber threats, especially because the techniques used are increasingly sophisticated, change frequently, are complex, and are often not recognized until launched. We routinely identify cyber threats as well as vulnerabilities in our systems and work to address them, but these efforts may be insufficient. Further, these efforts involve costs that can be significant as cyber attack methods continue to rapidly evolve. Cyber attacks can originate from a variety of sources, including external parties who are affiliated with foreign governments or are involved with organized crime or terrorist organizations. Third parties may also attempt to induce employees, customers or other users of our systems to disclose sensitive information or provide access to our systems or network, or to our data or that of our counterparties or borrowers, and these types of risks may be difficult to detect or prevent.

The occurrence of a cyber attack, breach, unauthorized access, misuse, computer virus or other malicious code or other cybersecurity event could jeopardize or result in the unauthorized disclosure, gathering, monitoring, misuse, corruption, loss or destruction of confidential and other information that belongs to us, our customers, our counterparties, third-party service providers or borrowers that is processed and stored in, and transmitted through, our computer systems and networks. The occurrence of such an event could also result in damage to our software, computers or systems, or otherwise cause interruptions or malfunctions in our, our customers', our counterparties' or third parties' operations. This could result in significant financial losses, loss of customers and business opportunities, reputational damage, litigation, regulatory fines, penalties or intervention, reimbursement or other compensatory costs, or otherwise adversely affect our business, financial condition or results of operations.

Cyber attacks can occur and persist for an extended period of time without detection. Investigations of cyber attacks are inherently unpredictable, and it takes time to complete an investigation and have full and reliable information. While we are investigating a cyber attack, we do not necessarily know the extent of the harm or how best to remediate it, and we can repeat or compound certain errors or actions before we discover and remediate them. In addition, announcing that a cyber attack has occurred increases the risk of additional cyber attacks, and preparing for this elevated risk can delay the announcement of a cyber attack. All or any of these challenges could further increase the costs and consequences of a cyber attack.

In addition, we may be required to expend significant additional resources to modify our protective measures and to investigate and remediate vulnerabilities or other exposures arising from operational and security risks. Although we maintain insurance coverage relating to cybersecurity risks, our insurance may not be sufficient to provide adequate loss coverage in all circumstances.

Because we are interconnected with and dependent on third-party vendors, exchanges, clearing houses, fiscal and paying agents, and other financial intermediaries, including CSS, we could be materially adversely impacted if any of them is subject to a successful cyber attack or other information security event. Third parties with which we do business may also be sources of cybersecurity or other technological risks. We outsource certain functions and these relationships allow for the external storage and processing of our information, as well as customer, counterparty and borrower information, including on cloud-based systems. We also share this type of information with regulatory agencies and their vendors. While we engage in actions to mitigate our exposure resulting from our information-sharing activities, ongoing threats may result in unauthorized access, loss or destruction of data or other cybersecurity incidents with increased costs and consequences to us such as those described above.

We routinely transmit and receive personal, confidential and proprietary information by electronic means. In addition, our customers maintain personal, confidential and proprietary information on systems we provide. We have discussed and worked with customers, vendors, service providers, counterparties and other third parties to develop secure transmission capabilities and protect against cyber attacks, but we do not have, and may be unable to put in place, secure capabilities with all of our clients, vendors, service providers, counterparties and other third parties and we may not be able to ensure that these third parties have appropriate controls in place to protect the confidentiality of the information. An interception, misuse or mishandling of personal, confidential or proprietary information being sent to or received from a customer, vendor, service provider, counterparty or other third party could result in legal liability, regulatory action and reputational harm.

Our concurrent implementation of multiple new initiatives may increase our operational risk and result in one or more material weaknesses in our internal control over financial reporting.

We are currently implementing a number of initiatives in furtherance of both our and our conservator's strategic objectives. The magnitude of the many new initiatives we are undertaking may increase our operational risk. Many of these initiatives involve significant changes to our business processes, systems and infrastructure, and present significant operational challenges for us. Some business initiatives that we are currently developing or executing against include a new hedge accounting program, our environmental, social and governance initiatives, enhancements and efficiencies to our operational processes, and enhancements to our existing and development of new information technology and other systems. For example, for the past several years we have been transitioning our core information technology systems to third-party cloud-based platforms. If completing this initiative is delayed or we fail to complete it in a well-managed, secure and effective manner, we may experience unplanned service disruption or unforeseen costs, which could result in material harm to our business and results of operations. While implementation of each individual initiative creates operational challenges, implementing multiple initiatives during the same time period significantly increases these challenges. Due to the operational complexity associated with these changes and the limited time periods for implementing them, we believe there is a risk that implementing these changes could result in one or more material weaknesses in our internal control over financial reporting in a future period. If this were to occur, we could experience material errors in our reported financial results. In addition, FHFA, Treasury, other agencies of the U.S. government or Congress may require us to implement additional initiatives in the future that could further increase our operational risk.

Material weaknesses in our internal control over financial reporting could result in errors in our reported results or disclosures that are not complete or accurate.

Management has determined that, as of the date of this filing, we have ineffective disclosure controls and procedures that result in a material weakness in our internal control over financial reporting. In addition, our independent registered public accounting firm, Deloitte & Touche LLP, has expressed an adverse opinion on our internal control over financial reporting because of the material weakness. Our ineffective disclosure controls and procedures and material weakness could result in errors in our reported results or disclosures that are not complete or accurate, which could have a material adverse effect on our business and operations.

Our material weakness relates specifically to the impact of the conservatorship on our disclosure controls and procedures. Because we are under the control of FHFA, some of the information that we may need to meet our disclosure obligations may be solely within the knowledge of FHFA. As our conservator, FHFA has the power to take actions without our knowledge that could be material to our shareholders and other stakeholders, and could significantly affect our financial performance or our continued existence as an ongoing business. Because FHFA currently functions as both our regulator and our conservator, there are inherent structural limitations on our ability to design, implement, test or operate effective disclosure controls and procedures relating to information known to FHFA. As a result, we have not been able to update our disclosure controls and procedures in a manner that adequately ensures the accumulation and communication to management of information known to FHFA that is needed to meet our disclosure obligations under the federal securities laws, including disclosures affecting our financial statements. Given the structural nature of this material weakness, we do not expect to remediate this weakness while we are under conservatorship. See "Controls and Procedures" for further discussion of management's conclusions on our disclosure controls and procedures and internal control over financial reporting.

Failure of our models to produce reliable results may adversely affect our ability to manage risk and make effective business decisions.

We make significant use of quantitative models to measure and monitor our risk exposures and to manage our business. For example, we use models to measure and monitor our exposures to interest rate, credit and market risks, and to forecast credit losses. We use this information in making business decisions relating to strategies, initiatives, transactions, pricing and products.

Models are inherently imperfect predictors of actual results because they are based on historical data and assumptions regarding factors such as future loan demand, borrower behavior, creditworthiness and home price trends. Other potential sources of inaccurate or inappropriate model results include errors in computer code, bad data, misuse of data, or use of a model for a purpose outside the scope of the model's design. Modeling often assumes that historical data or experience can be relied upon as a basis for forecasting future events, an assumption that may be especially tenuous in the face of unprecedented events, such as the COVID-19 pandemic.

Given the challenges of predicting future behavior, management judgment is used at every stage of the modeling process, from model design decisions regarding core underlying assumptions, to interpreting and applying final model output. To control for these inherent imperfections, our models are validated by an independent model risk management team within our Enterprise Risk Management Division and are subject to control requirements set by our model risk policies.

When market conditions change quickly and in unforeseen ways, there is an increased risk that the model assumptions and data inputs for our models are not representative of the most recent market conditions, which requires management judgment to make adjustments or overrides to our models. In a rapidly changing environment, it may not be possible to update existing models quickly enough to properly account for the most recently available data and events. For example, the unprecedented nature of the COVID-19 pandemic has negatively affected our ability to rely on models and may continue to do so.

If our models fail to produce reliable results on an ongoing basis we may not make appropriate risk management decisions, including decisions affecting loan purchases, management of credit losses, guaranty fee pricing, and asset and liability management. Moreover, strategies we employ to manage and govern the risks associated with our use of models may not be effective or fully reliable.

Liquidity and Funding Risk

Limitations on our ability to access the debt capital markets could have a material adverse effect on our ability to fund our operations, and our liquidity contingency plans may be difficult or impossible to execute during a sustained liquidity crisis.

Our ability to fund our business depends on our ongoing access to the debt capital markets. Market concerns about matters such as the extent of government support for our business and debt securities, the future of our business (including future profitability, future structure, regulatory actions and our status as a government-sponsored enterprise) and the creditworthiness of the U.S. government could cause a severe negative effect on our access to the unsecured debt markets, particularly for long-term debt. We believe that our ability in recent years to issue debt of varying maturities at attractive pricing resulted from federal government support of our business. As a result, we believe that our status as a government-sponsored enterprise and continued federal government support is essential to maintaining our access to debt funding. Changes or perceived changes in federal government support of our business, our debt securities or our status as a government-sponsored enterprise, including changes arising in connection with efforts to end our conservatorship, could materially and adversely affect our ability to fund our business. There can be no assurance that the government will continue to support our business or our debt securities, or that our current level of access to debt funding will continue. If our senior preferred stock purchase agreement with Treasury is amended in the future to reduce its support for our debt securities issued after such amendment, it could materially increase our borrowing costs or materially adversely affect our access to the debt capital markets.

Future changes or disruptions in the financial markets could significantly change the amount, mix and cost of funds we obtain, as well as our liquidity position. If we are unable to issue both short- and long-term debt securities at attractive rates and in amounts sufficient to operate our business and meet our obligations, it likely would interfere with the operation of our business and have a material adverse effect on our liquidity, results of operations, financial condition and net worth.

Our liquidity contingency plans may be difficult or impossible to execute during a sustained market liquidity crisis. If the financial markets experience substantial volatility in the future similar to or more intensely than in 2020, it could significantly adversely affect the amount, mix and cost of funds we obtain, as well as our liquidity position. If we cannot access the unsecured debt markets, our ability to repay maturing indebtedness and fund our operations could be eliminated or significantly impaired. In this event, our alternative source of liquidity, our other investments portfolio, may not be sufficient to meet our liquidity needs.

A decrease in the credit ratings on our senior unsecured debt could have an adverse effect on our ability to issue debt on reasonable terms, particularly if such a decrease were not based on a similar action on the credit ratings of the U.S. government. A decrease in our credit ratings also could require that we post additional collateral for our derivatives contracts.

A reduction in our credit ratings could materially adversely affect our liquidity, our ability to conduct our normal business operations, our financial condition and our results of operations. Credit ratings on our senior unsecured debt, as well as the credit ratings of the U.S. government, are primary factors that could affect our borrowing costs and our access to the debt capital markets. Credit ratings on our debt are subject to revision or withdrawal at any time by the rating agencies. Actions by governmental entities impacting the support our business or our debt securities receive from Treasury could adversely affect the credit ratings on our senior unsecured debt. If our senior preferred stock purchase agreement with Treasury is amended to reduce its support for our debt securities issued after such amendment, it could result in a downgrade in the credit ratings on our senior unsecured debt.

Because we rely on the U.S. government for capital support, in recent years, when a rating agency has taken an action relating to the U.S. government's credit rating, they have taken a similar action relating to our ratings at approximately the same time. S&P, Moody's and Fitch have all indicated that they would likely lower their ratings on the debt of Fannie Mae and certain other government-related entities if they were to lower their ratings on the U.S. government. As a result, if a future government shutdown or other event results in downgrades of the government's credit rating, our credit ratings may be similarly downgraded. We currently cannot predict the potential impact of a credit ratings downgrade on demand for our securities or on our business.

A reduction in our credit ratings also could cause derivatives clearing organizations or their members to demand that we post additional collateral for our derivative contracts. Our credit ratings and ratings outlook are included in "MD&A—Liquidity and Capital Management—Liquidity Management—Credit Ratings."

Market and Industry Risk

Changes in interest rates or our loss of the ability to manage interest-rate risk successfully could adversely affect our financial results and condition, and increase interest-rate risk.

We are subject to interest-rate risk, which is the risk that movements in interest rates will adversely affect the value of our assets or liabilities or our future earnings. The primary source of our interest-rate risk is our retained mortgage portfolio, other investments portfolio and the Fannie Mae debt and risk management derivatives we use to fund and manage these portfolios. We describe these risks in more detail in "MD&A—Risk Management—Market Risk Management, Including Interest-Rate Risk Management." Changes in interest rates affect both the value of our mortgage assets and prepayment rates on our mortgage loans, which could have a material adverse effect on our financial results and condition, as well as our liquidity.

Our ability to manage interest-rate risk depends on our ability to issue debt instruments with a range of maturities and other features, including call provisions, at attractive rates and to engage in derivatives transactions. We must exercise judgment in selecting the amount, type and mix of debt and derivative instruments that will most effectively manage our interest-rate risk. The amount, type and mix of financial instruments that are available to us may not offset possible future changes in the spread between our borrowing costs and the interest we earn on our mortgage assets.

We mark to market changes in the estimated fair value of our derivatives through our earnings on a quarterly basis, but we do not similarly mark to market changes in some of the financial instruments that generate our interest-rate risk exposures. As a result, changes in interest rates, particularly significant changes, can have a significant adverse effect on our earnings and net worth for the quarter in which the changes occur, depending on the nature of the changes and the derivatives and short-term investments we hold at that time. For example, we invest the cash held in MBS trusts in short-term investments, such as reverse repo arrangements and U.S. Treasury bills, or hold it in our Federal Reserve account. In a positive interest-rate environment we are entitled to the interest income earned on these short-term investments. If interest rates on short-term investments become negative we would plan to keep all trust cash in our Federal Reserve account. The Federal Reserve has previously indicated that it is not considering adopting a negative interest rate policy and negative interest rates on short-term products have been limited; however, if negative interest rates become more prevalent in the market and the Federal Reserve adopts a negative interest rate policy, then the cash we hold in MBS trusts may not be sufficient to make required payments of principal and interest. If this were to occur, we would be required to replace any shortfall with our own funds to make payments that are due to Fannie Mae MBS certificateholders.

The overall decline in interest rates in 2020 resulted in declines in the fair value of some of the financial instruments that we mark to market through our earnings, which contributed to our fair value losses in 2020. While we have not generally experienced negative interest rates in the United States, some central banks in Europe and Asia have in the past cut interest rates below zero. If U.S. interest rates decline further or fall below zero, it could also further negatively affect our ability to manage our interest-rate risk and result in additional fair value losses, and negative interest rates could increase our operational risk. Additionally a low or negative interest rate environment could reduce the amounts that we earn on our other investment portfolio to the extent interest rates on our investments are lower than the interest expense associated with the debt that funds those assets and we are unable to reinvest contemporaneously in higher-yielding instruments. The lower interest rates in 2020 also contributed to an increase in the size of our retained mortgage portfolio due to an increase in our acquisitions of loans through our whole loan conduit. We expect the size of our retained mortgage portfolio will continue to increase, driven by increases in the amount of loans we purchase from MBS trusts as a result of loan delinquencies and loss mitigation strategies. Because we expect our retained mortgage portfolio to grow, we have increased our outstanding debt and derivative issuance activity. This has increased the risk that movements in interest rates will affect our financial results.

While we implemented hedge accounting in 2021 to reduce the impact of interest-rate volatility on our financial results, we have experienced significant fair value losses in some periods due to changes in interest rates, and we expect to continue to experience volatility from period to period in our financial results as a result of fair value losses or gains on our derivatives.

Changes in interest rates also can affect our credit losses. When interest rates increase, our credit losses from loans with adjustable payment terms may increase as borrower payments increase at their reset dates, which increases the borrower's risk of default. Rising interest rates may also reduce the opportunity for these borrowers to refinance into a fixed-rate loan. Similarly, many borrowers may have additional debt obligations, such as home equity lines of credit and second liens, that also have adjustable payment terms. If a borrower's payment on his or her other debt obligations increases due to rising interest rates or a change in amortization, it increases the risk that the borrower may default on a loan we own or guarantee. In addition to increasing the risk of future borrower defaults, rising interest rates reduce expected future loan prepayments, which lengthens the expected life of our loans and therefore increases our impairment related to any concessions we may have provided on those loans.

Changes in spreads could materially impact our results of operations, net worth and the fair value of our net assets.

Spread risk can result from changes in the spread between our mortgage assets and the debt and derivatives we use to hedge our position, as well as the current market spreads of our Connecticut Avenue Securities® ("CAS") deals issued prior to 2016 that are subject to fair value accounting. Changes in market conditions, including changes in interest rates, liquidity, prepayment and default expectations, and the level of uncertainty in the market for a particular asset class may cause fluctuations in spreads. Changes in mortgage spreads have contributed to significant volatility in our financial results in certain periods, due to fluctuations in the estimated fair value of the financial instruments that we mark to market through our earnings, and this could occur again in a future period. Changes in mortgage spreads could cause significant fair value losses, and could adversely affect our near-term financial results and net worth. We do not actively manage or hedge our spread risk after we purchase mortgage assets, other than through asset monitoring and disposition.

Uncertainty relating to the potential discontinuance of LIBOR may adversely affect our results of operations, financial condition, liquidity and net worth.

We routinely engage in transactions involving financial instruments that reference LIBOR, including loans, securities, and derivative transactions. In 2017, the United Kingdom's Financial Conduct Authority, which regulates LIBOR, announced its intention to stop persuading or compelling the group of major banks that sustain LIBOR to submit rate quotations after 2021. In November 2020, ICE Benchmark Administration, the administrator of LIBOR, stated its intention to cease publication of one-week and two-month U.S. dollar LIBOR after 2021, and to cease publication of overnight, one-month, three-month, six-month and one-year U.S. dollar LIBOR tenors after June 2023. We have exposure to one-month, three-month, six-month and one-year LIBOR, including in financial instruments that mature after June 2023.

Efforts are underway to identify and transition to a set of alternative reference rates. As described in "Business—Legislation and Regulation—GSE Act and Other Legislative and Regulatory Matters—The Future of LIBOR and Alternative Reference Rates," the ARRC has recommended an alternative reference rate referred to as SOFR. However, SOFR is calculated based on different criteria than LIBOR. Accordingly, SOFR and LIBOR may diverge, particularly in times of macroeconomic stress. Since the initial publication of SOFR in 2018, daily changes in SOFR have at times been more volatile than daily changes in comparable benchmark or market rates, and SOFR may be subject to direct influence by activities of the Federal Reserve and the Federal Reserve Bank of New York in ways that other rates may not be. For example, at the direction of the Federal Reserve, the Federal Reserve Bank of New York conducted overnight and term repurchase agreement ("repo") operations to help maintain the federal funds rate within a target range starting in September 2019. Those activities lasted for an extended period of months and directly impacted prevailing SOFR rates.

While many of our LIBOR-indexed financial instruments allow us to take discretionary action to select an alternative reference rate if LIBOR is discontinued, our use of an alternative reference rate may be subject to legal challenges. There is considerable uncertainty as to how the financial services industry will address the discontinuance of LIBOR in financial instruments. This uncertainty could result in disputes and litigation with counterparties and borrowers surrounding the implementation of alternative reference rates in our financial instruments that reference LIBOR. If LIBOR ceases or changes in a manner that causes regulators or market participants to question its viability, financial instruments indexed to LIBOR could experience disparate outcomes based on their contractual terms, ability to amend those terms, market or product type, legal or regulatory jurisdiction, and other factors. There can be no assurance that legislative or regulatory actions will dictate what happens if LIBOR ceases or is no longer representative or viable, or what those actions might be. In addition, while the ARRC was created to ensure a successful transition from LIBOR, there can be no assurance that the ARRC will endorse practices that create a smooth transition and minimize value transfers between market participants, or that its endorsed practices will be broadly adopted by market participants. Divergent industry or market participant actions could result after LIBOR is no longer available, representative, or viable. It is uncertain what effect any divergent industry practices will have on the performance of financial instruments, including those that we own or have issued. Alternative reference rates that replace LIBOR may not yield the same or similar economic results over the lives of the financial instruments, which could adversely affect the value of and return on these instruments. The LIBOR transition could result in our paying higher interest rates on our current LIBOR-indexed obligations, adversely affect the yield on and fair value of the loans and securities we hold or guarantee that reference LIBOR, and increase the costs of or affect our ability to effectively use derivative instruments to manage interest-rate risk.

These developments could have a material impact on us, adjustable-rate mortgage borrowers, investors, and our customers and counterparties. This could result in losses, reputational damage, litigation or costs, or otherwise adversely affect our business.

A deterioration in general economic conditions, particularly home prices and employment trends, or the financial markets may materially adversely affect our business and financial condition.

Our business is significantly affected by the status of the U.S. economy, particularly home prices and employment trends. A prolonged period of slow growth in the U.S. economy or any deterioration in general economic conditions or the financial markets could materially adversely affect our results of operations, net worth and financial condition. In general, if home prices decrease, or the unemployment rate increases, it could result in significantly higher levels of credit losses and credit-related expense. For example, as we describe earlier in this section under "COVID-19 Pandemic Risk," the economic dislocation cause by the COVID-19 pandemic has exposed us to substantial credit-related expenses and risk of credit losses.

Global economic conditions can also adversely affect our business and financial results. Changes or volatility in market conditions resulting from deterioration in or uncertainty regarding global economic conditions can adversely affect the value of our assets, which could materially adversely affect our results of operations, net worth and financial condition. A slowdown in economic growth around the world remains a concern for policy makers and financial markets. To the extent global economic conditions negatively affect the U.S. economy, they also could negatively affect the credit performance of the loans in our book of business.

Volatility or uncertainty in global or domestic political conditions also can significantly affect economic conditions and the financial markets. Global or domestic political unrest also could affect growth and financial markets. We describe above the risks to our business posed by changes in interest rates and changes in spreads. In addition, future changes or disruptions in the financial markets could significantly change the amount, mix and cost of funds we obtain, as well as our liquidity position.

A decline in activity in the U.S. housing market or increasing interest rates could lower our business volumes or otherwise adversely affect our results of operations, net worth and financial condition.

Our business volume is affected by the rate of growth in total U.S. residential mortgage debt outstanding and the size of the U.S. residential mortgage market. A decline in mortgage debt outstanding reduces the unpaid principal balance of mortgage loans available for us to acquire, which in turn could reduce our net interest income and adversely affect our financial results. Various factors may impact our business volume, including:

- Rising interest rates, which generally result in fewer mortgage originations, particularly for refinances.
- Lower home prices and multifamily property valuations, which could preclude some borrowers from being able to refinance their loans.

Legal and Regulatory Risk

Regulatory changes in the financial services industry may negatively impact our business.

Changes in the regulation of the financial services industry are affecting and are expected to continue to affect many aspects of our business. Changes to financial regulations could affect our business directly or indirectly if they affect our customers and counterparties. Examples of regulatory changes that have affected us or may affect us in the future include: rules requiring the clearing of certain derivatives transactions and margin and capital rules for uncleared derivative trades, which impose additional costs on us; and the Dodd-Frank Act risk retention and single-counterparty credit limit requirements.

Our business and results also may be adversely affected by changes in the CFPB's "ability-to-repay" rule to replace the "qualified mortgage patch," including changes to the rule discussed in "Business—Legislation and Regulation—GSE Act and Other Legislative and Regulatory Matters." Although the ability-to-repay rule does not apply directly to us, the rule applies to the lenders from which we acquire single-family mortgage loans. And because FHFA has instructed and the senior preferred stock purchase agreement requires that, with respect to loans that are subject to TILA ability-to-repay standards, Fannie Mae and Freddie Mac shall only acquire loans that are qualified mortgages under the ability-to-repay rule with minor exceptions, provisions in the new rule may reduce the volume of loans that are eligible for delivery to us, and may increase the competition we face for the acquisition and guaranty of such loans.

Changes in regulations applicable to U.S. banks could affect the volume and characteristics of mortgage loans available in the market.

Changes in regulations could also affect demand for our debt and MBS, as U.S. banks purchase a large amount of our debt securities and MBS. New or revised liquidity or capital requirements applicable to U.S. banks could materially affect banks' willingness to deliver loans to us and demand by those banks for our debt securities and MBS. Developments in connection with the single-counterparty credit limit regulations, including those taken in anticipation of our eventual exit from conservatorship, could also cause our customers to change their business practices.

The actions of Treasury, the Commodity Futures Trading Commission, the SEC, the Federal Deposit Insurance Corporation, the Federal Reserve and international central banking authorities directly or indirectly impact financial institutions' cost of funds for lending, capital-raising and investment activities, which could increase our borrowing costs or make borrowing more difficult for us. Changes in monetary policy are beyond our control and difficult to anticipate.

Overall, these legislative and regulatory changes could affect us in substantial and unforeseeable ways and could have a material adverse effect on our business, results of operations, financial condition, liquidity and net worth.

Legislative, regulatory or judicial actions could negatively impact our business, results of operations, financial condition or net worth.

Legislative, regulatory or judicial actions at the federal, state or local level could negatively impact our business, results of operations, financial condition, liquidity or net worth. Legislative, regulatory or judicial actions could affect us in a number of ways, including by imposing significant additional costs on us and diverting management attention or other resources. For example, we were affected by loan forbearance requirements of the CARES act and, among other things, we could also be affected by:

- Designation as a systemically important financial institution. In September 2020, the FSOC announced that it had completed an activities based review of the secondary mortgage market. It noted that any distress at the GSEs that affected their secondary mortgage market activities could pose a risk to financial stability if the risks are not properly mitigated and concluded that it will continue to monitor the secondary mortgage market activities of the GSEs and FHFA's implementation of the regulatory framework to ensure potential risks to financial stability are adequately addressed. If the FSOC determines that such risks to financial stability are not adequately addressed by FHFA's capital and other regulatory requirements or other risk mitigants, the FSOC may consider more formal recommendations or other actions.
- Legislative or regulatory changes that expand our, or our servicers', responsibility and liability for securing, maintaining or otherwise overseeing properties prior to foreclosure, which could increase our costs.
- Court decisions concluding that we or our affiliates are governmental actors, which could impose additional burdens and requirements on us.
- State laws and court decisions granting new or expanded priority rights over our mortgages to homeowners associations or through initiatives that provide a lien priority to loans used to finance energy efficiency or similar improvements, which could adversely affect our ability to recover our losses on affected loans.
- Other agencies of the U.S. government or Congress asking us to take actions to support the housing and mortgage markets or in support of other goals. For example, in December 2011 Congress enacted the TCCA under which we increased our guaranty fee on all single-family mortgages delivered to us by 10 basis points. The revenue generated by this fee increase is paid to Treasury.

General Risk

Our business and financial results could be materially adversely affected by legal or regulatory proceedings.

We are a party to various claims and other legal proceedings. We are periodically involved in government investigations. We may be required to establish accruals and to make substantial payments in the event of adverse judgments or settlements of any such claims, investigations or proceedings, which could have a material adverse effect on our business, results of operations, financial condition, liquidity and net worth. Any legal proceeding or governmental investigation, even if resolved in our favor, could result in negative publicity or cause us to incur significant legal and other expenses. In addition, responding to these matters could divert significant internal resources away from managing our business.

In addition, a number of lawsuits have been filed against the U.S. government relating to the senior preferred stock purchase agreement and the conservatorship. See "Note 16, Commitments and Contingencies" and "Legal Proceedings" for a description of these lawsuits. These lawsuits, and actions Treasury or FHFA may take in response to these lawsuits, could have a material impact on our business.

Changes in accounting standards and policies can be difficult to predict and can materially impact how we record and report our financial results.

Our accounting policies and methods are fundamental to how we record and report our financial condition, results of operations and cash flows. From time to time, the FASB or the SEC changes the financial accounting and reporting standards or the policies that govern the preparation of our financial statements. In addition, FHFA provides guidance that affects our adoption or implementation of financial accounting or reporting standards. These changes can be difficult to predict and expensive to implement, and can materially impact how we record and report our financial condition, results of operations and cash flows. We could be required to apply new or revised guidance retrospectively, which may result in the revision of prior-period financial statements by material amounts. The implementation of new or revised accounting guidance, could have a material adverse effect on our financial results or net worth.

In many cases, our accounting policies and methods, which are fundamental to how we report our financial condition and results of operations, require management to make judgments and estimates about matters that are inherently uncertain. Management also relies on models in making these estimates.

Our accounting policies and methods are fundamental to how we record and report our financial condition and results of operations. Our management must exercise judgment in applying many of these accounting policies and methods so that they comply with GAAP and reflect management's judgment of the most appropriate manner to report our financial condition and results of operations. In some cases, management must select the appropriate accounting policy or method from two or more acceptable alternatives, any of which might be reasonable under the circumstances but might affect the amounts of assets, liabilities, revenues and expenses that we report. See "Note 1, Summary of Significant Accounting Policies" for a description of our significant accounting policies.

We have identified our allowance for loan losses accounting policy as critical to the presentation of our financial condition and results of operations. This policy is described in "MD&A—Critical Accounting Policies and Estimates." We believe this policy is critical because it requires management to make particularly subjective or complex judgments about matters that are inherently uncertain and because of the likelihood that materially different amounts would be reported under different conditions or using different assumptions.

Because our financial statements involve estimates for amounts that are very large, even a small change in the estimate can have a significant impact for the reporting period. For example, because our allowance for loan losses is so large, even a change that has a small impact relative to the size of this allowance can have a meaningful impact on our results for the quarter in which we make the change. Because loans are evaluated for impairment under the CECL standard, our credit-related income or expense now reflects expected lifetime losses, rather than just incurred losses, as were recognized under the pre-CECL model. As a result, the CECL standard has introduced additional volatility to our results.

Many of our accounting methods involve substantial use of models, which are inherently imperfect predictors of actual results because they are based on assumptions, including about future events. For example, we will determine expected lifetime losses on loans and other financial instruments subject to the CECL standard using models. Our actual results could differ significantly from those generated by our models. As a result, the estimates that we use to prepare our financial statements, as well as our estimates of our future results of operations, may be inaccurate, perhaps significantly.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

There are no physical properties that are material to us.

Item 3. Legal Proceedings

This item describes our material legal proceedings. We describe additional material legal proceedings in "Note 16, Commitments and Contingencies," which is incorporated herein by reference. In addition to the matters specifically described or incorporated by reference in this item, we are involved in a number of legal and regulatory proceedings that arise in the ordinary course of business that we do not expect will have a material impact on our business or financial condition. However, litigation claims and proceedings of all types are subject to many factors and their outcome and effect on our business and financial condition generally cannot be predicted accurately.

We establish an accrual for legal claims only when a loss is probable and we can reasonably estimate the amount of such loss. The actual costs of resolving legal claims may be substantially higher or lower than the amounts accrued for those claims. If certain of these matters are determined against us, FHFA or Treasury, it could have a material adverse effect on our results of operations, liquidity and financial condition, including our net worth.

Senior Preferred Stock Purchase Agreements Litigation

Between June 2013 and August 2018, preferred and common stockholders of Fannie Mae and Freddie Mac filed lawsuits in multiple federal courts against one or more of the United States, Treasury and FHFA, challenging actions taken by the defendants relating to the Fannie Mae and Freddie Mac senior preferred stock purchase agreements and the conservatorships of Fannie Mae and Freddie Mac. Some of these lawsuits also contain claims against Fannie Mae and Freddie Mac. The legal claims being advanced by one or more of these lawsuits include challenges to the net worth sweep dividend provisions of the senior preferred stock that were implemented pursuant to August 2012 amendments to the agreements, the payment of dividends to Treasury under the net worth sweep dividend provisions, and FHFA's decision to require Fannie Mae and Freddie Mac to draw funds from Treasury in order to pay dividends to Treasury prior to the August 2012 amendments. Some of the lawsuits also challenge the constitutionality of FHFA's structure. The plaintiffs seek various forms of equitable and injunctive relief, including rescission of the August 2012 amendments, as well as damages.

Amendments to our senior preferred stock purchase agreement made pursuant to the January 2021 letter agreement provide that we may take certain actions without Treasury's prior written consent only when all currently pending significant litigation relating to the conservatorship and to the August 2012 amendments to the agreement has been resolved. For more information, see "Business—Conservatorship, Treasury Agreements and Housing Finance Reform—Treasury Agreements." The cases that remain pending or were terminated after September 30, 2020 are as follows:

District of Columbia. Fannie Mae is a defendant in three cases pending in the U.S. District Court for the District of Columbia—a consolidated putative class action and two additional cases. In all three cases, Fannie Mae and Freddie Mac stockholders filed amended complaints on November 1, 2017 against us, FHFA as our conservator and Freddie Mac. On September 28, 2018, the court dismissed all of the plaintiffs' claims in these cases, except for their claims for breach of an implied covenant of good faith and fair dealing. All three cases are described in "Note 16, Commitments and Contingencies."

Southern District of Texas (Collins v. Mnuchin). On October 20, 2016, preferred and common stockholders filed a complaint against FHFA and Treasury in the U.S. District Court for the Southern District of Texas. On May 22, 2017, the court dismissed the case. On September 6, 2019, the U.S. Court of Appeals for the Fifth Circuit, sitting en banc, affirmed the district court's dismissal of claims against Treasury, but reversed the dismissal of claims against FHFA. The court held that plaintiffs could pursue their claim that FHFA exceeded its statutory powers as conservator when it implemented the net worth sweep dividend provisions of the senior preferred stock purchase agreements in August 2012. The court also held that the provision of the Housing and Economic Recovery Act that insulates the FHFA Director from removal without cause violates constitutional separation of powers principles and, thus, that the FHFA Director may be removed by the president for any reason. The court held that the appropriate remedy for this violation is to declare the provision severed from the statute. Both the plaintiffs and the government filed petitions with the Supreme Court seeking review of the Fifth Circuit's decision. The Supreme Court granted those petitions on July 9, 2020 and heard oral argument on December 9, 2020.

Western District of Michigan. On June 1, 2017, preferred and common stockholders of Fannie Mae and Freddie Mac filed a complaint for declaratory and injunctive relief against FHFA and Treasury in the U.S. District Court for the Western District of Michigan. FHFA and Treasury moved to dismiss the case on September 8, 2017, and plaintiffs filed a motion for summary judgment on October 6, 2017. On September 8, 2020, the court denied plaintiffs' motion for summary judgment and granted defendants' motion to dismiss. The plaintiffs filed a notice of appeal with the U.S. Court for the Sixth Circuit on October 27, 2020.

District of Minnesota. On June 22, 2017, preferred and common stockholders of Fannie Mae and Freddie Mac filed a complaint for declaratory and injunctive relief against FHFA and Treasury in the U.S. District Court for the District of Minnesota. The court dismissed the case on July 6, 2018, and plaintiffs filed a notice of appeal with the U.S. Court of Appeals for the Eighth Circuit on July 10, 2018.

Eastern District of Pennsylvania. On August 16, 2018, common stockholders of Fannie Mae and Freddie Mac filed a complaint for declaratory and injunctive relief against FHFA and Treasury in the U.S. District Court for the Eastern District of Pennsylvania. FHFA and Treasury moved to dismiss the case on November 16, 2018, and plaintiffs filed a motion for summary judgment on December 21, 2018.

U.S. Court of Federal Claims. Numerous cases are pending against the United States in the U.S. Court of Federal Claims. Fannie Mae is a nominal defendant in four of these cases: Fisher v. United States of America, filed on December 2, 2013; Rafter v. United States of America, filed on August 14, 2014; Perry Capital LLC v. United States of America, filed on August 15, 2018; and Fairholme Funds Inc. v. United States, which was originally filed on July 9, 2013, and amended publicly to include Fannie Mae as a nominal defendant on October 2, 2018. Plaintiffs in these cases allege that the net worth sweep dividend provisions of the senior preferred stock that were implemented pursuant to the August 2012 amendment constitute a taking of Fannie Mae's property without just compensation in violation of the U.S. Constitution. The Fisher plaintiffs are pursuing this claim derivatively on behalf of Fannie Mae, while the Rafter, Perry Capital and Fairholme Funds plaintiffs are pursuing the claim both derivatively and directly against the United States. Plaintiffs in Rafter also allege direct and derivative breach of contract claims against the government. The Perry Capital and Fairholme Funds plaintiffs allege similar breach of contract claims, as well as direct and derivative breach of fiduciary duty claims against the government. Plaintiffs in Fisher request just compensation to Fannie Mae in an unspecified amount. Plaintiffs in Rafter, Perry Capital and Fairholme Funds seek just compensation for themselves on their direct claims and payment of damages to Fannie Mae on their derivative claims. The United States filed a motion to dismiss the Fisher, Rafter and Fairholme Funds cases on August 1, 2018. On December 6, 2019, the court entered an order in the Fairholme Funds case that granted the government's motion to dismiss all the direct claims but denied the motion as to all of the derivative claims brought on behalf of Fannie Mae. On June 18, 2020, the U.S. Court of Appeals for the Federal Circuit agreed to hear the appeal of the court's December 6, 2019 order. In the Fisher case, the court denied the government's motion to dismiss on May 8, 2020 and, on August 21, 2020, the Federal Circuit denied the Fisher plaintiffs' request for interlocutory appeal.

Item 4. Mine Safety Disclosures

None.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Common Stock

Our common stock is traded in the over-the-counter market and quoted on the OTCQB, operated by OTC Markets Group Inc., under the ticker symbol "FNMA." Over-the-counter market quotations for our common stock reflect inter-dealer prices, without retail mark-up, mark-down or commission and may not necessarily represent actual transactions. The transfer agent and registrar for our common stock is Computershare Trust Company, N.A., and its address is P.O. Box 505005, Louisville, KY 40233-5005 or, for overnight correspondence, 462 South 4th Street, Suite 1600, Louisville, KY 40202.

Holders

As of February 1, 2021, we had approximately 8,000 registered holders of record of our common stock. In addition, as of February 1, 2021, Treasury held a warrant giving it the right to purchase shares of our common stock equal to 79.9% of the total number of shares of our common stock outstanding on a fully diluted basis on the date of exercise.

Equity Compensation Plan Information

As of December 31, 2020, we had no outstanding options, warrants or rights under any equity compensation plan. Although we have a legacy equity compensation plan that was previously approved by shareholders, our 1985 Employee Stock Purchase Plan, we do not anticipate issuing additional shares under that plan. Moreover, we are prohibited from issuing any stock or other equity securities as compensation without the approval of FHFA and the prior written consent of Treasury under the senior preferred stock purchase agreement, except under limited circumstances.

Recent Sales of Unregistered Equity Securities

Under the terms of our senior preferred stock purchase agreement with Treasury, we are prohibited from selling or issuing our equity interests, without the prior written consent of Treasury except under limited circumstances described in "Conservatorship, Treasury Agreements and Housing Finance Reform—Treasury Agreements—Covenants under Treasury Agreements."

During the quarter ended December 31, 2020, we did not sell any equity securities.

Information about Certain Securities Issuances by Fannie Mae

Pursuant to SEC regulations, public companies are required to disclose certain information when they incur a material direct financial obligation or become directly or contingently liable for a material obligation under an off-balance sheet arrangement. The disclosure must be made in a current report on Form 8-K under Item 2.03 or, if the obligation is incurred in connection with certain types of securities offerings, in prospectuses for that offering that are filed with the SEC.

Because the securities we issue are exempted securities under the Securities Act of 1933, we do not file registration statements or prospectuses with the SEC with respect to our securities offerings. To comply with the disclosure requirements of Form 8-K relating to the incurrence of material financial obligations, we report our incurrence of these types of obligations either in offering circulars or prospectuses (or supplements thereto) that we post on our website or in a current report on Form 8-K that we file with the SEC, in accordance with a "no-action" letter we received from the SEC staff in 2004. In cases where the information is disclosed in a prospectus or offering circular posted on our website, the document will be posted on our website within the same time period that a prospectus for a non-exempt securities offering would be required to be filed with the SEC.

The website address for disclosure about our debt securities is www.fanniemae.com/debtsearch. From this address, investors can access the offering circular and related supplements for debt securities offerings under Fannie Mae's universal debt facility, including pricing supplements for individual issuances of debt securities.

Disclosure about our obligations pursuant to the MBS we issue, some of which may be off-balance sheet obligations, can be found at www.fanniemae.com/mbsdisclosure. From this address, investors can access information and documents about our MBS, including prospectuses and related prospectus supplements.

We are providing our website address solely for your information. Information appearing on our website is not incorporated into this report.

Our Purchases of Equity Securities

We did not repurchase any of our equity securities during the fourth quarter of 2020.

Item 6. Selected Financial Data

The selected consolidated financial data displayed below are summarized from our results of operations for the five-year period ended December 31, 2020, as well as selected consolidated balance sheet data as of the end of each year within this five-year period. Our results of operations for any one period are not necessarily indicative of the results to be expected in any other period. This section should be read together with our consolidated financial statements and the accompanying notes.

	For the Year Ended December 31,				
	2020	2019	2018	2017	2016
	(Dollars in millions)				
Statement of operations data:					
Net revenues[(1)]	**$ 25,328**	$ 21,859	$ 21,828	$ 22,562	$ 21,764
Net income attributable to Fannie Mae	**11,805**	14,160	15,959	2,463	12,313
New business purchase data:					
New business purchases[(2)]	**$ 1,435,305**	$ 666,878	$ 512,023	$ 569,616	$ 637,425
Performance ratios:					
Net interest yield[(3)]	**0.68 %**	0.62 %	0.64 %	0.65 %	0.68 %
Efficiency ratio[(4)]	**31.17**	33.22	31.22	26.85	25.03
Credit (income) loss ratio (in basis points):[(5)]					
Single-family	**(0.6) bps**	1.5 bps	6.8 bps	7.6 bps	12.8 bps
Multifamily	**4.3**	(0.1)	0.6	(0.7)	(0.2)
Return on assets[(6)]	**0.32 %**	0.41 %	0.47 %	0.07 %	0.38 %
Net worth ratio[(7)]	**0.63**	0.42	*	*	*

	As of December 31,				
	2020	2019	2018	2017	2016
Credit quality data:	(Dollars in millions)				
Total troubled debt restructurings on accrual status	**$ 69,532**	$ 81,700	$ 98,375	$ 110,130	$ 127,494
Total nonaccrual loans[(8)]	**29,716**	29,147	32,150	47,369	44,450
Loss reserves[(9)]	**(10,798)**	(9,047)	(14,252)	(19,400)	(23,835)
Loss reserves as a percentage of guaranty book of business:					
Single-family[(10)]	**0.30 %**	0.30 %	0.49 %	0.65 %	0.83 %
Multifamily[(11)]	**0.32**	0.08	0.08	0.09	0.08
Balance sheet data:					
Investments in securities	**$ 138,239**	$ 50,527	$ 45,296	$ 39,522	$ 48,925
Mortgage loans, net of allowance	**3,653,892**	3,334,162	3,249,395	3,178,525	3,079,753
Total assets	**3,985,749**	3,503,319	3,418,318	3,345,529	3,287,968
Short-term debt	**12,173**	26,662	24,896	33,756	35,579
Long-term debt	**3,923,563**	3,440,724	3,367,024	3,296,298	3,226,737
Total liabilities	**3,960,490**	3,488,711	3,412,078	3,349,215	3,281,897
Senior preferred stock	**120,836**	120,836	120,836	117,149	117,149
Preferred stock	**19,130**	19,130	19,130	19,130	19,130
Total Fannie Mae stockholders' equity (deficit)	**25,259**	14,608	6,240	(3,686)	6,071
Net worth surplus (deficit)	**25,259**	14,608	6,240	(3,686)	6,071

	As of December 31,				
	2020	2019	2018	2017	2016
	(Dollars in millions)				
Book of business data:					
Guaranty book of business[12]	**$ 3,714,454**	$ 3,367,498	$ 3,269,152	$ 3,211,858	$ 3,134,005

(1) Consists of net interest income and fee and other income.

(2) New business purchases consist of single-family and multifamily whole mortgage loans purchased during the period and single-family and multifamily mortgage loans underlying Fannie Mae MBS issued during the period pursuant to lender swaps.

(3) Calculated based on net interest income for the period divided by the average balance of total interest-earning assets during the period, expressed as a percentage.

(4) Calculated based on non-interest expense for the period divided by the sum of net interest income and non-interest income, excluding fair value gains (losses), net, for the period, expressed as a percentage.

(5) Consists of write-offs, recoveries, foreclosed property income (expense), write-offs on the redesignation of mortgage loans and gains on sales and other valuation adjustments for the reporting period divided by the average guaranty book of business during the period, expressed in basis points.

(6) Calculated based on net income for the reporting period divided by average total assets during the period, expressed as a percentage. Average balances for purposes of ratio calculations are based on balances at the beginning of the year and at the end of each quarter for each year shown.

(7) Calculated based upon net worth divided by total assets outstanding at the end of the period. For periods prior to the second quarter of 2019, we were unable to retain our earnings to build net worth beyond $3 billion in agreement with the terms of our Senior Preferred Stock Agreement. As such, this ratio is not presented prior to 2019.

(8) Total amounts based on amortized cost of nonaccrual loans. See “Note 1, Summary of Significant Accounting Policies” for information about our policies for placing single-family and multifamily loans on nonaccrual status.

(9) Consists of our allowance for loan losses and reserve for guaranty losses. The measurement of our loss reserves was impacted upon the adoption of the CECL standard on January 1, 2020. See “Note 1, Summary of Significant Accounting Policies” for more information about our adoption of the CECL standard.

(10) Calculated based on single-family conventional guaranty book of business.

(11) Prior to our adoption of the CECL standard on January 1, 2020, benefits for freestanding credit enhancements were netted against our multifamily loss reserves. As of January 1, 2020, these credit enhancements are recorded in “Other assets” in our consolidated balance sheets.

(12) Refers to the sum of the unpaid principal balance of: (a) Fannie Mae MBS outstanding (excluding the portions of any structured securities Fannie Mae issues that are backed by Freddie Mac securities); (b) mortgage loans of Fannie Mae held in our retained mortgage portfolio; and (c) other credit enhancements that we provide on mortgage assets. It also excludes non-Fannie Mae mortgage-related securities held in our retained mortgage portfolio for which we do not provide a guaranty.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

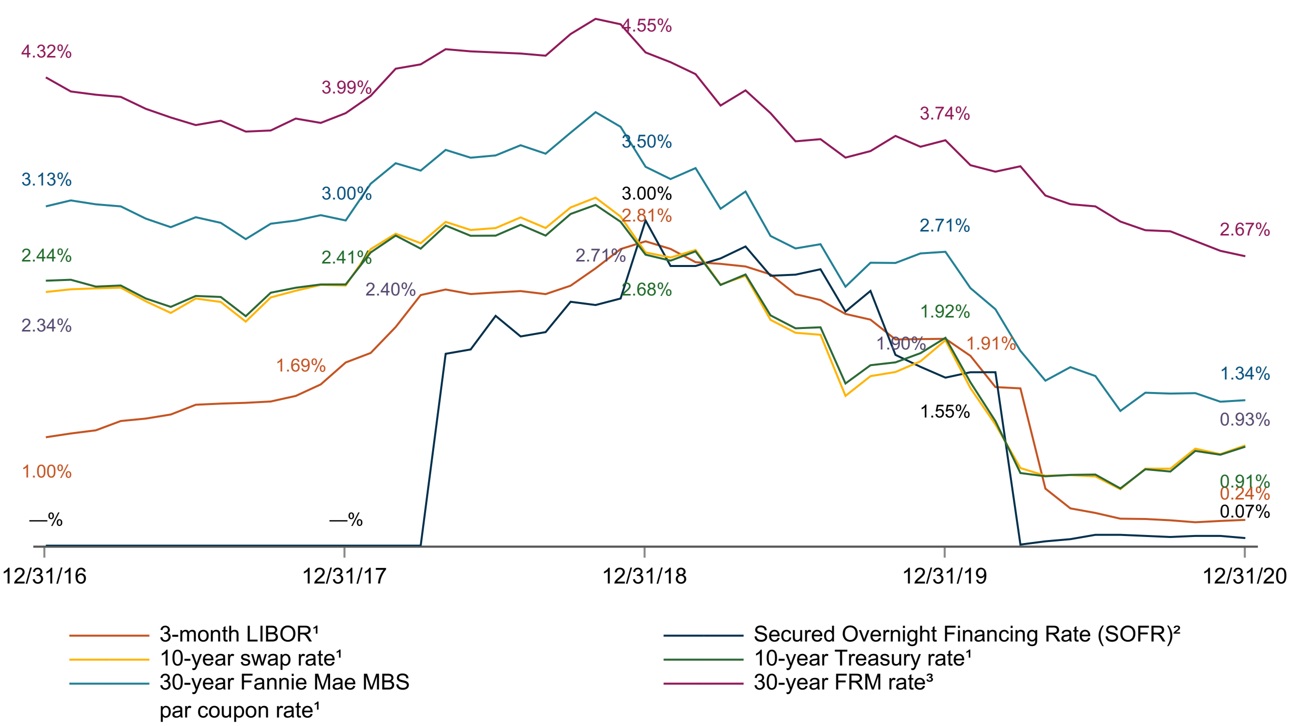
You should read this MD&A together with our consolidated financial statements as of December 31, 2020 and the accompanying notes. This MD&A does not discuss 2018 performance or a comparison of 2018 versus 2019 performance for select areas where we have determined the omitted information is not necessary to understand our current-period financial condition, changes in our financial condition, or our results. The omitted information may be found in our 2019 Form 10-K, filed with the SEC on February 13, 2020, in MD&A sections titled "Consolidated Results of Operations," "Single-Family Business," "Multifamily Business," and "Liquidity and Capital Management."

Key Market Economic Indicators

The COVID-19 pandemic has had a significant adverse effect on both the U.S. and global economies. Below we discuss how varying macroeconomic conditions can influence our financial results across different business and economic environments. See "Executive Summary—COVID-19 Impact" for additional information on the effects of the pandemic on the economy and the uncertainty associated with its ultimate impact on our business and financial results.

Our forecasts and expectations relating to the impact of the COVID-19 pandemic are subject to many uncertainties and may change, perhaps substantially, from our current forecasts and expectations.

Selected Benchmark Interest Rates



(1) According to Bloomberg.

(2) SOFR began April 2018.

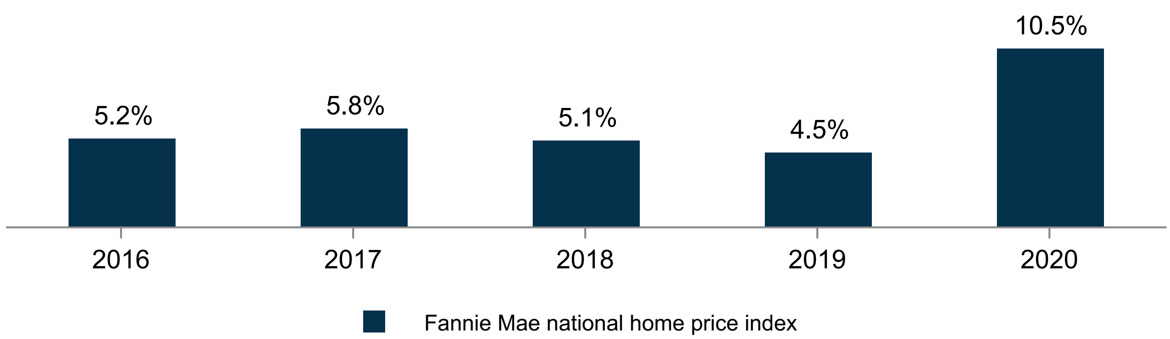
(3) Refers to the U.S. weekly average fixed-rate mortgage rate according to Freddie Mac's Primary Mortgage Market Survey®. These rates are reported using the latest available data for a given period.

How interest rates can affect our financial results

- *Net interest income*. In a rising interest-rate environment, our mortgage loans tend to prepay more slowly, which typically results in lower net amortization income from cost basis adjustments on mortgage loans and related debt. Conversely, in a declining interest-rate environment, our mortgage loans tend to prepay faster, typically resulting in higher net amortization income from cost basis adjustments on mortgage loans and related debt.

- *Fair value gains (losses)*. We have exposure to fair value gains and losses resulting from changes in interest rates, primarily through our mortgage commitment derivatives and risk management derivatives, which we mark to market through earnings. Fair value gains and losses on our mortgage commitment derivatives fluctuate depending on how interest rates and prices move between the time the commitment is opened and settled. The net position and composition across the yield curve of our risk management derivatives changes over time. As a result, interest rate changes (increases or decreases) and yield curve changes (parallel, steepening or flattening shifts) will generate varying amounts of fair value gains or losses in a given period. In January 2021, we implemented fair value hedge accounting to reduce the impact of interest-rate volatility on our financial results. For additional information on the expected impact of hedge accounting, see "Consolidated Results of Operations—Fair Value Losses, Net."
- *Credit-related income (expense).* Increases in mortgage interest rates tend to lengthen the expected lives of our loans, which generally increases the expected impairment and provision for credit losses on such loans. Decreases in mortgage interest rates tend to shorten the expected lives of our loans, which reduces the impairment and provision for credit losses on such loans.

Single-Family Annual Home Price Growth Rate[(1)]



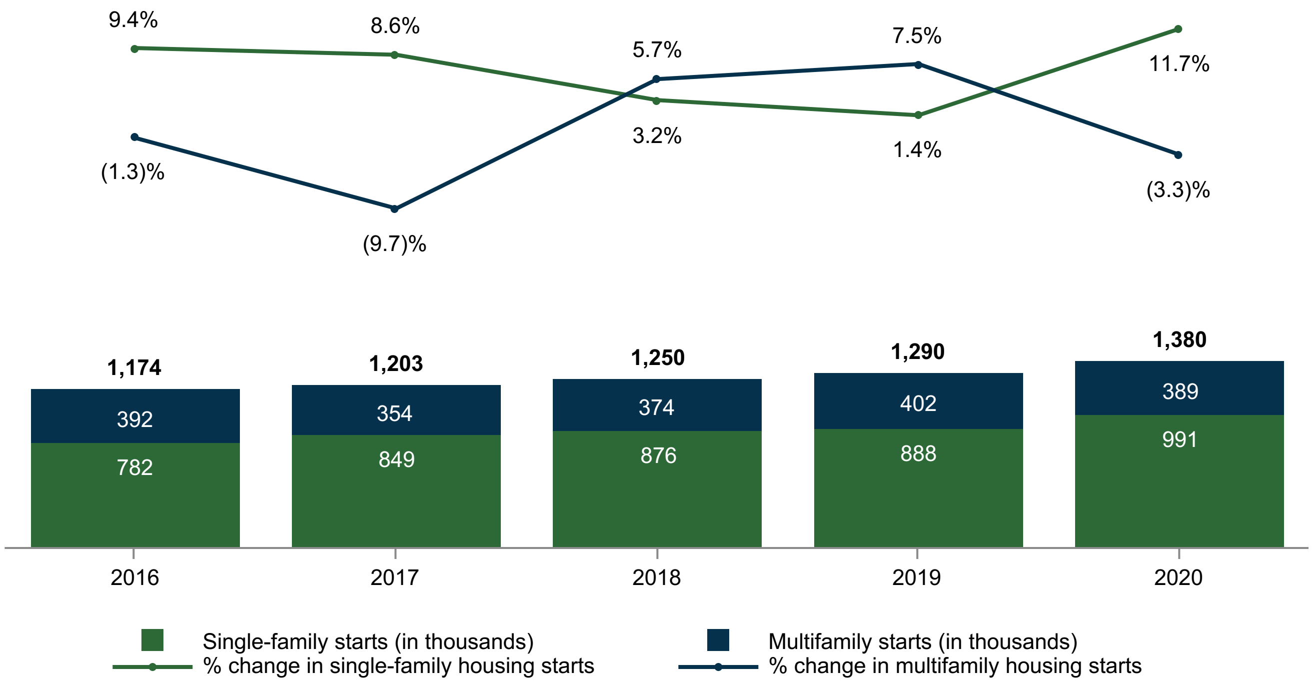
(1) Calculated internally using property data on loans purchased by Fannie Mae, Freddie Mac, and other third-party home sales data. Fannie Mae's home price index is a weighted repeat transactions index, measuring average price changes in repeat sales on the same properties. Fannie Mae's home price index excludes prices on properties sold in foreclosure. Fannie Mae's home price estimates are based on preliminary data and are subject to change as additional data becomes available.

How home prices can affect our financial results

- Actual and forecasted home prices impact our provision or benefit for credit losses.
- Changes in home prices affect the amount of equity that borrowers have in their homes. Borrowers with less equity typically have higher delinquency and default rates.
- As home prices increase, the severity of losses we incur on defaulted loans that we hold or guarantee decreases because the amount we can recover from the properties securing the loans increases. Declines in home prices increase the losses we incur on defaulted loans.
- Home price growth in 2020 was very robust at 10.5% despite the COVID-19 pandemic, benefiting from continued low interest rates, low levels of supply and high levels of demand, particularly from first-time homebuyers.
- We currently expect home price growth on a national basis to slow to 4.5% in 2021, which is an improvement from our prior forecast but lower than the exceptionally strong home price growth we saw in 2020. However, higher-than-expected increases in supply or decreases in demand could lead to decreases or slower growth in home prices. We also expect significant regional variation in the timing and rate of home price growth.
- Our forecasts and expectations relating to the impact of the COVID-19 pandemic are subject to many uncertainties and may change, perhaps substantially, from our current forecasts and expectations. For example, home price growth could slow and potentially decline if GDP growth is weaker than we currently expect, if unemployment, particularly among existing homeowners and potential new home buyers, is higher than we expect, or if the housing market is more sensitive to economic and labor-market weaknesses than we

expect. For further discussion on housing activity, see “Single-Family Business—Single-Family Mortgage Market” and “Multifamily Business—Multifamily Mortgage Market.”

New Housing Starts[1]



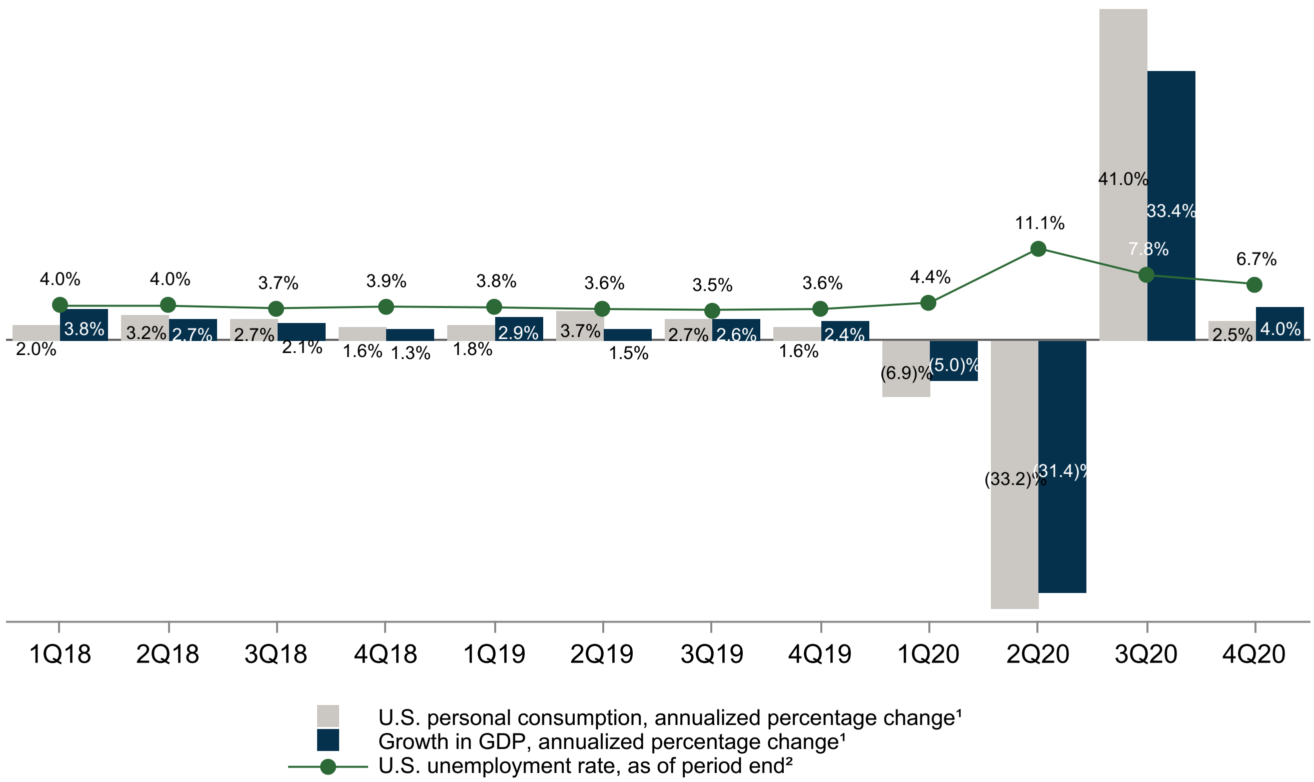
(1) According to U.S. Census Bureau and subject to revision.

How housing activity can affect our financial results

- Two key aspects of economic activity that can impact supply and demand for housing and thus mortgage lending are the rates of household formation and housing construction.
- Household formation is a key driver of demand for both single-family and multifamily housing. A newly formed household will either rent or purchase a home. Thus, changes in the pace of household formation can affect prices and credit performance as well as the degree of loss on defaulted loans.
- Growth of household formation stimulates homebuilding. Homebuilding has typically been a cyclical leading indicator, weakening prior to a slowdown in U.S. economic activity and accelerating prior to a recovery, which contributes to the growth of GDP and employment. However, the housing sector’s performance may vary from its historical precedent due to the many uncertainties related to the impact of the COVID-19 pandemic on the economy and the housing market, as well as uncertainty surrounding future economic or housing policy.
- With regard to housing construction, a decline in housing starts results in fewer new homes being available for purchase and potentially a lower volume of mortgage originations. Construction activity can also affect credit losses through its impact on home prices. If the growth of demand exceeds the growth of supply, prices will appreciate and impact the risk profile of newly originated home purchase mortgages, depending on where in the housing cycle the market is. A reduced pace of construction is often associated with a broader economic slowdown and may signal expected increases in delinquency and losses on defaulted loans.
- After falling sharply in the second quarter, home sales rebounded significantly in the second half of 2020 as purchase demand strengthened due to the low mortgage-rate environment and pent-up demand from the earlier pandemic-related declines, among other factors.
- Given both the current strength in demand and low supply of existing and new homes available for sale at the end of the year, we expect single-family housing starts in 2021 to exceed 2020 levels by 18.6%, with overall housing activity also remaining strong throughout 2021.

- We expect multifamily starts to remain mostly flat in 2021 compared with the levels seen at the end of 2020; however, due primarily to the high level of multifamily starts at the beginning of 2020, multifamily starts are projected to fall by 13.0% on an annual basis in 2021.

GDP, Unemployment Rate and Personal Consumption



(1) GDP growth (decline) and personal consumption growth (decline) for periods prior to the fourth quarter of 2020 are based on the quarterly series calculated by the Bureau of Economic Analysis and are subject to revision.

(2) According to the U.S. Bureau of Labor Statistics and subject to revision.

How GDP, the unemployment rate and personal consumption can affect our financial results

- Changes in GDP, the unemployment rate and personal consumption can affect several mortgage market factors, including the demand for both single-family and multifamily housing and the level of loan delinquencies, which in turn can lead to credit losses.
- Economic growth is a key factor for the performance of mortgage-related assets. In a growing economy, employment and income are rising, thus allowing existing borrowers to meet payment requirements, existing homeowners to consider purchasing and moving to another home, and renters to consider becoming homeowners. Homebuilding typically increases to meet the rise in demand. Mortgage delinquencies typically fall in an expanding economy, thereby decreasing credit losses.
- In a slowing economy, employment and income growth slow and housing activity slows as an early indicator of reduced economic activity. Typically, as an economic slowdown intensifies, households reduce their spending. This reduction in consumption then accelerates the slowdown. An economic slowdown can lead to employment losses, impairing the ability of borrowers and renters to meet mortgage and rental payments, thus causing loan delinquencies to rise. Home sales and mortgage originations also typically fall in a slowing economy.

- The impact of COVID-19 resulted in a significant decline in GDP and a significant rise in the unemployment rate in the first half of 2020, with partial recovery in the second half of 2020 resulting in estimated negative GDP of 3.5% for the full year compared to the 2019 annual level. We expect economic recovery to continue into 2021, as we expect the positive impacts of further stimulus, increased vaccinations and reduction of lockdown measures should help spur economic growth, particularly beginning in the spring. We expect positive GDP growth of 6.1% for 2021.

See "Risk Factors—Market and Industry Risk" for further discussion of risks to our business and financial results associated with interest rates, home prices, housing activity and economic conditions.

Consolidated Results of Operations

This section discusses our consolidated results of operations and should be read together with our consolidated financial statements and the accompanying notes.

Summary of Consolidated Results of Operations

	For the Year Ended December 31,			Variance	
	2020	**2019**	**2018**	**2020 vs. 2019**	**2019 vs. 2018**
	(Dollars in millions)				
Net interest income[1]	**$ 24,866**	$ 21,293	$ 21,273	$ 3,573	$ 20
Fee and other income	**462**	566	555	(104)	11
Net revenues	**25,328**	21,859	21,828	3,469	31
Investment gains, net	**907**	1,770	952	(863)	818
Fair value gains (losses), net	**(2,501)**	(2,214)	1,121	(287)	(3,335)
Administrative expenses	**(3,068)**	(3,023)	(3,059)	(45)	36
Credit-related income:					
Benefit (provision) for credit losses	**(678)**	4,011	3,309	(4,689)	702
Foreclosed property expense	**(177)**	(515)	(617)	338	102
Total credit-related income (expense)	**(855)**	3,496	2,692	(4,351)	804
TCCA fees	**(2,673)**	(2,432)	(2,284)	(241)	(148)
Credit enhancement expense[2]	**(1,361)**	(1,134)	(679)	(227)	(455)
Change in expected credit enhancement recoveries[3]	**233**	—	—	233	—
Other expenses, net[4]	**(1,131)**	(745)	(472)	(386)	(273)
Income before federal income taxes	**14,879**	17,577	20,099	(2,698)	(2,522)
Provision for federal income taxes	**(3,074)**	(3,417)	(4,140)	343	723
Net income	**$ 11,805**	$ 14,160	$ 15,959	$ (2,355)	$ (1,799)
Total comprehensive income	**$ 11,790**	$ 13,969	$ 15,611	$ (2,179)	$ (1,642)

(1) Prior-period amounts have been adjusted to reflect the current-year change in presentation related to our yield maintenance fees. See "Note 1, Summary of Significant Accounting Policies" for more information about our change in presentation.

(2) Previously included in Other expenses, net. Consists of costs associated with our freestanding credit enhancements, which primarily include our Connecticut Avenue Securities® ("CAS") and CIRT programs, enterprise-paid mortgage insurance ("EPMI") and certain lender risk-sharing programs. See "Note 1, Summary of Significant Accounting Policies" for more information about our change in presentation.

(3) Includes estimated changes in benefits from our freestanding credit enhancements as well as any realized amounts. See "Note 1, Summary of Significant Accounting Policies" for more information about our change in presentation.

(4) Consists of debt extinguishment gains and losses, housing trust fund expenses, loan subservicing costs, servicer fees paid in connection with certain loss mitigation activities and gains and losses from partnership investments.

Net Interest Income

Our primary source of net interest income is guaranty fees we receive for managing the credit risk on loans underlying Fannie Mae MBS held by third parties.

Guaranty fees consist of two primary components:

- base guaranty fees that we receive over the life of the loan; and
- upfront fees that we receive at the time of loan acquisition primarily related to single-family loan-level pricing adjustments and other fees we receive from lenders, which are amortized into net interest income as cost basis adjustments over the contractual life of the loan. We refer to this as amortization income.

We recognize almost all of our guaranty fee revenue in net interest income because we consolidate the substantial majority of loans underlying our Fannie Mae MBS in consolidated trusts in our consolidated balance sheets. Guaranty fees from these loans account for the difference between the interest income on loans in consolidated trusts and the interest expense on the debt of consolidated trusts.

The timing of when we recognize amortization income can vary based on a number of factors, the most significant of which is a change in mortgage interest rates. In a rising interest-rate environment, our mortgage loans tend to prepay more slowly, which typically results in lower net amortization income. Conversely, in a declining interest-rate environment, our mortgage loans tend to prepay faster, typically resulting in higher net amortization income.

We also recognize net interest income on the difference between interest income earned on the assets in our retained mortgage portfolio and our other investments portfolio (collectively, our "portfolios") and the interest expense associated with the debt that funds those assets. See "Retained Mortgage Portfolio" and "Liquidity and Capital Management—Liquidity Management—Other Investments Portfolio" for more information about our portfolios.

The table below displays the components of our net interest income from our guaranty book of business, which we discuss in "Guaranty Book of Business," and from our portfolios. Prior-period amounts have been adjusted to reflect the current-year change in presentation related to our yield maintenance fees. See "Note 1, Summary of Significant Accounting Policies" for more information about our change in presentation.

Components of Net Interest Income

	For the Year Ended December 31,			Variance	
	2020	**2019**	**2018**	**2020 vs. 2019**	**2019 vs. 2018**
	(Dollars in millions)				
Net interest income from guaranty book of business:					
Base guaranty fee income[1]	**$ 11,157**	$ 9,711	$ 8,908	**$ 1,446**	$ 803
Base guaranty fee income related to TCCA[2]	**2,673**	2,432	2,284	**241**	148
Net amortization income	**9,121**	5,866	5,655	**3,255**	211
Total net interest income from guaranty book of business	**22,951**	18,009	16,847	**4,942**	1,162
Net interest income from portfolios[3]	**1,915**	3,284	4,426	**(1,369)**	(1,142)
Total net interest income	**$ 24,866**	$ 21,293	$ 21,273	**$ 3,573**	$ 20

(1) Excludes revenues generated by the 10 basis point guaranty fee increase we implemented pursuant to the TCCA which is remitted to Treasury and not retained by us.

(2) Represents revenues generated by the 10 basis point guaranty fee increase we implemented pursuant to the TCCA, the incremental revenue from which is remitted to Treasury and not retained by us. See "Note 1, Summary of Significant Accounting Policies" for more information on guidance we received from FHFA regarding TCCA fee amounts that we are not required to accrue or remit to Treasury with respect to delinquent loans backing MBS trusts.

(3) Includes interest income from assets held in our retained mortgage portfolio and our other investments portfolio, as well as other assets used to generate lender liquidity. Also includes interest expense on our outstanding Connecticut Avenue Securities of $857 million in 2020 and $1.4 billion in both 2019 and 2018.

Net interest income increased in 2020 compared with 2019 and in 2019 compared with 2018, driven by higher net amortization income and higher base guaranty fee income, partially offset by lower income from portfolios.

- *Higher net amortization income.* A declining interest-rate environment in 2020 and 2019 led to increased prepayment volumes as loans refinanced, which accelerated the amortization of cost basis adjustments on mortgage loans of consolidated trusts and the related debt.

  When refinance activity slows, we expect the amortization rate of our loans to also slow, which will likely result in less amortization income.

- *Higher base guaranty fee income.* An increase in the size of our guaranty book of business combined with loans with higher average base guaranty fees comprising a greater portion of our book contributed to the increase in base guaranty fee income in 2020 and 2019.
- *Lower income from portfolios.* Lower yields in 2020 on mortgage loans and assets in our other investments portfolio, partially offset by a decrease in interest expense on our funding debt as key benchmark rates declined as a result of the COVID-19 pandemic, contributed to a decline in income from portfolios in 2020. We discuss the impact of COVID-19 on our funding needs and funding activity in "Liquidity and Capital Management—Liquidity Management—Debt Funding."

  Sales of reperforming loans as well as liquidations in 2019 reduced the average balance of our retained mortgage portfolio, which contributed to lower income from portfolios in 2019. This was partially offset by increased interest income in our other investment portfolio due to higher short-term interest rates on our federal funds sold and securities purchased under agreements to resell or similar arrangements, and a higher average balance of non-mortgage related securities.

Given the historically low interest-rate environment throughout 2020, we acquired a higher-than-usual portion of our outstanding book of business over the last 12 months, with 38% of the loans in our single-family conventional guaranty book of business as of December 31, 2020 being originated during 2020. We expect mortgage rates to remain low through 2021, contributing to continued mortgage refinance activity and high levels of amortization income. Because a large portion of our book of business has been and is expected to be originated in a historically low interest rate environment, we anticipate that refinancing activity will decrease at some point in the future as fewer borrowers can benefit from a refinancing or as interest rates rise. Lower levels of refinancing in the future will likely slow the rate at which we amortize cost basis adjustments and therefore will likely result in lower amortization income in any one period as the average life of our outstanding book of business may extend. In addition, a slower turnover rate would limit the impact that changes in our guaranty fees have on our future revenues as any changes would take longer to meaningfully impact the average charged guaranty fee on our total book of business.

Net Interest Income for Loans Negatively Impacted by COVID-19

We have updated the application of our accounting policy for nonaccrual loans as it relates to loans negatively impacted by COVID-19. As a result, for loans that were current as of March 1, 2020 and subsequently become delinquent, we continue to accrue interest income for up to six months pursuant to an April 2020 Interagency Statement on Loan Modifications and Reporting for Financial Institutions Working with Customers Affected by the Coronavirus (the "Interagency Statement"). For single-family, if those loans are in a forbearance plan beyond six months of delinquency, we continue to accrue interest income provided collection of principal and interest continues to be reasonably assured. Multifamily loans that are in a forbearance plan are placed on nonaccrual status when the borrower is six months past due unless the loan is both well secured and in the process of collection.

As a result of this update, in 2020 we recognized $2.8 billion in interest income related to these loans that we would not have recognized prior to the application of our updated policy, and we recognized $216 million of provision for loan losses on the related accrued interest receivable in 2020. For those single-family loans that remain on accrual status as of period end, and where we continue to accrue interest after six or more contractual payments were past due, we recognized in total $1.6 billion of interest income for the year ended December 31, 2020, and $151 million of provision for loan losses on the related accrued interest receivable for the year ended December 31, 2020. This update also resulted in a significant portion of delinquent loans staying on accrual status. See "Note 1, Summary of Significant Accounting Policies" for more information about our accounting policy update and "Single-Family Business—Single-Family Mortgage Credit Risk Management—Single-Family Problem Loan Management" and "Multifamily Business—Multifamily Mortgage Credit Risk Management—Multifamily Problem Loan Management and Foreclosure Prevention" for details about loans in forbearance, as well as on-balance sheet loans past due 90 days or more and continuing to accrue interest.

Analysis of Net Interest Income

The table below displays an analysis of our net interest income, average balances and related yields earned on assets and incurred on liabilities. For most components of the average balances, we use a daily weighted average of unpaid principal balance net of unamortized cost basis adjustments. When daily average balance information is not available, such as for mortgage loans, we use monthly averages. Prior-period amounts have been adjusted to reflect the current-year change in presentation related to our yield maintenance fees.

Analysis of Net Interest Income and Yield(1)

	For the Year Ended December 31,								
	2020			2019			2018		
	Average Balance	Interest Income/ Expense	Average Rates Earned/ Paid	Average Balance	Interest Income/ Expense	Average Rates Earned/ Paid	Average Balance	Interest Income/ Expense	Average Rates Earned/ Paid
	(Dollars in millions)								
Interest-earning assets:									
Mortgage loans of Fannie Mae	**$ 114,132**	**$ 3,917**	**3.43 %**	$ 116,350	$ 4,959	4.26 %	$ 149,878	$ 6,641	4.43 %
Mortgage loans of consolidated trusts	**3,369,573**	**102,399**	**3.04**	3,181,505	112,415	3.53	3,083,060	108,388	3.52
Total mortgage loans(2)	**3,483,705**	**106,316**	**3.05**	3,297,855	117,374	3.56	3,232,938	115,029	3.56
Mortgage-related securities	**9,793**	**327**	**3.34**	10,115	421	4.16	10,744	440	4.10
Non-mortgage-related securities(3)	**123,218**	**645**	**0.51**	61,332	1,381	2.22	55,809	1,126	1.99
Federal funds sold and securities purchased under agreements to resell or similar arrangements	**41,807**	**146**	**0.34**	35,891	843	2.32	37,338	742	1.96
Advances to lenders	**8,551**	**135**	**1.55**	5,410	163	2.97	4,102	136	3.27
Total interest-earning assets	**$3,667,074**	**107,569**	**2.93 %**	$3,410,603	120,182	3.52 %	$3,340,931	117,473	3.52 %
Interest-bearing liabilities:									
Short-term funding debt	**$ 33,068**	**(182)**	**0.54**	$ 23,426	(501)	2.11	$ 25,835	(464)	1.77
Long-term funding debt	**204,832**	**(3,181)**	**1.55**	164,752	(4,115)	2.50	200,478	(4,557)	2.27
CAS debt	**17,915**	**(857)**	**4.78**	23,630	(1,433)	6.06	24,247	(1,391)	5.74
Total debt of Fannie Mae	**255,815**	**(4,220)**	**1.65**	211,808	(6,049)	2.86	250,560	(6,412)	2.56
Debt securities of consolidated trusts held by third parties	**3,403,052**	**(78,483)**	**2.31**	3,190,070	(92,840)	2.91	3,084,846	(89,788)	2.91
Total interest-bearing liabilities	**$3,658,867**	**(82,703)**	**2.26 %**	$3,401,878	(98,889)	2.91 %	$3,335,406	(96,200)	2.88 %
Net interest income/net interest yield		**$ 24,866**	**0.68 %**		$ 21,293	0.62 %		$ 21,273	0.64 %

(1) Includes the effects of discounts, premiums and other cost basis adjustments.

(2) Average balance includes mortgage loans on nonaccrual status. For nonaccrual mortgage loans not subject to the COVID-19-related nonaccrual guidance, interest income is recognized when cash is received. Interest income from the amortization of loan fees, primarily consisting of upfront cash fees and yield maintenance fees, was $9.3 billion, $5.4 billion and $4.2 billion for the years ended 2020, 2019, and 2018, respectively.

(3) Consists of cash, cash equivalents and U.S. Treasury securities.

The table below displays the change in our net interest income between periods and the extent to which that variance is attributable to: (1) changes in the volume of our interest-earning assets and interest-bearing liabilities or (2) changes in the interest rates of these assets and liabilities.

Rate/Volume Analysis of Changes in Net Interest Income

	2020 vs. 2019			2019 vs. 2018		
	Total Variance	Variance Due to:[1] Volume	Rate	Total Variance	Variance Due to:[1] Volume	Rate
	(Dollars in millions)					
Interest income:						
Mortgage loans of Fannie Mae	**$ (1,042)**	**$ (93)**	**$ (949)**	$ (1,682)	$ (1,437)	$ (245)
Mortgage loans of consolidated trusts	**(10,016)**	**6,369**	**(16,385)**	4,027	3,475	552
Total mortgage loans	**(11,058)**	**6,276**	**(17,334)**	2,345	2,038	307
Mortgage-related securities	**(94)**	**(19)**	**(75)**	(19)	(26)	7
Non-mortgage-related securities[2]	**(736)**	**786**	**(1,522)**	255	118	137
Federal funds sold and securities purchased under agreements to resell or similar arrangements	**(697)**	**120**	**(817)**	101	(30)	131
Advances to lenders	**(28)**	**70**	**(98)**	27	40	(13)
Total interest income	**(12,613)**	**7,233**	**(19,846)**	2,709	2,140	569
Interest expense:						
Short-term funding debt	**319**	**(152)**	**471**	(37)	46	(83)
Long-term funding debt	**934**	**(852)**	**1,786**	442	864	(422)
CAS debt	**576**	**307**	**269**	(42)	36	(78)
Total debt of Fannie Mae	**1,829**	**(697)**	**2,526**	363	946	(583)
Debt securities of consolidated trusts held by third parties	**14,357**	**(5,989)**	**20,346**	(3,052)	(3,115)	63
Total interest expense	**16,186**	**(6,686)**	**22,872**	(2,689)	(2,169)	(520)
Net interest income	**$ 3,573**	**$ 547**	**$ 3,026**	$ 20	$ (29)	$ 49

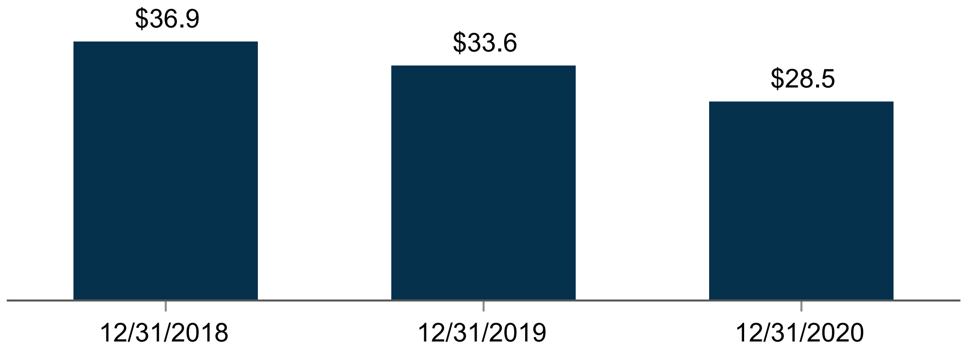
(1) Combined rate/volume variances are allocated between rate and volume based on the relative size of each variance.

(2) Consists of cash, cash equivalents and U.S. Treasury securities.

Analysis of Deferred Amortization Income

We initially recognize mortgage loans and debt of consolidated trusts in our consolidated balance sheets at fair value. The difference between the initial fair value and the carrying value of these instruments is recorded as a cost basis adjustment, either as a premium or a discount, in our consolidated balance sheets. We amortize these cost basis adjustments over the contractual lives of the loans or debt. On a net basis, for mortgage loans and debt of consolidated trusts, we are in a premium position with respect to debt of consolidated trusts, which represents deferred income we will recognize in our consolidated statements of operations and comprehensive income as amortization income in future periods. The amount of our deferred amortization income decreased in 2020 primarily as a result of high refinance volumes.

Deferred Income Represented by Net Premium Position on Debt of Consolidated Trusts (Dollars in billions)



Investment Gains, Net

Investment gains, net primarily includes gains and losses recognized from the sale of available-for-sale ("AFS") securities, sale of loans, gains and losses recognized on the consolidation and deconsolidation of securities, and lower of cost or fair value adjustments on held for sale ("HFS") loans. Investment gains, net decreased during 2020 compared with 2019 primarily driven by a significant decrease in the volume of sales of single-family HFS loans. Investment gains, net increased during 2019 compared with 2018 primarily driven by an increase in gains on sales of single-family HFS loans.

Fair Value Gains (Losses), Net

The estimated fair value of our derivatives, trading securities and other financial instruments carried at fair value may fluctuate substantially from period to period because of changes in interest rates, the yield curve, mortgage and credit spreads and implied volatility, as well as activity related to these financial instruments. While the estimated fair value of our derivatives that serve to mitigate certain risk exposures may fluctuate, some of the financial instruments that generate these exposures are not recorded at fair value in our consolidated statements of operations and comprehensive income.

The table below displays the components of our fair value gains and losses.

Fair Value Gains (Losses), Net

	For the Year Ended December 31,		
	2020	**2019**	**2018**
	(Dollars in millions)		
Risk management derivatives fair value gains (losses) attributable to:			
Net contractual interest expense on interest-rate swaps	**$ (261)**	$ (833)	$ (1,061)
Net change in fair value during the period	**(99)**	(199)	1,133
Total risk management derivatives fair value gains (losses), net	**(360)**	(1,032)	72
Mortgage commitment derivatives fair value gains (losses), net	**(2,654)**	(1,043)	324
Credit enhancement derivatives fair value gains (losses), net	**182**	(35)	26
Total derivatives fair value gains (losses), net	**(2,832)**	(2,110)	422
Trading securities gains, net	**513**	322	126
CAS debt fair value gains, net	**327**	145	208
Other, net[1]	**(509)**	(571)	365
Fair value gains (losses), net	**$ (2,501)**	$ (2,214)	$ 1,121

[1] Consists of fair value gains and losses on non-CAS debt and mortgage loans held at fair value.

Risk Management Derivatives Fair Value Gains (Losses), Net

Risk management derivative instruments are an integral part of our interest-rate risk management strategy. We supplement our issuance of debt securities with derivative instruments to further reduce duration risk, which includes prepayment risk. We purchase option-based risk management derivatives to economically hedge prepayment risk. In cases where options obtained through callable debt issuances are not needed for risk management derivative purposes, we may sell options in the over-the-counter ("OTC") derivatives market in order to offset the options obtained in the callable debt. Our principal purpose in using derivatives is to manage our aggregate interest-rate risk profile within prescribed risk parameters. We generally use only derivatives that are relatively liquid and straightforward to value. We consider the cost of derivatives used in our management of interest-rate risk to be an inherent part of the cost of funding and hedging our mortgage investments and economically similar to the interest expense that we recognize on the debt we issue to fund our mortgage investments.

We present, by derivative instrument type, the fair value gains and losses on our derivatives in "Note 8, Derivative Instruments."

The primary factors that may affect the fair value of our risk management derivatives include the following:

- *Changes in interest rates.* Our primary derivative instruments are interest-rate swaps, including pay-fixed and receive-fixed interest-rate swaps. Pay-fixed swaps decrease in value and receive-fixed swaps increase in value as swap rates decrease (with the opposite being true when swap rates increase). Because the composition of our pay-fixed and receive-fixed derivatives varies across the yield curve, different yield curve changes (that is, parallel, steepening or flattening) will generate different gains and losses.
- *Changes in our derivative activity.* The mix and balance of our derivative portfolio changes from period to period as we enter into or terminate derivative instruments to respond to changes in interest rates and changes in the balances and modeled characteristics of our assets and liabilities. Changes in the composition of our derivative portfolio affect the derivative fair value gains and losses we recognize in a given period.

Additional factors that affect the fair value of our risk management derivatives include implied interest-rate volatility and the time value of purchased or sold options, among other factors.

We recognized total risk management derivatives fair value losses in 2020 and 2019, primarily as a result of net interest expense on interest-rate swaps combined with a decrease in the fair value of our interest-rate swaps due to the declines in swap rates during 2020 and 2019.

For additional information on our use of derivatives to manage interest-rate risk, see "Risk Management—Market Risk Management, Including Interest-Rate Risk Management—Interest-Rate Risk Management."

Expected Impact of Hedge Accounting

We implemented fair value hedge accounting in January 2021 to reduce the impact of interest-rate volatility on our financial results. Under this hedge program, fair value gains and losses attributable to changes in certain benchmark interest rates, such as LIBOR or SOFR, for derivatives that are in a designated hedge relationship may be reduced by offsetting gains and losses in the fair value of designated hedged mortgage loans or debt. Therefore, we expect the volatility of our financial results associated with changes in fair value due to interest rates will be reduced substantially going forward. We expect fair value gains and losses driven by other factors, such as credit spreads, will continue. During the hedge period, the changes in the fair value of the derivative and the hedged item will be recognized in net interest income.

Mortgage Commitment Derivatives Fair Value Gains (Losses), Net

We account for certain commitments to purchase or sell mortgage-related securities and to purchase single-family mortgage loans as derivatives. For open mortgage commitment derivatives, we include changes in their fair value in our consolidated statements of operations and comprehensive income. When derivative purchase commitments settle, we include the fair value of the commitment on the settlement date in the cost basis of the loan or security we purchase. When derivative commitments to sell securities settle, we include the fair value of the commitment on the settlement date in the cost basis of the security we sell. Purchases of securities issued by our consolidated MBS trusts are treated as extinguishments of debt; we recognize the fair value of the commitment on the settlement date as a component of debt extinguishment gains and losses in "Other expenses, net." Sales of securities issued by our consolidated MBS trusts are treated as issuances of consolidated debt; we recognize the fair value of the commitment on the settlement date as a component of debt in the cost basis of the debt issued.

We recognized fair value losses on our mortgage commitments in 2020 and 2019 primarily due to losses on commitments to sell mortgage-related securities driven by increases in prices during the commitment periods as interest rates declined during 2020 and 2019.

Trading Securities Gains, Net

Gains on trading securities in 2020 and 2019 were primarily driven by declines in interest rates, which resulted in gains on fixed-rate securities held in portfolio.

CAS Debt Fair Value Gains, Net

Credit risk transfer transactions, including CAS debt issuances, transfer a portion of credit losses on a reference pool of mortgage loans to investors. CAS debt we issued prior to 2016 is reported at fair value as “Debt of Fannie Mae” in our consolidated balance sheets. CAS debt issued subsequent to 2016 is not accounted for in a manner that generates fair value gains and losses. We expect our exposure to fair value gains and losses on CAS debt to continue to decline as the outstanding balance of this debt declines.

We recognized fair value gains on CAS debt reported at fair value in 2020 and 2019 primarily due to widened spreads between CAS debt yields and LIBOR.

For further discussion of our credit risk transfer transactions, see “Single-Family Business—Single-Family Mortgage Credit Risk Management—Single-Family Credit Enhancement and Transfer of Mortgage Credit Risk—Credit Risk Transfer Transactions.”

Fair Value Option Debt of Consolidated Trusts Fair Value Gains (Losses), Net

We elected the fair value option for our long-term debt of consolidated trusts that contain embedded derivatives that would otherwise require bifurcation. The fair value of our long-term consolidated trust debt held at fair value is reported as “Debt of Consolidated Trusts” in our consolidated balance sheets. The changes in the fair value of our long-term consolidated trust debt held at fair value are included in “Other, net” in the table above.

We recognized fair value losses on our long-term debt of consolidated trusts held at fair value in 2020 and 2019 due to declines in interest rates.

Credit-Related Income (Expense)

Our credit-related income or expense can vary substantially from period to period based on a number of factors, such as changes in actual and forecasted home prices or property valuations, fluctuations in actual and forecasted interest rates, borrower payment behavior, events such as natural disasters or pandemics, the types and volume of our loss mitigation activities, including forbearances and loan modifications, the volume of foreclosures completed and the redesignation of loans from held for investment (“HFI”) to HFS. In recent periods, the redesignation of certain reperforming and nonperforming single-family loans has been a significant driver of credit-related income. We suspended new sales of reperforming and nonperforming loans in the second quarter of 2020, as investor interest in purchasing these loans was severely impacted by the COVID-19 pandemic and its effects. Market conditions for the sale of these loans, particularly reperforming loans, improved following the second quarter of 2020. As a result, we resumed sales of reperforming loans in the third quarter of 2020. However, our volume of nonperforming and reperforming loans sales in 2020 was still much less than 2019.

Our credit-related income or expense and our loss reserves can also be impacted by updates to the models, assumptions and data used in determining our allowance for loan losses. The January 1, 2020 CECL standard implementation introduced additional volatility in our financial results as credit-related income or expense now includes expected lifetime losses on our loans and thus is sensitive to fluctuations in the factors detailed above. Although CECL impacts the timing and amount of estimated credit-related income or expense recognized in any given period, it does not impact the amount of credit losses we ultimately realize at the time a loan is written-off.

As described below, since the onset of the COVID-19 pandemic in early 2020, our credit-related income or expense and our loss reserves have been significantly affected by our estimates of the impact of the COVID-19 pandemic, which require significant management judgment. Changes in our estimates of borrowers that will ultimately receive forbearance (referred to as our “cumulative forbearance take-up rate”) and even more significantly, the loss mitigation outcomes of affected borrowers after the forbearance period ends, remain uncertain and can affect the amount of credit-related income or expense we recognize. Although we believe the estimates underlying our allowance are reasonable, we may observe future volatility in these estimates as we continue to observe actual loan performance data and update our models and assumptions relating to this unprecedented event.

Provision for Credit Losses

The table below provides a quantitative analysis of the drivers in 2020 of our single-family and multifamily benefit or provision for credit losses and the decrease or increase in expected benefit from freestanding credit enhancements. The provision for credit losses includes our provision for loan losses, accrued interest receivable losses and our guaranty loss reserves, and excludes credit losses on our AFS securities. It also excludes the transition impact of adopting the CECL standard, which was recorded as an adjustment to retained earnings as of January 1, 2020. Many of the drivers that contribute to our provision for credit losses overlap or are interdependent. The attribution shown below is based on internal allocation estimates.

Components of Provision for Credit Losses and Change in Expected Credit Enhancement Recoveries

	For the Year Ended December 31, 2020
	(Dollars in millions)
Single-family provision for credit losses:	
Changes in loan activity[(1)]	$ (31)
Redesignation of loans from HFI to HFS	672
Actual and forecasted home prices	1,536
Actual and projected interest rates	1,085
Change in actual and expected loan delinquencies and change in assumptions regarding COVID-19 forbearance[(2)]	(3,021)
Other[(3)]	(314)
Single-family provision for credit losses	(73)
Multifamily provision for credit losses:	
Changes in loan activity[(1)]	(234)
Actual and projected interest rates	210
Actual and projected economic data and estimated impact of the COVID-19 pandemic	(648)
Other[(3)]	70
Multifamily provision for credit losses	(602)
Total provision for credit losses	$ (675)
Change in expected credit enhancement recoveries:[(4)]	
Single-family	$ 89
Multifamily	137
Total change in expected credit enhancement recoveries	$ 226

(1) Primarily consists of loan liquidations, new troubled debt restructurings ("TDRs"), amortization of concessions granted to borrowers and the impact of FHFA's Advisory Bulletin 2012-02, "Framework for Adversely Classifying Loans, Other Real Estate Owned, and Other Assets and Listing Assets for Special Mention" (the "Advisory Bulletin"). For multifamily, changes in loan activity also includes changes in the allowance due to loan delinquencies and the impact of changes in debt service coverage ratios ("DSCRs") based on updated property financial information, which is used to assess loan credit quality.

(2) Includes changes in the allowance due to assumptions regarding loss mitigation when loans exit forbearance as well as adjustments to modeled results.

(3) Includes provision for allowance for accrued interest receivable. For single-family, also includes changes in the reserve for guaranty losses that are not separately included in the other components.

(4) Includes changes in expected credit enhancement recoveries only for active loans. Recoveries received after foreclosure, which are included in "Change in expected credit enhancement recoveries" in "Summary of Consolidated Results of Operations," are not included.

The primary factors that contributed to our single-family provision for credit losses in 2020 were:

- *Provision from changes in actual and expected loan delinquencies and change in assumptions regarding COVID-19 forbearance, which includes adjustments to modeled results.* The economic dislocation caused by the COVID-19 pandemic was a significant driver of credit-related expenses during 2020, with the majority of the impact recognized in the first quarter of 2020. Estimating expected credit losses as a result of the COVID-19 pandemic continues to require significant management judgment regarding a number of matters, including our expectations surrounding the length of time that loans remain in forbearance and the type and extent of loss mitigation that may be needed when loans exit a COVID-19-related forbearance, political uncertainty and the high degree of uncertainty regarding the future course of the pandemic, including new strains of the virus and its effect on the economy. As a result, we believe the model used to estimate single-family credit losses does not capture the entirety of losses we expect to incur relating to COVID-19. Accordingly, management used its judgment to significantly increase the loss projections developed by our credit loss model in the first quarter of 2020. The model has consumed data from the initial quarters of the pandemic, including loan delinquencies, and updated credit profile data for loans in forbearance. As more of this data was consumed by our credit loss model throughout the year, we have reduced the non-modeled adjustment initially recorded in the first quarter of 2020.

Management continued to apply its judgment and supplement model results as of December 31, 2020, taking into account the continued high degree of uncertainty regarding the future impact of the pandemic and its effect on the economy. In determining our allowance for loan losses as of December 31, 2020, we estimated that 8.5% our single-family borrowers, calculated by loan count, would ultimately receive forbearance due to a COVID-19-related financial hardship. This represents a downward revision from the 15% take-up rate estimated as of March 31, 2020, which was revised based on recent economic data and actual forbearance activity observed during the last nine months of 2020. See "Single-Family Business—Single-Family Mortgage Credit Risk Management—Single-Family Problem Loan Management—Single-Family Loans in Forbearance" for information on our single-family loans in forbearance.

The impact of these factors was partially offset by the impact of the following factors, which reduced our single-family provision for credit losses recognized in 2020:

- *Benefit from actual and expected home price growth*. In the first quarter of 2020, we significantly reduced our expectations for home price growth to near-zero for 2020. However, the negative impact from the first quarter of 2020 was more than offset by a robust increase in actual home price growth through the remainder of 2020 despite the COVID-19 pandemic. In addition, we also expect more moderate home price growth for 2021. See "Key Market Economic Indicators" for additional information about how home prices affect our credit loss estimates, including a discussion of our home price forecast.
- *Benefit from lower actual and projected interest rates*. For much of 2020, we continued to be in a historically low interest rate environment, which we expect to continue in 2021. As mortgage interest rates decline, we expect an increase in future prepayments on single-family loans, including modified loans. Higher expected prepayments shorten the expected lives of modified loans, which decreases the expected impairment relating to term and interest-rate concessions provided on these loans and results in a benefit for credit losses.
- *Benefit from the redesignation of certain reperforming single-family loans from HFI to HFS.* In the third quarter of 2020, we resumed sales of reperforming loans after our suspension of new loan sales in the second quarter of 2020. As a result, we redesignated certain reperforming single-family loans from HFI to HFS in the second half of 2020, as we no longer intend to hold them for the foreseeable future or to maturity. Upon redesignation of these loans, we recorded the loans at the lower of cost or fair value with a write-off against the allowance for loan losses. Amounts recorded in the allowance related to these loans exceeded the amounts written off, resulting in a benefit as shown in the table above.

Our multifamily provision for credit losses in 2020 was primarily driven by:

- *Provision from actual and projected economic data and estimated impact of the COVID-19 pandemic, which includes adjustments to modeled results*. Our multifamily provision for credit losses in 2020 was driven by higher expected losses as a result of the economic dislocation caused by the COVID-19 pandemic and heightened economic uncertainty, driven by elevated unemployment, which we expect will result in a decrease in multifamily property income and property values. In addition, the multifamily provision for credit losses includes increased expected credit losses on seniors housing loans, as these properties have been disproportionately impacted by the pandemic. Consistent with the single-family discussion above, we believe the model we use to estimate multifamily credit losses does not capture the entirety of losses we expect to incur relating to COVID-19. Accordingly, management used its judgment to increase the loss projections developed by our credit loss model. The model has consumed data from the initial quarters of the pandemic, but we continue to apply management judgment and supplement model results as of December 31, 2020, taking into account the continued high degree of uncertainty that remains relating to the impact of the pandemic.

The table below provides quantitative analysis of the drivers in 2019 and 2018 of our single-family benefit for credit losses. The presentation of our components represents amounts recognized prior to our transition to the lifetime loss model prescribed by the CECL standard. Many of the drivers that contribute to our benefit for credit losses overlap or are interdependent. The attribution shown below is based on internal allocation estimates. The table does not include our multifamily provision for credit losses as the amounts in 2019 and 2018 were less than $50 million.

Components of Benefit for Credit Losses

	For the Year Ended December 31,	
	2019	2018
	(Dollars in millions)	
Single-family benefit for credit losses:		
Changes in loan activity[1]	$ 458	$ 797
Redesignation of loans from HFI to HFS	1,489	1,907
Actual and forecasted home prices	859	1,200
Actual and projected interest rates	291	(803)
Other[2]	941	212
Total single-family benefit for credit losses	$ 4,038	$ 3,313

(1) Primarily consists of changes in the allowance due to loan delinquency, loan liquidations, new TDRs, amortization of concessions granted to borrowers and the impact of FHFA's Advisory Bulletin.

(2) Primarily consists of the impact of model and assumption changes and changes in the reserve for guaranty losses that are not separately included in the other components.

The primary factors that contributed to our single-family benefit for credit losses in 2019 were:

- The redesignation of certain reperforming single-family loans from HFI to HFS as we no longer intend to hold them for the foreseeable future or to maturity.
- During 2019, we enhanced the model used to estimate cash flows for individually impaired single-family loans within our allowance for loan losses. This enhancement was performed as a part of management's routine model performance review process. In addition to incorporating recent loan performance data, this model enhancement better captures recent prepayment activity, default rates, and loss severity in the event of default. The enhancement resulted in a decrease in our allowance for loan losses and an incremental benefit for credit losses of approximately $850 million and is included in "Other" in the table above.
- An increase in actual and forecasted home prices. Higher home prices decrease the likelihood that loans will default and reduce the amount of credit loss on loans that do default, which impacts our estimate of losses and ultimately reduces our loss reserves and provision for credit losses.
- Changes in loan activity. Higher loan liquidation activity generally occurs during a lower interest-rate environment as loans prepay, and during the peak home buying season of the second and third quarters of each year. When mortgage loans prepay, we reverse any remaining allowance related to these loans, which contributed to the benefit for credit losses.

The primary factors that impacted our single-family benefit for credit losses in 2018 were:

- We recognized a benefit from the redesignation of certain reperforming and nonperforming single-family loans from HFI to HFS during the year.
- We recognized a benefit for credit losses due to higher actual and forecasted home prices in the year.
- The benefit for credit losses was partially offset by the impact of higher actual and projected mortgage interest rates. As mortgage interest rates rise, we expect a decrease in future prepayments on single-family loans, including modified loans. Lower expected prepayments lengthen the expected lives of modified loans, which increases the impairment relating to term and interest rate concessions provided on these loans and results in an increase in the provision for credit losses.

TCCA Fees

Pursuant to the TCCA, in 2012 FHFA directed us to increase our single-family guaranty fees by 10 basis points and remit this increase to Treasury. This TCCA-related revenue is included in "Net interest income" and the expense is recognized as "TCCA fees" in our consolidated financial statements.

TCCA fees increased in 2020 compared with 2019 as our book of business subject to the TCCA continued to grow during the year. FHFA has provided guidance that we are not required to accrue or remit TCCA fees to Treasury with respect to loans backing MBS trusts that have been delinquent for four months or longer. Once payments on such loans resume, we will resume accrual and remittance to Treasury of the associated TCCA fees on the loans. See "Business—Legislation and Regulation—GSE Act and Other Legislative and Regulatory Matters—Guaranty Fees and Pricing" for further discussion of the TCCA.

Credit Enhancement Expense

Credit enhancement expense consists of costs associated with our freestanding credit enhancements, which primarily include our CAS and CIRT programs, EPMI, and amortization expense for certain lender risk-sharing programs. For our CAS and CIRT programs, this expense is generally based on the average balance of the covered reference pool. Therefore, the periodic expense at the transaction or security level generally increases or decreases as the covered balance increases or decreases, respectively. We exclude from this expense costs related to our CAS transactions accounted for as debt instruments and credit risk transfer programs accounted for as derivative instruments. Credit enhancement expense has been presented as a separate line item for all periods presented. In prior periods, credit enhancement expenses were recorded in "Other expenses, net." We discuss the transfer of mortgage credit risk in "Single-Family Business—Single-Family Mortgage Credit Risk Management—Single-Family Credit Enhancement and Transfer of Mortgage Credit Risk" and "Multifamily Business—Multifamily Mortgage Credit Risk Management—Transfer of Multifamily Mortgage Credit Risk."

Change in Expected Credit Enhancement Recoveries

Change in expected credit enhancement recoveries consists of the change in benefits recognized from our freestanding credit enhancements, including any realized amounts. Benefits, if any, from our CAS, CIRT and EPMI programs previously recorded in "Fee and other income" have been reclassified to "Change in expected credit enhancement recoveries" for all periods presented. Benefits from other lender risk-sharing programs, including our multifamily Delegated Underwriting and Servicing ("DUS®") program, were recorded as a reduction of credit-related expense in periods prior to 2020. However, with our adoption of the CECL standard on January 1, 2020, benefits from freestanding credit enhancements are no longer recorded as a reduction of credit-related expenses. These benefits from lender risk-sharing have been reclassified into "Change in expected credit enhancement recoveries" on a prospective basis beginning January 1, 2020.

Other Expenses, Net

Other expenses primarily consists of debt extinguishment gains and losses, housing trust fund expenses, loan subservicing costs, servicer fees paid in connection with certain loss mitigation activities, and gains and losses from partnership investments. Other expenses increased in 2020 compared with 2019 primarily due to an increase in housing trust fund expenses due to increases in acquisitions during the year. We expect our fees paid to servicers for loss mitigation work to increase into 2021 as single-family borrowers who received a COVID-19-related forbearance enter into various loss mitigation solutions once the forbearance period ends, such as repayment plans, payment deferrals or loan modifications. For additional information about our loans in forbearance, see "Single-Family Business—Single-Family Mortgage Credit Risk Management—Single-Family Loans in Forbearance."

Federal Income Taxes

We recognized provisions for federal income taxes of $3.1 billion in 2020, $3.4 billion in 2019 and $4.1 billion in 2018. Our provision for federal income taxes declined in 2020 compared with 2019 and in 2019 compared with 2018 primarily because of decreases in our pre-tax income. In addition, we recognized a benefit for federal income taxes in 2019 of $205 million as a result of a favorable resolution with the Internal Revenue Service ("IRS") of an uncertain tax position.

Our effective tax rates were 20.7% in 2020, 19.4% in 2019 and 20.6% in 2018. Our effective tax rates for each of these periods was also impacted by the benefits of our investments in housing projects eligible for low-income housing tax credits. See "Note 9, Income Taxes" for additional information on our income taxes.

Consolidated Balance Sheet Analysis

This section discusses our consolidated balance sheets and should be read together with our consolidated financial statements and the accompanying notes.

Summary of Consolidated Balance Sheets

	As of December 31,		
	2020	**2019**	**Variance**
	(Dollars in millions)		
Assets			
Cash and cash equivalents and federal funds sold and securities purchased under agreements to resell or similar arrangements	**$ 66,537**	$ 34,762	$ 31,775
Restricted cash	**77,286**	40,223	37,063
Investments in securities	**138,239**	50,527	87,712
Mortgage loans:			
Of Fannie Mae	**117,911**	101,668	16,243
Of consolidated trusts	**3,546,533**	3,241,510	305,023
Allowance for loan losses	**(10,552)**	(9,016)	(1,536)
Mortgage loans, net of allowance for loan losses	**3,653,892**	3,334,162	319,730
Deferred tax assets, net	**12,947**	11,910	1,037
Other assets	**36,848**	31,735	5,113
Total assets	**$ 3,985,749**	$ 3,503,319	$ 482,430
Liabilities and equity			
Debt:			
Of Fannie Mae	**$ 289,572**	$ 182,247	$ 107,325
Of consolidated trusts	**3,646,164**	3,285,139	361,025
Other liabilities	**24,754**	21,325	3,429
Total liabilities	**3,960,490**	3,488,711	471,779
Fannie Mae stockholders' equity (deficit):			
Senior preferred stock	**120,836**	120,836	—
Other net deficit	**(95,577)**	(106,228)	10,651
Total equity	**25,259**	14,608	10,651
Total liabilities and equity	**$ 3,985,749**	$ 3,503,319	$ 482,430

Cash and Cash Equivalents and Federal Funds Sold and Securities Purchased under Agreements to Resell or Similar Arrangements and Investments in Securities

The increase in both (1) cash and cash equivalents and federal funds sold and securities purchased under agreements to resell or similar arrangements and (2) investments in securities from December 31, 2019 to December 31, 2020 was primarily driven by the investment of proceeds from new debt issuances, which we discuss in "Liquidity and Capital Management—Liquidity Management—Cash Flows" as well as proceeds from loan payoffs. These funds were mostly invested in U.S. Treasury securities at period end.

Restricted Cash

The increase in restricted cash from December 31, 2019 to December 31, 2020 was primarily driven by an increase in prepayments due to high refinance volumes for loans of consolidated trusts. The cash from these prepayments has been received from the borrower but not yet been remitted to MBS certificateholders. For information on our accounting policy for restricted cash, see "Note 1, Summary of Significant Accounting Policies."

Mortgage Loans, Net of Allowance

The mortgage loans reported in our consolidated balance sheets are classified as either HFS or HFI and include loans owned by Fannie Mae and loans held in consolidated trusts.

Mortgage loans, net of allowance for loan losses increased as of 2020 compared with 2019 primarily driven by:

- an increase in mortgage loans due to acquisitions, primarily from record levels of refinancing activity, outpacing liquidations and sales;
- partially offset by an increase in our allowance for loan losses we expect to incur as a result of the COVID-19 pandemic and the impact of our adoption of the CECL standard on January 1, 2020.

For additional information on our mortgage loans, see “Note 3, Mortgage Loans,” and for additional information on changes in our allowance for loan losses, see “Note 4, Allowance for Loan Losses.”

Other Assets

The increase in other assets from December 31, 2019 to December 31, 2020 was primarily driven by an increase in advances to lenders. As interest rates declined during 2020, mortgage activity increased, resulting in higher funding needs by lenders. For information on our accounting policy for advances to lenders, see “Note 1, Summary of Significant Accounting Policies.”

Debt

Debt of consolidated trusts represents the amount of Fannie Mae MBS issued from consolidated trusts and held by third-party certificateholders. Debt of Fannie Mae is the primary means of funding our mortgage purchases. Debt of Fannie Mae also includes CAS debt, which we issued in connection with our transfer of mortgage credit risk. We provide a comparison of the mix between our outstanding short-term and long-term debt and a summary of activity in debt of Fannie Mae in “Liquidity and Capital Management—Liquidity Management—Debt Funding.” Also see “Note 7, Short-Term and Long-Term Debt” for additional information on our outstanding debt.

The increase in debt of Fannie Mae from December 31, 2019 to December 31, 2020 was primarily driven by long-term debt issuances to support elevated refinancing and purchase activity in preparation for the implementation in December 2020 of new liquidity risk management requirements issued by FHFA, and in support of current and potential future liquidity needs due to the COVID-19 pandemic. The increase in debt of consolidated trusts from December 31, 2019 to December 31, 2020 was primarily driven by sales of Fannie Mae MBS, which are accounted for as issuances of debt of consolidated trusts in our consolidated balance sheets, since the MBS certificate ownership is transferred from us to a third party.

Stockholders’ Equity

Our net equity increased as of December 31, 2020 compared with December 31, 2019 by the amount of our comprehensive income recognized during 2020, partially offset by a charge of $1.1 billion to retained earnings due to our implementation of the CECL standard on January 1, 2020. See “Note 1, Summary of Significant Accounting Policies—New Accounting Guidance—The Current Expected Credit Loss Standard” for further details.

The aggregate liquidation preference of the senior preferred stock increased from $138.0 billion as of September 30, 2020 to $142.2 billion as of December 31, 2020. For more information about how this liquidation preference is determined see “Business—Conservatorship, Treasury Agreements and Housing Finance Reform—Treasury Agreements—Senior Preferred Stock.”

Retained Mortgage Portfolio

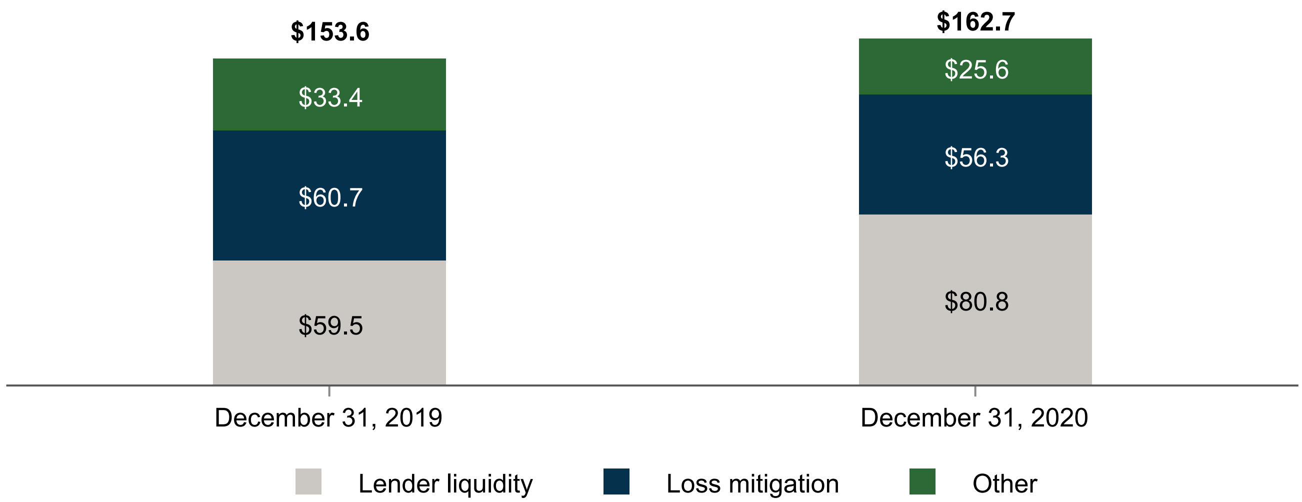
We use our retained mortgage portfolio primarily to provide liquidity to the mortgage market through our whole loan conduit and to support our loss mitigation activities, particularly in times of economic stress when other sources of liquidity to the mortgage market may decrease or withdraw. Previously, we also used our retained mortgage portfolio for investment purposes.

Our retained mortgage portfolio consists of mortgage loans and mortgage-related securities that we own, including Fannie Mae MBS and non-Fannie Mae mortgage-related securities. Assets held by consolidated MBS trusts that back mortgage-related securities owned by third parties are not included in our retained mortgage portfolio.

The chart below separates the instruments within our retained mortgage portfolio, measured by unpaid principal balance, into three categories based on each instrument's use:

- *Lender liquidity*, which includes balances related to our whole loan conduit activity, supports our efforts to provide liquidity to the single-family and multifamily mortgage markets.
- *Loss mitigation* supports our loss mitigation efforts through the purchase of delinquent loans from our MBS trusts.
- *Other* represents assets that were previously purchased for investment purposes. More than half of the balance of "Other" as of December 31, 2020 consisted of Fannie Mae reverse mortgage securities and reverse mortgage loans. We expect the amount of assets in "Other" will continue to decline over time as they liquidate, mature or are sold.

Retained Mortgage Portfolio
(Dollars in billions)



The increase in our retained mortgage portfolio as of December 31, 2020 compared with December 31, 2019 was primarily due to an increase in our acquisitions of loans through our whole loan conduit, which primarily supports liquidity for small- to medium-sized lenders, during 2020 driven by higher mortgage refinance activity. This increase was partially offset by a decrease in our legacy investment portfolio due to continued liquidations of loans and a decrease in our loss mitigation portfolio due to the sale of reperforming loans. See "Executive Summary—Conservatorship, Treasury Agreements and Housing Finance Reform—Treasury Agreements—Covenants under Treasury Agreements" for information on new volume limitations related to single-family loan acquisitions through the our whole loan conduit under the terms of our senior preferred stock purchase agreement with Treasury.

The table below displays the components of our retained mortgage portfolio, measured by unpaid principal balance. Based on the nature of the asset, these balances are included in either "Investments in securities" or "Mortgage loans of Fannie Mae" in our Summary of Consolidated Balance Sheets shown above.

Retained Mortgage Portfolio

	As of December 31,	
	2020	2019
	(Dollars in millions)	
Lender liquidity:		
Agency securities[(1)]	$ 34,810	$ 38,375
Mortgage loans	45,895	21,152
Total lender liquidity	80,705	59,527
Loss mitigation mortgage loans[(2)]	56,315	60,731
Other:		
Reverse mortgage loans	12,388	17,129
Mortgage loans	4,881	6,546
Reverse mortgage securities[(3)]	7,185	7,575
Private-label and other securities	473	1,250
Fannie Mae-wrapped private-label securities	521	581
Mortgage revenue bonds	182	272
Total other	25,630	33,353
Total retained mortgage portfolio	$ 162,650	$ 153,611
Retained mortgage portfolio by segment:		
Single-family mortgage loans and mortgage-related securities	$ 154,943	$ 145,179
Multifamily mortgage loans and mortgage-related securities	$ 7,707	$ 8,432

(1) Consists of Fannie Mae, Freddie Mac and Ginnie Mae mortgage-related securities, including Freddie Mac securities guaranteed by Fannie Mae. Excludes Fannie Mae and Ginnie Mae reverse mortgage securities and Fannie Mae-wrapped private-label securities.

(2) Includes single-family loans classified as troubled debt restructurings ("TDRs") that were on accrual status of $29.4 billion and $38.2 billion as of December 31, 2020 and 2019, respectively, and single-family loans on nonaccrual status of $19.6 billion as of December 31, 2020 and 2019, respectively. Includes multifamily loans classified as TDRs that were on accrual status of $20 million and $51 million as of December 31, 2020 and 2019, respectively, and multifamily loans on nonaccrual status of $536 million and $132 million as of December 31, 2020 and 2019, respectively.

(3) Consists of Fannie Mae and Ginnie Mae reverse mortgage securities.

The amount of mortgage assets that we may own is capped at $250 billion and will decrease to $225 billion on December 31, 2022 under the terms of our senior preferred stock purchase agreement with Treasury. We are currently managing our business to a $225 billion cap pursuant to instructions from FHFA.

We include 10% of the notional value of interest-only securities in calculating the size of the retained portfolio for the purpose of determining compliance with the senior preferred stock purchase agreement retained portfolio limits and associated FHFA guidance. As of December 31, 2020, 10% of the notional value of our interest-only securities was $2.3 billion, which is not included in the table above.

Under the terms of our MBS trust documents, we have the option or, in some instances, the obligation, to purchase mortgage loans that meet specific criteria from an MBS trust. The purchase price for these loans is the unpaid principal balance of the loan plus accrued interest. If a delinquent loan remains in a single-family MBS trust, the servicer is responsible for advancing the borrower's missed scheduled principal and interest payments to the MBS holders for up to four months, after which time we must make these missed payments. In addition, we must reimburse servicers for advanced principal and interest payments. The cost of purchasing most delinquent loans from a single-family Fannie Mae MBS trust and holding them in our retained mortgage portfolio is currently less than the cost of advancing delinquent payments to security holders.

In September 2020, FHFA instructed both us and Freddie Mac to extend the timeframe for our single-family delinquent loan buyout policy to 24 consecutively missed monthly payments (that is, loans that are 24 months past due) effective January 1, 2021. Despite this change in policy, we currently anticipate that in most cases we will purchase delinquent loans from single-family MBS trusts prior to the 24-month deadline under one of the exceptions to the general policy, which includes loans that are permanently modified, loans subject to a short-sale or deed-in-lieu of foreclosure, loans that are paid in full and loans referred to foreclosure.

In support of our loss mitigation strategies, we purchased $13.5 billion of loans from our single-family MBS trusts during 2020, the substantial majority of which were delinquent, compared with $10.5 billion of loans purchased from single-family MBS trusts during 2019. We expect the amount of loans we buy out of trusts to increase in 2021 as a result of COVID-19-related loan delinquencies and loss mitigation strategies, which will increase the size of our retained mortgage portfolio, perhaps substantially. However, the volume of loans we ultimately buy, the timing of those purchases, and the length of time those loans remain in our retained mortgage portfolio remain highly uncertain and depend on a number of factors, including the success of our loss mitigation activities, particularly payment deferrals and repayment plans, which do not require us to purchase loans out of trust. Because of our mortgage asset limit, our business activities may be constrained. See "Single-Family Business—Single-Family Mortgage Credit Risk Management—Single-Family Problem Loan Management—Single-Family Loans in Forbearance" and "Multifamily Business—Multifamily Mortgage Credit Risk Management—Multifamily Problem Loan Management and Foreclosure Prevention" for information on our loans in forbearance.

Guaranty Book of Business

Our "guaranty book of business" consists of:

- Fannie Mae MBS outstanding, excluding the portions of any structured securities we issue that are backed by Freddie Mac securities;
- mortgage loans of Fannie Mae held in our retained mortgage portfolio; and
- other credit enhancements that we provide on mortgage assets.

"Total Fannie Mae guarantees" consists of:

- our guaranty book of business; and
- the portions of any structured securities we issue that are backed by Freddie Mac securities.

We and Freddie Mac began issuing single-family uniform mortgage-backed securities, or "UMBS®," in June 2019. In this report, we use the term "Fannie Mae-issued UMBS" to refer to single-family Fannie Mae MBS that are directly backed by fixed-rate mortgage loans and generally eligible for trading in the to-be-announced ("TBA") market. We use the term "Fannie Mae MBS" or "our MBS" to refer to any type of mortgage-backed security that we issue, including UMBS, Supers, Real Estate Mortgage Investment Conduit securities ("REMICs") and other types of single-family or multifamily mortgage-backed securities.

Some Fannie Mae MBS that we issue are backed in whole or in part by Freddie Mac securities. When we resecuritize Freddie Mac securities into Fannie Mae-issued structured securities, such as Supers and REMICs, our guaranty of principal and interest extends to the underlying Freddie Mac securities. However, Freddie Mac continues to guarantee the payment of principal and interest on the underlying Freddie Mac securities that we have resecuritized. We do not charge an incremental guaranty fee to include Freddie Mac securities in the structured securities that we issue. References to our single-family guaranty book of business in this report exclude Freddie Mac-acquired mortgage loans underlying Freddie Mac securities that we have resecuritized.

The table below displays the composition of our guaranty book of business based on unpaid principal balance. Our single-family guaranty book of business accounted for 90% of our guaranty book of business as of December 31, 2020 and 2019.

Composition of Fannie Mae Guaranty Book of Business

	As of December 31,					
	2020			2019		
	Single-Family	Multifamily	Total	Single-Family	Multifamily	Total
	(Dollars in millions)					
Conventional guaranty book of business[1]	**$3,305,030**	**$ 386,379**	**$3,691,409**	$2,997,475	$ 341,522	$ 3,338,997
Government guaranty book of business[2]	**20,777**	**2,268**	**23,045**	27,422	1,079	28,501
Guaranty book of business	**3,325,807**	**388,647**	**3,714,454**	3,024,897	342,601	3,367,498
Freddie Mac securities guaranteed by Fannie Mae[3]	**137,316**	**—**	**137,316**	50,100	—	50,100
Total Fannie Mae guarantees	**$3,463,123**	**$ 388,647**	**$3,851,770**	$3,074,997	$ 342,601	$ 3,417,598

(1) Refers to mortgage loans and mortgage-related securities that are not guaranteed or insured, in whole or in part, by the U.S. government.

(2) Refers to mortgage loans and mortgage-related securities guaranteed or insured, in whole or in part, by the U.S. government.

(3) Consists of approximately (i) $110.7 billion and $37.8 billion in unpaid principal balance of Freddie Mac-issued UMBS backing Fannie Mae-issued Supers as of December 31, 2020 and 2019, respectively; and (ii) $26.6 billion and $12.3 billion in unpaid principal balance of Freddie Mac securities backing Fannie Mae-issued REMICs as of December 31, 2020 and 2019, respectively. Our total exposure as of December 31, 2019 to Freddie Mac securities backing Fannie Mae-issued REMICs may have been lower than the amount disclosed because a portion of the Freddie Mac securities backing these Fannie Mae-issued REMICs may have been backed by Fannie Mae MBS.

The GSE Act requires us to set aside each year an amount equal to 4.2 basis points of the unpaid principal balance of our new business purchases and to pay this amount to specified U.S. Department of Housing and Urban Development ("HUD") and Treasury funds in support of affordable housing. In February 2020, we paid $280 million to the funds based on our new business purchases in 2019. For 2020, we recognized an expense of $603 million related to this obligation based on $1.4 trillion in new business purchases during the period. We expect to pay this amount to the funds in 2021. See "Business—Legislation and Regulation—GSE Act and Other Legislative and Regulatory Matters—Affordable Housing Allocations" for more information regarding this obligation.

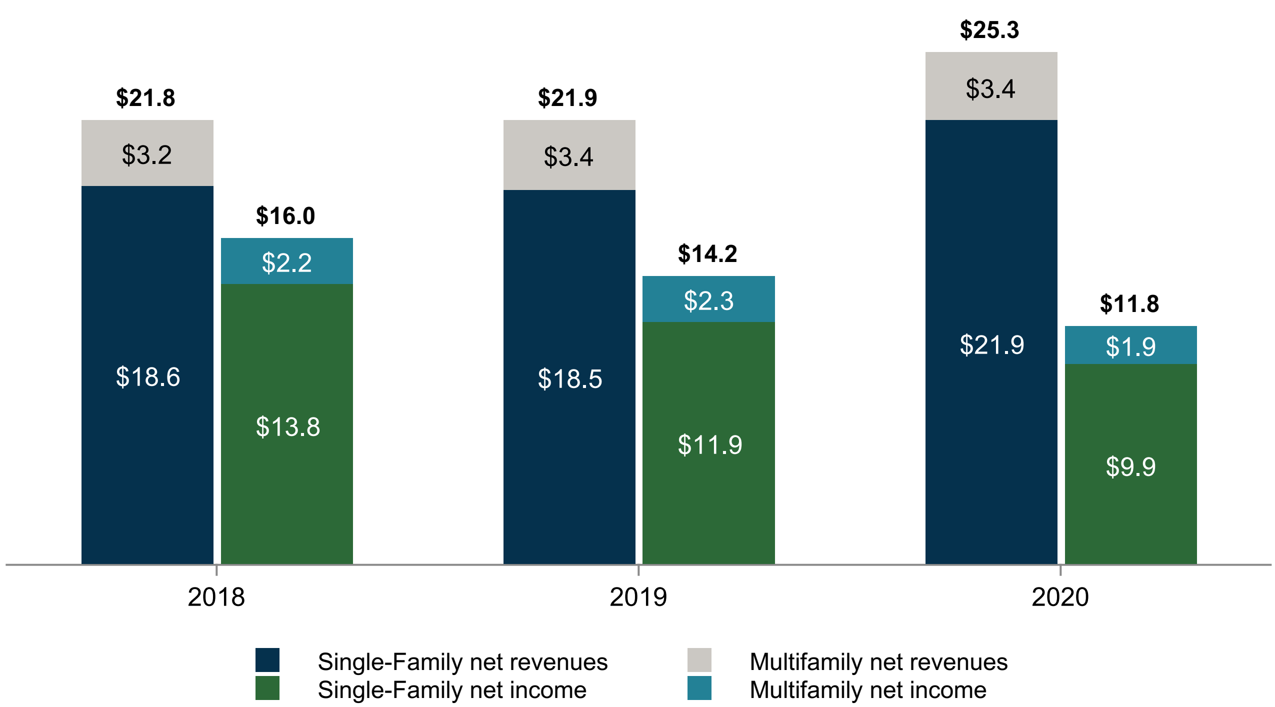
Business Segments

We conduct business in the U.S. residential mortgage markets and the global securities market. According to the Federal Reserve, total U.S. residential mortgage debt outstanding was estimated to be approximately $13.2 trillion as of September 30, 2020 (the latest date for which information is available). We owned or guaranteed mortgage assets representing approximately 26% of total U.S. residential mortgage debt outstanding as of September 30, 2020.

We have two reportable business segments: Single-Family and Multifamily. The Single-Family business operates in the secondary mortgage market relating to single-family mortgage loans, which are secured by properties containing four or fewer residential dwelling units. The Multifamily business operates in the secondary mortgage market relating primarily to multifamily mortgage loans, which are secured by properties containing five or more residential units.

The chart below displays the net revenues and net income for each of our business segments. Net revenues consist of net interest income and fee and other income.

Business Segment Net Revenues and Net Income
(Dollars in billions)



Segment Allocation Methodology

The majority of our assets, revenues and expenses are directly associated with each respective business segment and are included in determining its asset balance and operating results. Those assets, revenues and expenses that are not directly attributable to a particular business segment are allocated based on the size of each segment's guaranty book of business. The substantial majority of our gains and losses associated with our risk management derivatives are allocated to our Single-Family business segment.

In the following sections, we describe each segment's primary business activities, customers, competitive and market conditions, business metrics, and financial results. We also describe how each segment manages mortgage credit risk and its credit metrics.

Single-Family Business

Single-Family Primary Business Activities

Providing Liquidity for Single-Family Mortgage Loans

Working with our lender customers, our Single-Family business provides liquidity to the mortgage market primarily by acquiring single-family loans from lenders and securitizing those loans into Fannie Mae MBS, which are either delivered to the lenders or sold to investors or dealers. We describe our securitization transactions and the types of Fannie Mae MBS that we issue in "Business—Mortgage Securitizations" above. Our Single-Family business also supports liquidity in the mortgage market and the businesses of our lender customers through other activities, such as issuing structured Fannie Mae MBS backed by single-family mortgage assets and buying and selling single-family agency mortgage-backed securities.

Our Single-Family business securitizes and purchases primarily conventional (not federally insured or guaranteed) single-family fixed-rate or adjustable-rate, first-lien mortgage loans, or mortgage-related securities backed by these types of loans. We also securitize or purchase loans insured by FHA, loans guaranteed by the VA, loans guaranteed by the Rural Development Housing and Community Facilities Program of the U.S. Department of Agriculture, manufactured housing mortgage loans and other mortgage-related securities.

Single-Family Mortgage Servicing

Our single-family mortgage loans are serviced by mortgage servicers on our behalf. Some loans are serviced by the lenders that initially sold the loans to us. In other cases, loans are serviced by third-party servicers that did not originate or sell the loans to us. For loans we own or guarantee, the lender or servicer must obtain our approval before selling servicing rights to another servicer.

Our mortgage servicers typically collect and deliver principal and interest payments, administer escrow accounts, monitor and report on loan performance, perform default prevention activities, evaluate transfers of ownership interests, respond to requests for partial releases of security, and handle proceeds from casualty and condemnation losses. Our mortgage servicers are the primary point of contact for borrowers and perform a key role in the effective implementation of our servicing policies, negotiation of workouts for delinquent and troubled loans, and other loss mitigation activities. If necessary, mortgage servicers inspect and preserve properties and process foreclosures and bankruptcies. For information on the risks of our reliance on servicers, refer to "Risk Factors—Credit Risk."

We compensate servicers primarily by permitting them to retain a specified portion of each interest payment on a serviced mortgage loan as a servicing fee. Servicers also generally retain assumption fees, late payment charges and other similar charges, to the extent they are collected from borrowers, as additional servicing compensation. We also compensate servicers for negotiating workouts on problem loans.

Our servicers are required to develop, follow and maintain written procedures relating to loan servicing and legal compliance in accordance with our Servicing Guide. We oversee servicer compliance with our Servicing Guide requirements and execution of our loss mitigation programs by conducting reviews of select servicers. These reviews are designed to test a servicer's quality control processes and compliance with our requirements across key servicing functions. Issues identified through these Servicing Guide compliance reviews are provided to the servicer with prescribed corrective actions and expected resolution due dates, and we monitor servicers' remediation of their compliance issues.

Performance management staff measure, monitor and manage overall servicer performance by providing loss mitigation workout projections to targeted servicers, discussing performance against projections and tracking action items to improve, and following up on remediation of findings identified from compliance reviews. Additionally, we employ a servicer performance management program, called the STAR™ Program, which provides our largest servicers a transparent framework of key metrics and operational assessments to recognize strong performance and identify areas of weakness.

Repercussions for poor performance by a servicer may include performance improvement plans, lost incentive income, compensatory fees, monetary and non-monetary remedies, and reduced opportunity for STAR Program recognition. If poor performance persists, servicing may ultimately be transferred to a different servicer.

Single-Family Credit Risk and Credit Loss Management

Our Single-Family business:

- Prices and manages the credit risk on loans in our single-family guaranty book of business through our loan acquisition policies.
- Works to reduce costs of defaulted single-family loans through home retention solutions and foreclosure alternatives, management of foreclosures and our REO inventory, selling nonperforming loans, and pursuing contractual remedies from lenders, servicers and providers of credit enhancement.
- Enters into transactions that transfer a portion of the credit risk on some of the loans in our single-family guaranty book of business through our credit risk transfer programs.

See "Single-Family Mortgage Credit Risk Management" below for discussion of our strategies for managing credit risk and credit losses on single-family loans.

Single-Family Customers

Our principal single-family customers are lenders that operate within the primary mortgage market where mortgage loans are originated and funds are loaned to borrowers. Our customers include mortgage banking companies, savings and loan associations, savings banks, commercial banks, credit unions, community banks, private mortgage originators, insurance companies, and state and local housing finance agencies. Lenders originating mortgages in the primary mortgage market often sell them in the secondary mortgage market in the form of whole loans or in the form of mortgage-related securities.

During 2020, approximately 1,200 lenders delivered single-family mortgage loans to us. We acquire a significant portion of our single-family mortgage loans from several large mortgage lenders. During 2020, our top five lender customers, in the aggregate, accounted for approximately 31% of our single-family business volume, compared with approximately 44% in 2019. Rocket Companies, Inc., including its subsidiary Quicken Loans, LLC, was the only customer that accounted for 10% or more of our single-family business volume in 2020, representing approximately 12%.

We have a diversified funding base of domestic and international investors. Purchasers of single-family Fannie Mae MBS include asset managers, commercial banks, pension funds, insurance companies, Treasury, central banks, corporations, state and local governments, and other municipal authorities. Our CAS investors include asset managers, real estate investment trusts, hedge funds and insurance companies, while our CIRT transaction counterparties are insurers and reinsurers.

Single-Family Competition

We compete to acquire single-family mortgage assets in the secondary market. We also compete for the issuance of single-family mortgage-related securities to investors. Competition in these areas is affected by many factors, including the number of residential mortgage loans offered for sale in the secondary market by loan originators and other market participants, the nature of the residential mortgage loans offered for sale (for example, whether the loans represent refinancings), the current demand for mortgage assets from mortgage investors, the interest-rate risk investors are willing to assume and the yields they will require as a result, and the credit risk and prices associated with available mortgage investments.

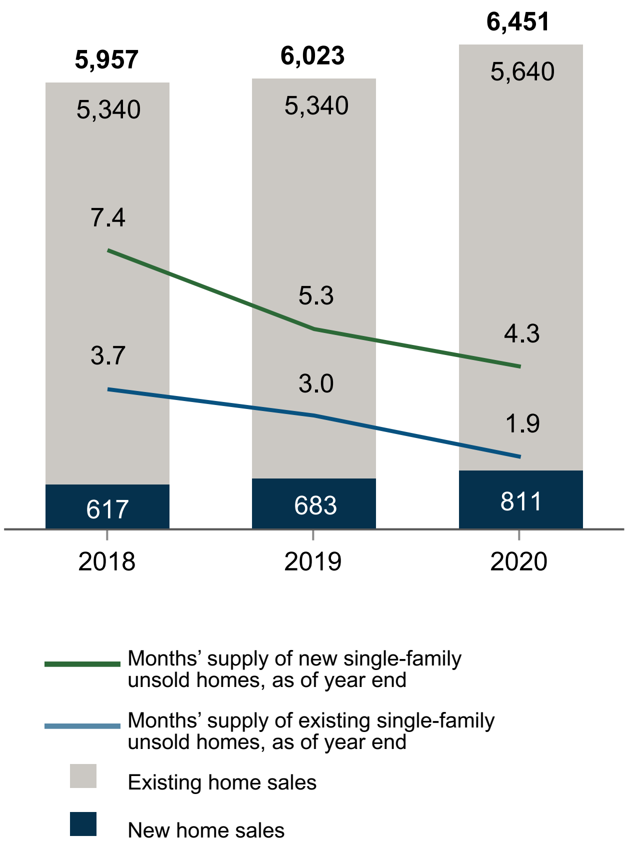
Competition to acquire mortgage assets is significantly affected by both our and our competitors' pricing and eligibility standards, as well as investor demand for UMBS and for our and our competitors' other mortgage-related securities. Our competitive environment also may be affected by many other factors, including our risk appetite and capital requirements; new or existing legislation or regulations applicable to us, our customers or our investors; and digital innovation and disruption in our markets. The Director of FHFA has indicated that, during conservatorship, Fannie Mae and Freddie Mac should reduce competition with each other and FHA. As a result, in order to successfully acquire loans in the secondary market, we focus on understanding what drives our customers' execution decisions and identifying how to best deliver value. See "Business—Conservatorship, Treasury Agreements and Housing Finance Reform," "Business—Legislation and Regulation," and "Risk Factors" for information on matters that could affect our business and competitive environment.

Our competitors for the acquisition of single-family mortgage assets are financial institutions and government agencies that manage residential mortgage credit risk or invest in residential mortgage loans, including Freddie Mac, FHA, the VA, Ginnie Mae (which primarily guarantees securities backed by FHA-insured loans and VA-guaranteed loans), the FHLBs, U.S. banks and thrifts, securities dealers, insurance companies, pension funds, investment funds and other mortgage investors. In 2020, our primary competitors for the issuance of single-family mortgage-related securities were Freddie Mac and Ginnie Mae, as many private market competitors dramatically reduced or ceased their activities in the single-family secondary mortgage market in early 2020 as the COVID-19 pandemic started to impact market confidence. Competition for investors and counterparties in our credit risk transfer transactions comes primarily from other issuers of mortgage credit risk transactions, such as Freddie Mac and private mortgage insurers. We also compete for investor funds against other credit-related securitized products, such as private-label residential mortgage-backed securities ("RMBS"), commercial RMBS, and collateralized loan obligations. As noted above, the nature of our primary competitors and the overall levels of competition we face could change as a result of a variety of factors, many of which are outside our control.

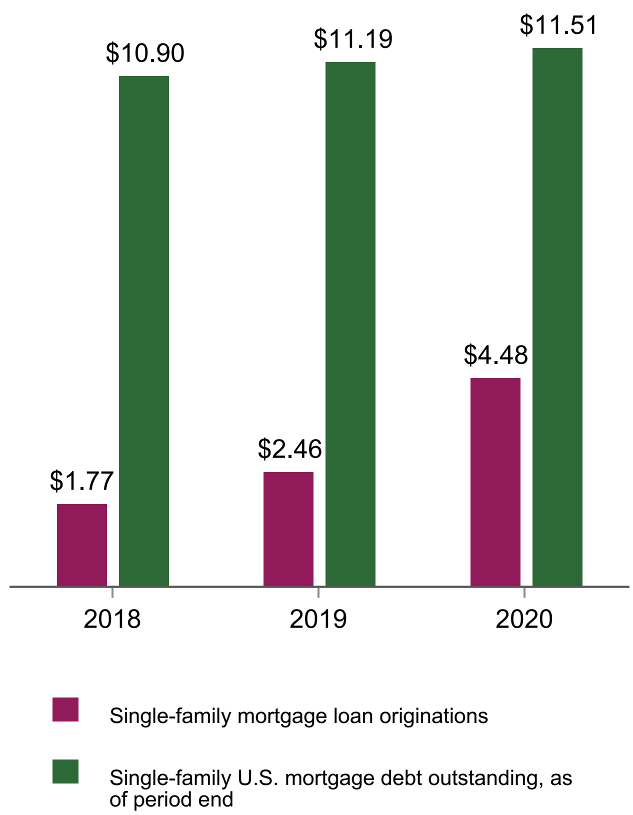
Single-Family Mortgage Market

In the charts below we present macroeconomic factors that affect the single-family mortgage market in which our Single-Family business operates. Home sales and the supply of unsold homes are indicators of the underlying demand for mortgage loans, which impacts our acquisition volumes.

Total Single-Family Home Sales and Months' Supply of Unsold Homes[1] (Home sales units in thousands)



Single-Family Mortgage Originations and Mortgage Debt Outstanding[2] [3] (Dollars in trillions)



(1) Total existing home sales data according to National Association of REALTORS®. New single-family home sales data according to the U.S. Census Bureau. Certain previously reported data has been updated to reflect revised historical data from one or both of these organizations.

(2) 2020 information is as of September 30, 2020 and is based on the Federal Reserve's December 2020 mortgage debt outstanding release, the latest date for which the Federal Reserve has estimated mortgage debt outstanding for single-family residences. Prior-period amounts have been changed to reflect revised historical data from the Federal Reserve.

(3) We estimate that Fannie Mae's share of total U.S. single-family mortgage debt outstanding was 28% as of the end of 2020, and 27% as of the end of 2019 and 2018.

Additional Information

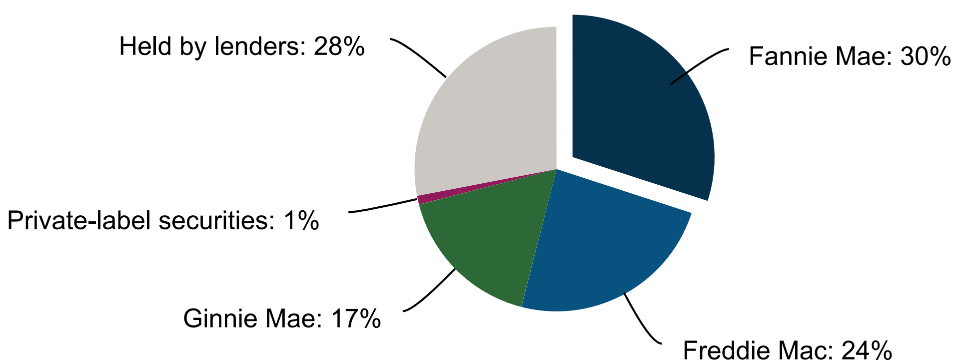
- The 30-year fixed mortgage rate averaged 3.11% in 2020 compared with 3.94% in 2019 according to Freddie Mac's Primary Mortgage Market Survey®.
- We forecast that total originations in the U.S. single-family mortgage market in 2021 will decrease from 2020 levels by approximately 9.5%, from an estimated $4.48 trillion in 2020 to $4.06 trillion in 2021, and that the amount of originations in the U.S. single-family mortgage market that are refinancings will decrease from an estimated $2.87 trillion in 2020 (the highest on record) to $2.24 trillion in 2021.

Single-Family Market Activity

Single-Family Mortgage Acquisition Share

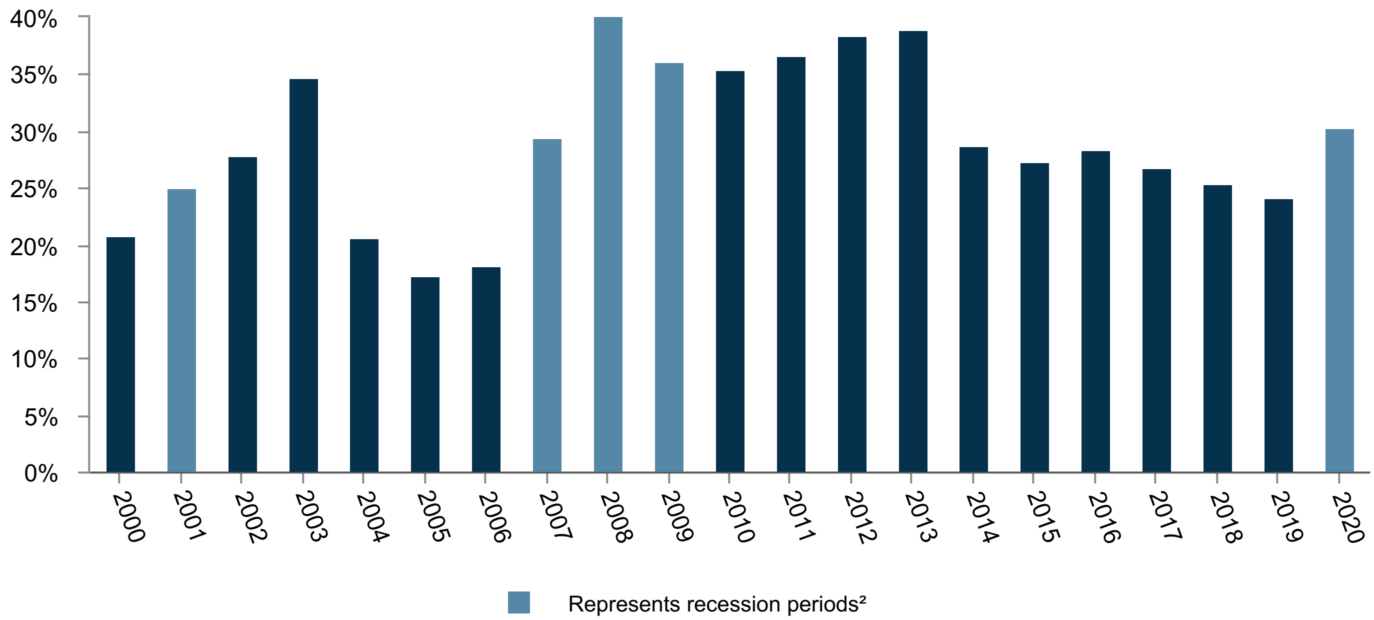
The chart below displays our estimated share of single-family mortgage acquisitions in 2020 as compared with that of our primary competitors. Our acquisition share estimate is based on publicly available data regarding the amount of single-family first-lien mortgage loans originated and our competitors' acquisitions. We exclude our purchase of delinquent loans from our MBS trusts in the calculation of our estimated share.

2020 Single-Family Mortgage Acquisition Share



The table below shows our estimated share of mortgage acquisitions from 2000 through 2020. Our share of total mortgage acquisitions has fluctuated and is often impacted by economic cycles. For example, during periods of recession, our acquisition share has historically increased as some other market competitors reduced their acquisitions.

Fannie Mae Single-Family Acquisition Share of Total Market Originations[1]



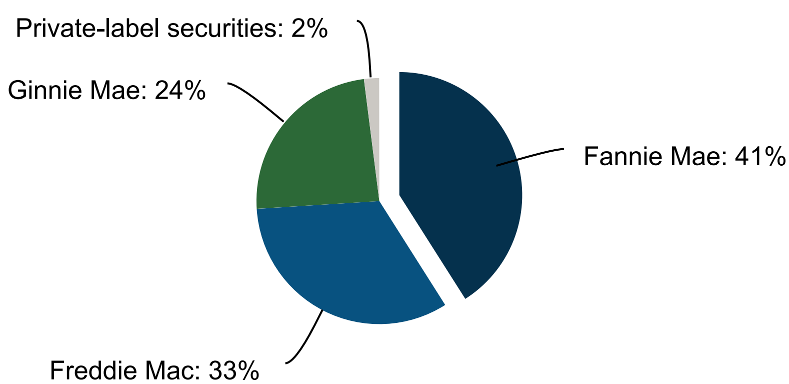
(1) Acquisition share is calculated as the ratio of Fannie Mae single-family acquisitions over our estimate of total market originations. We exclude our purchase of delinquent loans from our MBS trusts in the calculation of our acquisition share. Acquisition share is subject to change as additional data become available. Prior-period amounts have been updated to reflect revised acquisition data.

(2) Recession periods include any year in which any month in that year is determined to be recessionary by the National Bureau of Economic Research.

Single-Family Mortgage-Related Securities Issuances Share

Our single-family Fannie Mae MBS issuances were $1.34 trillion in 2020, compared with $591.1 billion in 2019 and $470.5 billion in 2018. The significant increase in 2020 compared with 2019 was driven by a very high volume of refinance activity due to historically low mortgage rates. Based on the latest data available, the chart below displays our estimated share of single-family mortgage-related securities issuances in 2020 as compared with that of our primary competitors for the issuance of single-family mortgage-related securities.

2020 Single-Family Mortgage-Related Securities Issuances Share



We estimate our share of single-family mortgage-related securities issuances was 37% in 2019 and 39% 2018.

Presentation of Our Single-Family Guaranty Book of Business

For purposes of the information reported in this "Single-Family Business" section, we measure the single-family guaranty book of business using the unpaid principal balance of our mortgage loans underlying Fannie Mae MBS outstanding. By contrast, the single-family guaranty book of business presented in the "Composition of Fannie Mae Guaranty Book of Business" table in the "Guaranty Book of Business" section is based on the unpaid principal balance of the Fannie Mae MBS outstanding, rather than the unpaid principal balance of the underlying mortgage loans. These amounts differ primarily as a result of payments we receive on underlying loans that have not yet been remitted to the MBS holders. As measured for purposes of the information reported below, our single-family conventional guaranty book of business was $3,200.9 billion as of December 31, 2020, $2,951.9 billion as of December 31, 2019 and $2,903.3 billion as of December 31, 2018.

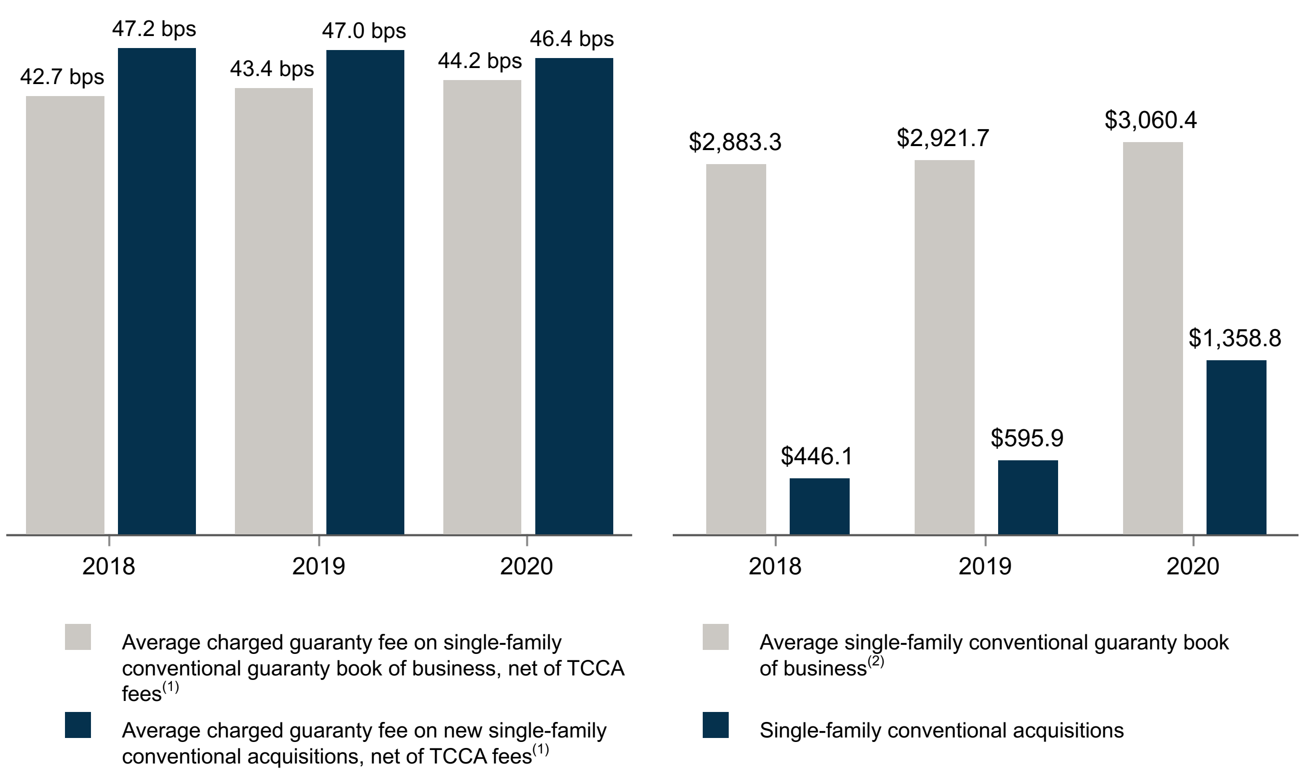
Single-Family Business Metrics

Net interest income for our Single-Family business is driven by the guaranty fees we charge and the size of our single-family conventional guaranty book of business. Our business volume and growth in our guaranty book of business is affected by the rate of growth in total U.S. residential mortgage debt outstanding, the size of the U.S. residential mortgage market and our share of mortgage acquisitions. The guaranty fees we charge are based on the characteristics of the loans we acquire. We may adjust our guaranty fees in light of market conditions and to achieve return targets, which are based on FHFA's conservatorship capital framework that currently applies to Fannie Mae. As a result, the average charged guaranty fee on new acquisitions may fluctuate based on the credit quality and product mix of loans acquired, as well as market conditions and other factors.

We implemented a new adverse market refinance fee effective December 1, 2020. The new fee is intended to help us offset some of the higher projected expenses and risk due to COVID-19. For every $1 billion in eligible refinance loans we acquire, we will collect $5 million in adverse market refinance fees, which will be amortized into net interest income over the contractual life of the loans as a cost basis adjustment. See "Executive Summary—COVID-19 Impact" for additional information on the new adverse market refinance fee.

The charts below display our average charged guaranty fees, net of TCCA fees, on our single-family conventional guaranty book of business and on new single-family conventional loan acquisitions, along with our average single-family conventional guaranty book of business and our single-family conventional loan acquisitions for the periods presented.

Select Single-Family Business Metrics
(Dollars in billions)



(1) Excludes the impact of a 10 basis-point guaranty fee increase implemented pursuant to the TCCA, the incremental revenue from which is remitted to Treasury and not retained by us.

(2) Our single-family conventional guaranty book of business primarily consists of single-family conventional mortgage loans underlying Fannie Mae MBS outstanding. It also includes single-family conventional mortgage loans of Fannie Mae held in our retained mortgage portfolio, and other credit enhancements that we provide on single-family conventional mortgage assets. Our single-family conventional guaranty book of business does not include: (a) non-Fannie Mae single-family mortgage-related securities held in our retained mortgage portfolio for which we do not provide a guaranty; (b) mortgage loans guaranteed or insured, in whole or in part, by the U.S. government; or (c) Freddie Mac-acquired mortgage loans underlying Freddie Mac-issued UMBS that we have resecuritized. Our average single-family conventional guaranty book of business is based on quarter-end balances.

Average charged guaranty fee represents the sum of the average base guaranty fees during the period for our single-family conventional guaranty arrangements, which we receive over the life of the loan, plus the recognition of any upfront cash payments, including loan-level pricing adjustments and the recently implemented adverse market fee, based on an estimated average life at the time of acquisition. We use loan-level price adjustments, including various upfront risk-based fees, to price for the credit risk we assume in providing our guaranty. FHFA must approve changes to the national loan-level price adjustments we charge and can direct us to make other changes to our single-family guaranty fee pricing. Management uses average charged guaranty fee on new acquisitions as a metric to assess the reasonableness of our compensation for the credit risk we manage on newly acquired single-family loans.

Our average charged guaranty fee on newly acquired conventional single-family loans, net of TCCA fees, decreased to 46.4 basis points in 2020 compared with 47.0 basis points in 2019 due to the improved credit risk profile of our 2020 acquisitions. See “Single-Family Mortgage Credit Risk Management—Single-Family Portfolio Diversification and Monitoring” for further information on the credit risk profile of our acquisitions in 2020 compared with 2019 and 2018.

If eligible refinances continue to be a large proportion of our acquisitions in 2021, we expect our average charged guaranty fee on new single-family conventional acquisitions to increase in 2021 as a result of the new adverse market refinance fee implemented on December 1, 2020.

Single-Family Business Financial Results[1]

	For the Year Ended December 31,			Variance	
	2020	**2019**	**2018**	**2020 vs. 2019**	**2019 vs. 2018**
	(Dollars in millions)				
Net interest income[2]	**$ 21,502**	$ 18,013	$ 18,162	$ 3,489	$ (149)
Fee and other income	**368**	453	450	(85)	3
Net revenues	**21,870**	18,466	18,612	3,404	(146)
Investment gains, net	**728**	1,589	850	(861)	739
Fair value gains (losses), net	**(2,539)**	(2,216)	1,210	(323)	(3,426)
Administrative expenses	**(2,559)**	(2,565)	(2,631)	6	66
Credit-related income (expense)[3]	**(232)**	3,515	2,709	(3,747)	806
TCCA fees[2]	**(2,673)**	(2,432)	(2,284)	(241)	(148)
Credit enhancement expense	**(1,141)**	(927)	(514)	(214)	(413)
Change in expected credit enhancement recoveries[4]	**89**	—	—	89	—
Other expenses, net[5]	**(1,055)**	(734)	(498)	(321)	(236)
Income before federal income taxes	**12,488**	14,696	17,454	(2,208)	(2,758)
Provision for federal income taxes	**(2,607)**	(2,859)	(3,708)	252	849
Net income	**$ 9,881**	$ 11,837	$ 13,746	$ (1,956)	$ (1,909)

(1) See “Note 10, Segment Reporting” for information about our segment allocation methodology.

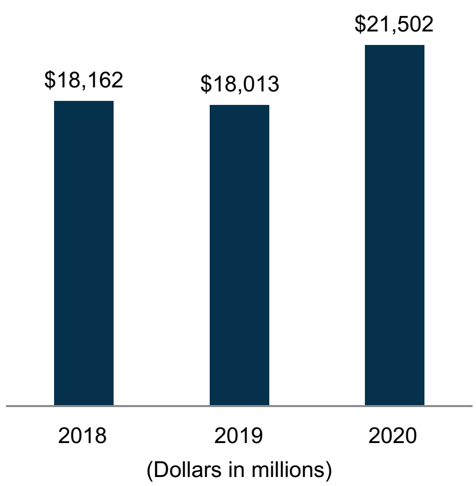
(2) Reflects the impact of the 10 basis point guaranty fee increase implemented pursuant to the TCCA, the incremental revenue from which is remitted to Treasury. The resulting revenue is included in net interest income and the expense is recognized as “TCCA fees.” Net interest income includes the interest expense on CAS debt issued prior to November 2018.

(3) Consists of the benefit or provision for credit losses and foreclosed property income or expense. The presentation of our credit-related income as of December 31, 2019 and 2018 represents amounts recognized prior to our transition to the lifetime loss model prescribed by the CECL standard.

(4) Consists of change in benefits recognized from our single-family freestanding credit enhancements, which primarily relate to our CAS and CIRT programs. See “Note 1, Summary of Significant Accounting Policies” for more information about our change in presentation.

(5) Consists primarily of debt extinguishment gains and losses, housing trust fund expenses, servicer fees paid in connection with certain loss mitigation activities, and loan subservicing costs.

Net interest income

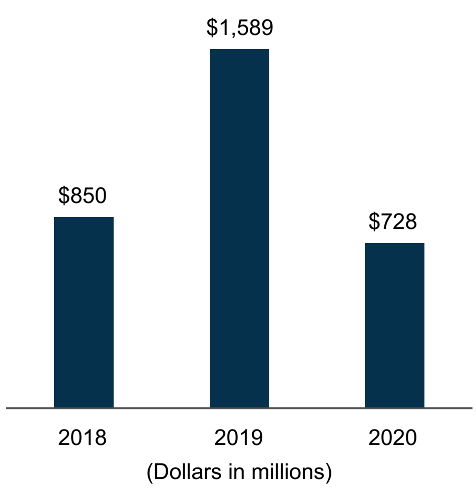


Single-family net interest income increased in 2020 compared with 2019, driven by higher net amortization income and higher base guaranty fee income, partially offset by lower income from portfolios.

Single-family net interest income decreased slightly in 2019 compared with 2018, primarily due to a decline in net interest income from portfolios partially offset by an increase in single-family base guaranty fee income.

The drivers of net interest income for the Single-Family segment are consistent with the drivers of net interest income in our consolidated statements of operations and comprehensive income, which we discuss in "Consolidated Results of Operations—Net Interest Income."

Investment gains, net

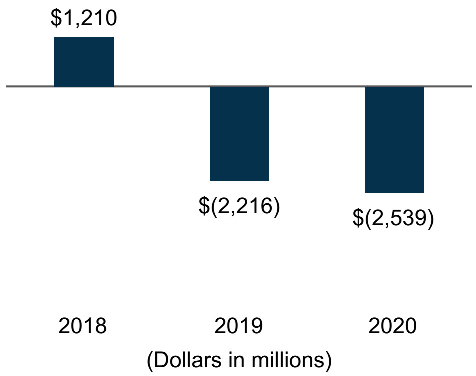


Single-family investment gains, net decreased during 2020 compared with 2019 primarily driven by a significant decrease in the volume of sales of single-family HFS loans.

Investment gains, net increased during 2019 compared with 2018 primarily driven by an increase in gains on sales of single-family HFS loans.

The drivers of investment gains, net for the Single-Family segment are consistent with the drivers of investment gains, net in our consolidated statements of operations and comprehensive income, which we discuss in "Consolidated Results of Operations—Investment Gains, Net."

Fair value gains (losses), net



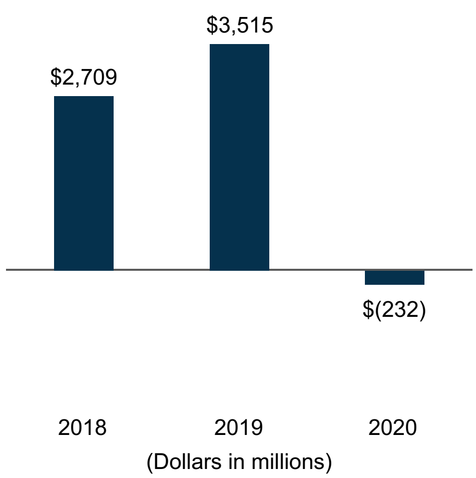
As we discuss more fully in "Consolidated Results of Operations—Fair Value Gains (Losses), Net," fair value losses in 2020 were primarily driven by fair value losses on our commitments to sell mortgage-related securities and our long-term debt of consolidated trusts held at fair value, partially offset by fair value gains on trading securities and CAS debt.

Fair value losses in 2019 were primarily driven by losses on our risk management derivatives and our commitments to sell mortgage-related securities.

The drivers of fair value losses, net for the Single-Family segment are consistent with the drivers of fair value losses, net in our consolidated statements of operations and comprehensive income, which we discuss in "Consolidated Results of Operations—Fair Value Gains (Losses), Net."

We expect our implementation of fair value hedge accounting in January 2021 will affect the fair value gains and losses we report in the future, as we discuss in "Consolidated Results of Operations—Fair Value Gains (Losses), Net,"

Credit-related income (expense)

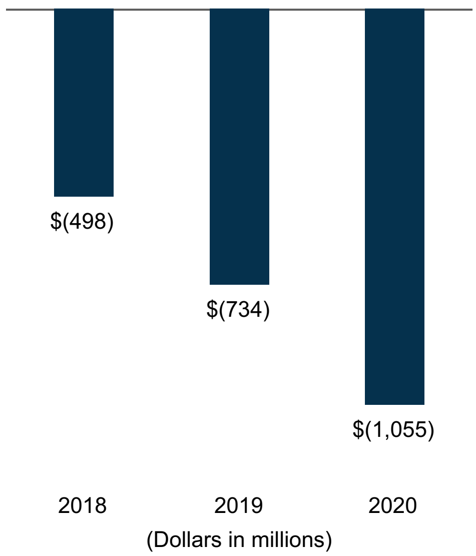


Credit-related expense in 2020 consists of an increase in our allowance for loan losses due to losses we expect to incur as a result of the COVID-19 pandemic. This was mostly offset by higher actual and forecasted home prices, lower actual and projected mortgage interest rates and the redesignation of certain reperforming single-family loans from HFI to HFS.

Credit-related income in 2019 was primarily driven by the redesignation of certain single-family loans from HFI to HFS; the result of an enhancement to the model used to estimate cash flows for individually impaired single-family loans within our allowance for loan losses, which incorporated recent loan performance data within the model; and an increase in actual and forecasted home prices.

See "Consolidated Results of Operations—Credit-Related Income (Expense)" in this report for more information on the primary factors that contributed to our single-family credit-related income (expense).

Other expenses, net



Other expenses, net increased in 2020 compared with 2019 primarily due to an increase in housing trust fund expenses driven by significantly higher acquisitions volumes throughout 2020.

The drivers of other expenses, net for the Single-Family segment are consistent with the drivers of other expenses, net in our consolidated statements of operations and comprehensive income, which we discuss in "Consolidated Results of Operations—Other Expenses, Net."

Single-Family Mortgage Credit Risk Management

Our strategy for managing single-family mortgage credit risk consists of four primary components:

- our acquisition and servicing policies along with our underwriting and servicing standards;
- portfolio diversification and monitoring;
- the transfer of credit risk through risk transfer transactions and the use of credit enhancements; and
- management of problem loans.

We typically obtain our single-family credit information from the sellers or servicers of the mortgage loans in our guaranty book of business and receive representations and warranties from them as to the accuracy of the information. While we perform various quality assurance checks by sampling loans to assess compliance with our underwriting and eligibility criteria, we do not independently verify all reported information and we rely on lender representations and warranties regarding the accuracy of the characteristics of loans in our guaranty book of business. See "Risk Factors" for a discussion of the risk that we could experience mortgage fraud as a result of this reliance on lender representations and warranties. We provide information on non-Fannie Mae mortgage-related securities held in our portfolio in "Note 5, Investments in Securities."

Single-Family Acquisition and Servicing Policies and Underwriting and Servicing Standards

Overview

Our Single-Family business, with the oversight of our Enterprise Risk Management division, is responsible for setting underwriting and servicing standards and pricing, and managing credit risk relating to our single-family guaranty book of business.

Underwriting and Servicing Standards

Our Selling Guide sets forth our underwriting and eligibility guidelines, as well as our policies and procedures related to selling single-family mortgages to us. Our Servicing Guide sets forth our policies for servicing the loans in our single-family guaranty book.

Desktop Underwriter

Our proprietary automated underwriting system, Desktop Underwriter® ("DU®"), is used by mortgage lenders to evaluate the substantial majority of our single-family loan acquisitions. DU measures credit risk by assessing the primary risk factors of a mortgage and provides a comprehensive risk assessment of a borrower's loan application and eligibility of the loan for sale to us. Risk factors evaluated by DU include the key loan attributes described under "Single-Family

Portfolio Diversification and Monitoring" below. DU does not use a FICO credit score to evaluate the borrower's credit history, but applies our own assessment of the borrower's credit data, including using trended credit data when available. DU analyzes the results of this risk and eligibility evaluation to arrive at the underwriting recommendation for the loan case file. As part of our comprehensive risk management approach, we regularly review DU's underlying risk assessment models and recalibrate these models to improve DU's ability to effectively analyze risk and avoid excessive risk layering. Factors we take into account in these evaluations include the profile of loans delivered to us, loan performance and current market conditions. We periodically update DU to reflect changes to our underwriting and eligibility guidelines based on these evaluations.

DU eligibility assessment. As part of our comprehensive risk management approach, we periodically update DU to reflect changes to our underwriting and eligibility guidelines. As part of normal business operations, we regularly review DU to determine whether its risk analysis and eligibility assessment are appropriate based on the current market environment and loan performance information. We expect to enhance DU to ensure our future loan acquisitions comply with risk criteria imposed on our loan acquisitions as a result of recent changes to our senior preferred stock purchase agreement with Treasury.

We will continue to closely monitor loan acquisitions and market conditions and, as appropriate, make changes to DU, including its eligibility criteria, to ensure the loans we acquire are consistent with our risk appetite and FHFA guidance.

Other Underwriting Standards

DU was used to evaluate over 90% of the single-family loans we acquired in 2020. However, we also purchase and securitize mortgage loans that have been underwritten using other automated underwriting systems, as well as manually underwritten mortgage loans that meet our stated underwriting requirements or meet agreed-upon standards that differ from our standard underwriting and eligibility criteria. The majority of loans we acquired in 2020 that were not underwritten with DU were underwritten through a third-party automated underwriting system, such as Freddie Mac's Loan Product Advisor®.

COVID-19 Selling Policies

We are working closely with Freddie Mac, under the guidance of FHFA, to offer temporary measures during the COVID-19 national emergency that provide lenders with the clarity and flexibility to continue lending in a prudent and responsible manner.

Temporary policy flexibilities and updates to our Selling Guide requirements have been designed to mitigate the operational impact of COVID-19 on loan underwriting and originations. These flexibilities have included:

- purchasing certain loans that originated in 2020 and are subject to a COVID-19-related payment forbearance at the time of sale, subject to payment of a loan-level price adjustment;
- offering additional methods of obtaining verbal verifications of borrower employment;
- allowing alternative property valuation methods; and
- expanding guidelines for the use of a power of attorney.

Temporary policy updates to provide clarity and mitigate risk include:

- assessment of more recent documentation of borrower employment (including self-employment), income, and assets;
- requiring evidence of receipt of funds from stocks, stock options and mutual funds when used for down payment or closing costs, and reducing the value to 70% when considered for reserves;
- requiring additional due diligence regarding the payment status of a borrower's existing mortgage loans;
- providing clarity for assessing self-employment income for qualifying purposes; and
- requiring that loans be no more than six months old to be eligible for sale to us.

Servicing Policies

Our servicing policies establish the requirements our servicers must follow in:

- processing and remitting loan payments;
- working with delinquent borrowers on loss mitigation activities;
- managing and protecting Fannie Mae's interest in the pledged property; and
- processing bankruptcies and foreclosures.

Our goal is to ensure that our policies support management of risk over the life of the mortgage loan by enabling default prevention activities, promoting loss mitigation in the event of default and providing for the preservation and protection of the collateral supporting the mortgage loan. See "Single-Family Primary Business Activities—Single-Family Mortgage Servicing" above for more information on the servicing of our single-family mortgage loans.

COVID-19 Servicing Policies

We also continue to work with Freddie Mac as instructed by FHFA to implement temporary policies in response to the COVID-19 pandemic, to enable our single-family loan servicers to better assist borrowers impacted by COVID-19. We issued initial requirements to servicers on temporary policies to assist borrowers impacted by COVID-19 in March 2020, and have subsequently amended the requirements. We will continue monitoring the market to determine whether further adjustments to or extensions of our temporary policies are appropriate.

These temporary policies include:

- authorizing servicers to offer up to 12 months of forbearance, upon the request of any single-family borrower experiencing a financial hardship due to the COVID-19 pandemic, regardless of the borrower's delinquency status; for loans already in a COVID-19-related forbearance as of February 28, 2021, servicers may grant an extension of forbearance for up to an additional three months, to a total of up to 15 months, provided that the forbearance does not result in the loan becoming greater than 15 months delinquent;
- beginning July 1, 2020, offering a payment deferral workout option to eligible borrowers who have resolved a COVID-19-related financial hardship but cannot afford to bring the loan current by reinstating the loan (that is, repaying all the missed payments at one time) or through a repayment plan (that is, repaying the missed payments over time). The payment deferral workout option allows the borrower to defer up to 15 months of past-due payments, without interest, to the end of the loan term (or when the loan is refinanced, the property is sold or the loan is otherwise paid off before the end of the loan term). All other terms of the loan remain unchanged;
- suspending foreclosures and certain foreclosure-related activities for single-family properties through at least March 31, 2021, other than for vacant or abandoned properties; and
- reporting as current to the credit bureaus the obligation of a borrower who receives a forbearance plan or other form of relief as a result of the COVID-19 pandemic during the CARES Act covered period if the borrower was current before the accommodation and makes payments as agreed under the accommodation in accordance with the Fair Credit Reporting Act, as amended by the CARES Act.

Certain states and localities have implemented COVID-19-related borrower and renter protections that are more extensive than the CARES Act requirements or our Servicing Guide requirements. States and localities may continue to consider such proposals in the future or extend the time period of existing protections. Our servicers must comply with all applicable laws.

In February 2021, we announced that a COVID-19-related forbearance can be extended for up to an additional three months, to a total of up to 15 months, to support borrowers who are already in a forbearance as of February 28, 2021 and continue to be impacted by the economic dislocation caused by the pandemic. Extending our forbearance timelines may impact the type of loss mitigation offered and their outcomes, which could impact our credit-related expense. In addition, this may impact our assessment of collectability used in determining when we place a loan on nonaccrual status.

Quality Control Process

Our quality control process includes using automated tools to help us determine whether a loan meets our underwriting and eligibility guidelines, performing in-depth reviews, and selecting random samples of performing loans for quality control review shortly after delivery.

Repurchase Requests and Representation and Warranty Framework

If we determine that a mortgage loan did not meet our underwriting or eligibility requirements, loan representations or warranties were violated, or a mortgage insurer rescinded coverage, then, except as described below, our mortgage sellers and/or servicers are obligated to either repurchase the loan or foreclosed property, reimburse us for our losses or provide other remedies. We refer to our demands that mortgage sellers and servicers meet these obligations collectively as repurchase requests.

Under our representation and warranty framework, lenders can obtain relief from repurchase liability for violations of certain underwriting representations and warranties. Loans with 36 months of consecutive monthly payments and minimal delinquencies over a specified time period or with satisfactory conclusion of a full-file quality control review are eligible for relief. However, no relief may be granted for violations of "life of loan" representations and warranties, such as those relating to whether a loan was originated in compliance with applicable laws or conforms to our charter requirements.

As of December 31, 2020, approximately 45% of the outstanding loans in our single-family conventional guaranty book of business that were acquired and are subject to this framework have obtained relief based solely on payment history or the satisfactory conclusion of a full-file quality control review, and an additional 51% remain eligible for relief in the future.

In addition, lenders may obtain relief from liability for violations of a more narrow set of representations and warranties through the use of specified underwriting tools. This primarily includes relief for:

- borrower income, asset and employment data that has been validated through DU; and
- appraised property value for appraisals that have received a qualifying risk score in Collateral Underwriter®, our appraisal review tool.

Single-Family Portfolio Diversification and Monitoring

Overview

The composition of our single-family conventional guaranty book of business is diversified by product type, loan characteristics and geography, all of which influence credit quality and performance and may reduce our credit risk. We monitor various loan attributes, in conjunction with housing market and economic conditions, to determine if our pricing, eligibility and underwriting criteria accurately reflect the risk associated with loans we acquire. In some cases, we may decide to significantly reduce our participation in riskier loan product categories. We also review the payment performance of loans in order to help identify potential problem loans early in the delinquency cycle and to guide the development of our loss mitigation strategies.

The profile of our single-family conventional guaranty book of business includes the following key risk characteristics:

- *LTV ratio.* LTV ratio is a strong predictor of credit performance. The likelihood of default and the severity of a loss in the event of default are typically lower as LTV ratio decreases. This also applies to estimated mark-to-market LTV ratios, particularly those over 100%, as this indicates that the borrower's mortgage balance exceeds the property value.
- *Product type.* Certain loan product types have features that may result in increased risk. Generally, intermediate-term, fixed-rate mortgages exhibit the lowest default rates, followed by long-term, fixed-rate mortgages. Historically, adjustable-rate mortgages ("ARMs"), including negative-amortizing and interest-only loans, and balloon/reset mortgages have exhibited higher default rates than fixed-rate mortgages, partly because the borrower's payments rose, within limits, as interest rates changed.
- *Number of units.* Mortgages on one-unit properties tend to have lower credit risk than mortgages on two-, three- or four-unit properties.
- *Property type.* Certain property types have a higher risk of default. For example, condominiums generally are considered to have higher credit risk than single-family detached properties.
- *Occupancy type.* Mortgages on properties occupied by the borrower as a primary or secondary residence tend to have lower credit risk than mortgages on investment properties.
- *Credit score.* Credit score is a measure often used by the financial services industry, including us, to assess borrower credit quality and the likelihood that a borrower will repay future obligations as expected. A higher credit score typically indicates lower credit risk.
- *Debt-to-income ratio.* Debt-to-income ("DTI") ratio refers to the ratio of a borrower's outstanding debt obligations (including both mortgage debt and certain other long-term and significant short-term debts) to that borrower's reported or calculated monthly income, to the extent the income is used to qualify for the mortgage. As a borrower's DTI ratio increases, the associated risk of default on the loan generally increases, especially if other higher-risk factors are present. From time to time, we revise our guidelines for determining a borrower's DTI ratio. The amount of income reported by a borrower and used to qualify for a mortgage may not represent the borrower's total income; therefore, the DTI ratios we report may be higher than borrowers' actual DTI ratios.
- *Loan purpose.* Loan purpose refers to how the borrower intends to use the funds from a mortgage loan—either for a home purchase or refinancing of an existing mortgage. Cash-out refinancings have a higher risk of default than either mortgage loans used for the purchase of a property or other refinancings that restrict the amount of cash returned to the borrower.
- *Geographic concentration.* Local economic conditions affect borrowers' ability to repay loans and the value of collateral underlying loans. Geographic diversification reduces mortgage credit risk.
- *Loan age.* We monitor year of origination and loan age, which is defined as the number of years since origination. Credit losses on mortgage loans typically do not peak until the third through fifth year following

origination; however, this range can vary based on many factors, including changes in macroeconomic conditions and foreclosure timelines.

The table below displays our single-family conventional business volumes and our single-family conventional guaranty book of business, based on certain key risk characteristics that we use to evaluate the risk profile and credit quality of our single-family loans. We provide additional information on the credit characteristics of our single-family loans in quarterly financial supplements, which we furnish to the SEC with current reports on Form 8-K and make available on our website. Information in our quarterly financial supplements is not incorporated by reference into this report.

Key Risk Characteristics of Single-Family Conventional Business Volume and Guaranty Book of Business[1]

	Percent of Single-Family Conventional Business Volume at Acquisition[2] For the Year Ended December 31,			Percent of Single-Family Conventional Guaranty Book of Business[3] As of December 31,		
	2020	**2019**	**2018**	**2020**	**2019**	**2018**
Original LTV ratio:[4]						
<= 60%	**27 %**	17 %	16 %	**23 %**	19 %	19 %
60.01% to 70%	**16**	13	12	**14**	13	13
70.01% to 80%	**34**	37	37	**35**	37	38
80.01% to 90%	**11**	13	13	**11**	12	12
90.01% to 95%	**10**	13	15	**11**	12	11
95.01% to 100%	**2**	7	7	**4**	5	4
Greater than 100%	*****	*	*	**2**	2	3
Total	**100 %**	100 %	100 %	**100 %**	100 %	100 %
Weighted average	***71 %***	*76 %*	*77 %*	***74 %***	*76 %*	*75 %*
Average loan amount	**$ 279,800**	$ 259,897	$ 232,651	**$ 185,047**	$ 173,804	$ 170,076
Estimated mark-to-market LTV ratio:[5]						
<= 60%				**52 %**	54 %	54 %
60.01% to 70%				**17**	17	18
70.01% to 80%				**18**	16	16
80.01% to 90%				**9**	8	8
90.01% to 100%				**4**	5	4
Greater than 100%				*****	*	*
Total				**100 %**	100 %	100 %
Weighted average				***58 %***	*57 %*	*57 %*
FICO credit score at origination:						
< 620	*** %**	* %	* %	**1 %**	1 %	2 %
620 to < 660	**2**	3	6	**4**	5	5
660 to < 680	**2**	4	5	**4**	5	5
680 to < 700	**5**	7	9	**7**	7	7
700 to < 740	**18**	23	23	**20**	21	20
>= 740	**73**	63	57	**64**	61	61
Total	**100 %**	100 %	100 %	**100 %**	100 %	100 %
Weighted average	***760***	*749*	*743*	***750***	*746*	*746*
DTI ratio at origination:[6]						
<= 43%	**79 %**	72 %	66 %	**77 %**	76 %	77 %
43.01% to 45%	**8**	9	9	**9**	9	9
Greater than 45%	**13**	19	25	**14**	15	14
Total	**100 %**	100 %	100 %	**100 %**	100 %	100 %
Weighted average	***34 %***	*36 %*	*37 %*	***35 %***	*35 %*	*35 %*

	Percent of Single-Family Conventional Business Volume at Acquisition[2] For the Year Ended December 31,			Percent of Single-Family Conventional Guaranty Book of Business[3] As of December 31,		
	2020	2019	2018	2020	2019	2018
Product type:						
Fixed-rate:[7]						
Long-term	**85** %	89 %	90 %	**85** %	85 %	84 %
Intermediate-term	**15**	10	8	**14**	13	14
Total fixed-rate	**100**	99	98	**99**	98	98
Adjustable-rate	*	1	2	**1**	2	2
Total	**100** %	100 %	100 %	**100** %	100 %	100 %
Number of property units:						
1 unit	**98** %	98 %	98 %	**97** %	97 %	97 %
2-4 units	**2**	2	2	**3**	3	3
Total	**100** %	100 %	100 %	**100** %	100 %	100 %
Property type:						
Single-family homes	**92** %	91 %	90 %	**91** %	91 %	91 %
Condo/Co-op	**8**	9	10	**9**	9	9
Total	**100** %	100 %	100 %	**100** %	100 %	100 %
Occupancy type:						
Primary residence	**92** %	92 %	89 %	**90** %	89 %	89 %
Second/vacation home	**4**	4	5	**4**	4	4
Investor	**4**	4	6	**6**	7	7
Total	**100** %	100 %	100 %	**100** %	100 %	100 %
Loan purpose:						
Purchase	**30** %	52 %	65 %	**38** %	45 %	43 %
Cash-out refinance	**19**	20	22	**20**	19	20
Other refinance	**51**	28	13	**42**	36	37
Total	**100** %	100 %	100 %	**100** %	100 %	100 %
Geographic concentration:[8]						
Midwest	**14** %	14 %	14 %	**14** %	15 %	15 %
Northeast	**12**	13	14	**17**	17	17
Southeast	**21**	22	23	**22**	22	22
Southwest	**20**	21	21	**19**	18	18
West	**33**	30	28	**28**	28	28
Total	**100** %	100 %	100 %	**100** %	100 %	100 %
Origination year:						
2014 and prior				**25** %	38 %	46 %
2015				**5**	8	10
2016				**8**	14	16
2017				**7**	12	15
2018				**6**	11	13
2019				**11**	17	—
2020				**38**	—	—
Total				**100** %	100 %	100 %

* Represents less than 0.5% of single-family conventional business volume or guaranty book of business.

(1) Second-lien mortgage loans held by third parties are not reflected in the original LTV or the estimated mark-to-market LTV ratios in this table.

(2) Calculated based on the unpaid principal balance of single-family loans for each category at time of acquisition.

(3) Calculated based on the aggregate unpaid principal balance of single-family loans for each category divided by the aggregate unpaid principal balance of loans in our single-family conventional guaranty book of business as of the end of each period.

(4) The original LTV ratio generally is based on the original unpaid principal balance of the loan divided by the appraised property value reported to us at the time of acquisition of the loan. Excludes loans for which this information is not readily available.

(5) The aggregate estimated mark-to-market LTV ratio is based on the unpaid principal balance of the loan as of the end of each reported period divided by the estimated current value of the property, which we calculate using an internal valuation model that estimates periodic changes in home value. Excludes loans for which this information is not readily available.

(6) Excludes loans for which this information is not readily available.

(7) Long-term fixed-rate consists of mortgage loans with maturities greater than 15 years, while intermediate-term fixed-rate loans have maturities equal to or less than 15 years.

(8) Midwest consists of IL, IN, IA, MI, MN, NE, ND, OH, SD and WI. Northeast consists of CT, DE, ME, MA, NH, NJ, NY, PA, PR, RI, VT and VI. Southeast consists of AL, DC, FL, GA, KY, MD, MS, NC, SC, TN, VA and WV. Southwest consists of AZ, AR, CO, KS, LA, MO, NM, OK, TX and UT. West consists of AK, CA, GU, HI, ID, MT, NV, OR, WA and WY.

Characteristics of our New Single-Family Loan Acquisitions

Our share of our single-family loan acquisitions consisting of refinance loans rather than home purchase loans increased sharply in 2020 compared with 2019, primarily due to a historically low interest-rate environment throughout 2020, which encouraged refinance activity. Typically, refinance loans have lower LTV ratios than home purchase loans. This trend contributed to a decrease in the percentage of our single-family loan acquisitions with LTV ratios over 90%, from 20% in 2019 to 12% in 2020. The historically low interest-rate environment, combined with the high level of refinancing activity, also led to an increase in the percentage of loans we acquired with a FICO credit score over 740, from 63% in 2019 to 73% in 2020. In addition, our acquisitions of loans from first-time home buyers decreased from 23% of our single-family loan acquisitions in 2019 to 13% in 2020.

Our share of acquisitions of loans with DTI ratios above 45% decreased in 2020 compared with 2019. This decrease was driven in part by changes in our eligibility guidelines implemented in 2019 to further limit risk layering, particularly with respect to loans with DTI ratios above 45%, as well as by a higher volume of refinance loan acquisitions, which tend to have lower DTI ratios than home purchase loans.

The credit profile of our future acquisitions will depend on many factors, including:

- our future guaranty fee pricing and our competitors' pricing, and any impact of that pricing on the volume and mix of loans we acquire;
- our internal risk limits;
- our future eligibility standards and those of mortgage insurers, FHA and VA;
- the percentage of loan originations representing refinancings;
- changes in interest rates;
- our future objectives and activities in support of those objectives, including actions we may take to reach additional underserved creditworthy borrowers;
- government and regulatory policy;
- market and competitive conditions;
- the volume and characteristics of high LTV refinance loans we acquire in the future; and
- our future capital requirements.

We expect the ultimate performance of all our loans will be affected by borrower behavior, public policy and macroeconomic trends, including unemployment, the economy and home prices. In addition, if lender customers retain more of the higher-quality loans they originate, it could negatively affect the credit profile of our new single-family acquisitions.

High-Balance Loans

The standard conforming loan limit for a one-unit property was $484,350 for 2019, $510,400 for 2020 and increased to $548,250 for 2021. As we discuss in "Business—Our Mission and Charter—Charter Act," we are permitted to acquire loans with higher balances in certain areas, which we refer to as high-balance loans.

The following table displays the amount of high-balance loans in our single-family conventional guaranty book of business.

Single-Family High-Balance Loans

	As of December 31,	
	2020	**2019**
Unpaid principal balance (in billions)	**$ 210.9**	$ 212.0
Percentage of single-family conventional guaranty book of business	**7 %**	7 %

Reverse Mortgages

In 2010, we stopped acquiring newly originated reverse mortgages. The outstanding unpaid principal balance of reverse mortgage loans and Fannie Mae MBS backed by reverse mortgage loans in our guaranty book of business was $16.4 billion as of December 31, 2020 and $21.9 billion as of December 31, 2019.

Mortgage Products with Rate Resets

ARMs are mortgage loans with an interest rate that adjusts periodically over the life of the mortgage based on changes in a specified index. Rate-reset modifications are mortgage loans we have modified with terms that include a reduction in the borrowers' interest rate that is fixed for an initial period and is followed by one or more annual interest rate increases. The majority of these loans have fixed interest rates for an initial five-year period followed by annual interest rate increases, of up to 1 percent per year, until the mortgage rate reaches the prevailing market rate at the time of modification.

The outstanding unpaid principal balance of rate-reset modifications in our guaranty book of business was $5.4 billion as of December 31, 2020. During 2020, approximately 72% of these modified loans experienced an interest rate reset to a weighted-average interest rate of 3.85%. Approximately 19% of our modified loans that are performing included a reduction in the borrower's interest rate that was fixed for an initial period and subject to one or more annual interest rate increases thereafter.

The table below displays the unpaid principal balance for ARMs and rate-reset modifications in our single-family conventional guaranty book of business by the year of their next scheduled contractual reset date. The contractual reset is either an adjustment to the loan's interest rate or a scheduled change to the loan's monthly payment to begin to reflect the payment of principal. The timing of the actual reset dates may differ from those presented due to a number of factors, including refinancing or exercising of other provisions within the terms of the mortgage.

Single-Family Adjustable-Rate Mortgage and Rate-Reset Modifications[1]

	Reset Year						
	2021	**2022**	**2023**	**2024**	**2025**	**Thereafter**	**Total**
	(Dollars in millions)						
ARMs[2]	$ 20,740	$ 3,390	$ 2,689	$ 3,215	$ 2,308	$ 6,551	**$ 38,893**
Rate-Reset Modifications and Other[3]	3,457	637	11	1	—	1	**4,107**

(1) Excludes loans for which there is not an additional reset for the remaining life of the loan.

(2) Includes $6.6 billion of Interest-Only and Negative-Amortizing loans.

(3) Includes Fixed-Rate Interest Only.

We have not observed a materially different performance trend for rate-reset modifications, interest-only loans or negative-amortizing loans that have recently reset as compared to those that are still in the initial period. We believe the current performance trend for these loans is the result of the historically low interest-rate environment. If interest rates rise significantly, it is uncertain that this trend will continue.

Single-Family Credit Enhancement and Transfer of Mortgage Credit Risk

One of the key components of our credit risk management strategy is the transfer of mortgage credit risk to third parties. The table below displays information about the loans in our single-family conventional guaranty book of business covered by one or more forms of credit enhancement, including mortgage insurance or a credit risk transfer transaction. For a discussion of our exposure to and management of the counterparty credit risk associated with the providers of these credit enhancements, see "Risk Management—Mortgage Credit Risk Management—Institutional Counterparty Credit Risk Management" and "Note 13, Concentrations of Credit Risk."

Single-Family Loans with Credit Enhancement

	As of December 31,			
	2020		2019	
	Unpaid Principal Balance	Percentage of Single-Family Conventional Guaranty Book of Business	Unpaid Principal Balance	Percentage of Single-Family Conventional Guaranty Book of Business
	(Dollars in billions)			
Primary mortgage insurance and other	**$ 681**	**21 %**	$ 653	22 %
Connecticut Avenue Securities	**608**	**19**	919	31
Credit Insurance Risk Transfer	**216**	**7**	275	10
Lender risk-sharing	**131**	**4**	147	5
Less: Loans covered by multiple credit enhancements	**(304)**	**(9)**	(438)	(15)
Total single-family loans with credit enhancement	**$ 1,332**	**42 %**	$ 1,556	53 %

Mortgage Insurance

Our charter generally requires credit enhancement on any single-family conventional mortgage loan that we purchase or securitize if it has an LTV ratio over 80% at the time of acquisition. We generally achieve this through primary mortgage insurance. Primary mortgage insurance transfers varying portions of the credit risk associated with a mortgage loan to a third-party insurer. For us to receive a payment in settlement of a claim under a primary mortgage insurance policy, the insured loan must be in default and the borrower's interest in the property securing the loan must have been extinguished, generally in a foreclosure action. Claims are generally paid three to six months after title to the property has been transferred. For a discussion of our policies that govern mortgage insurers' claim-paying obligations to us, see "Risk Management—Mortgage Credit Risk Management—Institutional Counterparty Credit Risk Management."

Credit Risk Transfer Transactions

Our Single-Family business has developed other risk-sharing capabilities to transfer portions of our single-family mortgage credit risk to the private market. Our credit risk transfer transactions are designed to transfer a portion of the losses we expect would be incurred in an economic downturn or a stressed credit environment. We continually evaluate our credit risk transfer transactions which, in addition to managing our credit risk, also affect our returns on capital under FHFA's conservatorship capital requirements and recently finalized enterprise regulatory capital framework.

In previous years, we have targeted over 90% of acquisitions in the following loan categories for credit risk transfer transactions:

- fixed-rate single-family conventional loans with terms greater than 20 years that meet certain additional, minimum criteria;
- loans that are non-Refi Plus; and
- loans with LTV ratios between 60% and 97%.

This criteria covered over 55% of our 2020 single-family acquisitions. Loans are generally included in reference pools for CAS and CIRT transactions on a lagged basis. In the years leading up to 2020, we shortened this lag for a majority of target loans to typically less than six months after we initially acquire the loans. The portion of our single-family loan acquisitions we include in credit risk transfer transactions can vary from period to period based on market conditions and other factors.

We did not enter into new credit risk transfer transactions in the second quarter of 2020 due to adverse market conditions resulting from the COVID-19 pandemic. Market conditions improved in the second half of 2020, but we have not entered into any new transactions as we evaluate their costs and benefits, including a reduction in the capital relief these transactions provide under FHFA's enterprise regulatory capital framework. We may engage in credit risk transfer transactions in the future, which could help us manage capital and manage within our risk appetite, particularly given the growth and turnover in our book in 2020. The structure of and extent to which we engage in any additional credit risk transfer transactions will be affected by the enterprise regulatory capital framework, our risk appetite, the strength of future market conditions, including the cost of these transactions, and the review of our overall business and capital plan.

See “Risk Factors” in this report for additional information on the risks associated with the constraints on credit risk transfer transactions and “Business—Legislation and Regulation—GSE Act and Other Legislative and Regulatory Matters” in this report for more information on FHFA’s enterprise regulatory capital framework.

In 2020, pursuant to our credit risk transfer transactions, we transferred a portion of the mortgage credit risk on single-family mortgages with an unpaid principal balance of $182 billion at the time of the transactions. Below is a table that describes our various risk-transfer products. Because we did not enter into new credit risk transfer transactions in the last three quarters of 2020, the percentage of loans in our single-family conventional guaranty book of business with credit enhancement declined from 53% as of December 31, 2019 to 42% as of December 31, 2020.

Categories of Our Credit Risk Transfer Transactions

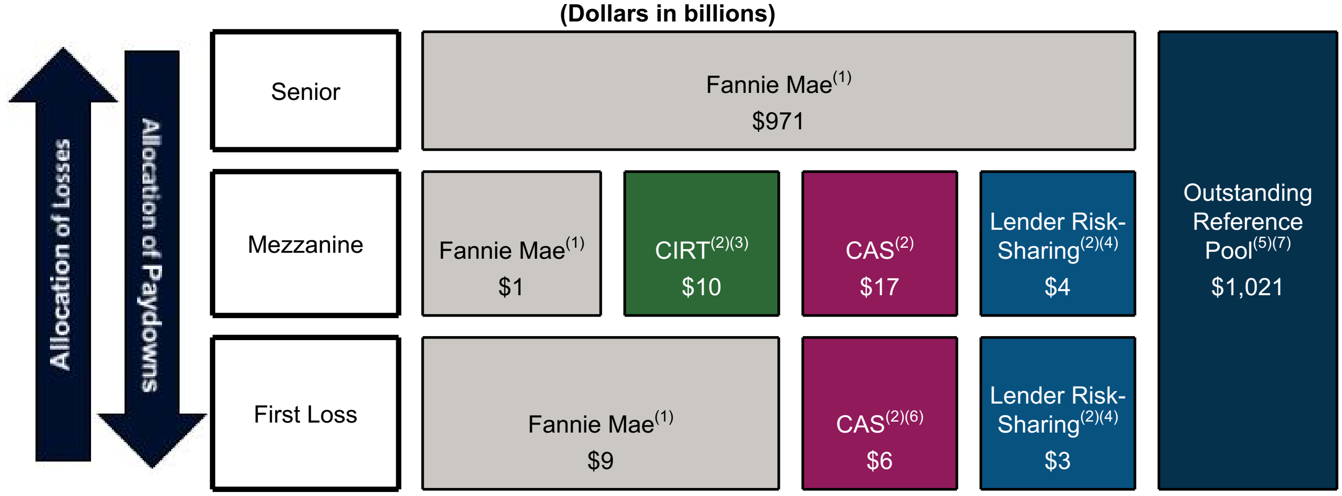
	Transaction Description	Other Key Characteristics
CAS	• We transfer to investors a portion of the mortgage credit risk associated with losses on a reference pool of mortgage loans. • We create a reference pool consisting of recently acquired single-family mortgage loans included in our guaranty book of business and create a hypothetical securitization structure with notional credit risk positions, or tranches (that is, first loss, mezzanine and senior). • CAS debt is issued related to the first loss, mezzanine and senior loss risk positions. • We retain the senior loss and all or a portion of the first loss tranche in CAS transactions. In addition, we retain a pro rata share of risk equal to approximately 5% of all notes sold in mezzanine tranches. • CAS debt is recognized as "debt of Fannie Mae" in our consolidated balance sheets. CAS debt issued to investors beginning January 2016 through October 2018 is recognized at amortized cost. CAS debt we issued prior to 2016 is recognized at fair value. • We stopped issuing this form of CAS in October 2018.	• The principal balance of CAS debt decreases as a result of credit losses on loans in the related reference pool. These write downs of the principal balance reduce the total amount of payments we are obligated to make to investors on the CAS debt. • Credit losses on the loans in the reference pool for a CAS transaction are first applied to reduce the outstanding principal balance of the first loss tranche. • If credit losses on these loans exceed the outstanding principal balance of the first loss tranche, losses would then be applied to reduce the outstanding principal balance of the mezzanine loss tranche. • Generally issued with a stated final maturity date of either 10 or 12.5 years from issuance. • After maturity, CAS debt provides no further credit protection with respect to the remaining loans in the reference pool underlying that CAS transaction. • Significant lag exists between the time when we recognize a provision for credit losses and when we recognize the related recovery from the CAS transaction. • Presents minimal counterparty risk as we receive the proceeds that would reimburse us for certain credit events on the related loans upon the issuance of CAS.
CAS REMIC	CAS REMIC® transactions are similar to CAS transactions, with some key differences: • CAS REMIC offerings are structured as notes that qualify as interests in a REMIC issued by a non-consolidated trust, not as corporate debt, but we obtain credit protection through arrangements that we execute with the trust. • We recognize the cost of credit protection in "Credit enhancement expense" in our consolidated statements of operations and comprehensive income. • We recognize the expected benefits from the credit protection in "Change in expected credit enhancement recoveries" in our consolidated statements of operations and comprehensive income.	CAS REMICs have characteristics similar to CAS, with some key differences: • Enables expanded participation by real estate investment trusts and certain international investors. • Aligns the timing of our recognition of credit losses with the related recovery from CAS REMIC transactions. We record the expected benefit and the loss in the same period with our adoption of the CECL standard in January 2020. • Beginning with our July 2019 issuances: extended the stated final maturity date from 12.5 to 20 years from issuance, shortened the call option from 10 years to 7 years; and retained a smaller first loss position. These updates were primarily designed to further reduce the capital requirements associated with loans in the reference pool under FHFA's conservatorship capital framework. • Presents minimal counterparty risk as the CAS trust receives the proceeds that would reimburse us for certain credit events on the related loans upon the issuance of the CAS REMIC.

	Transaction Description	Other Key Characteristics
CAS Credit-linked notes ("CLN")	CAS CLN transactions are similar to CAS REMIC transactions, with some key differences: • In December 2019 we began offering CAS CLNs in addition to CAS REMICs. CAS CLNs allow us to obtain credit protection on reference pools containing seasoned loans such as Refi Plus™ loans. • Since the loans used in our CAS CLNs were not tagged for use in a REMIC transaction at the time of acquisition, CAS CLNs do not qualify as interests in a REMIC. Since May 2018, we have taken a REMIC election on the majority of single-family loans we acquire.	• CAS CLNs do not provide as broad of a range of investor participation as CAS REMICs.
CIRT	• Insurance transactions whereby we obtain actual loss coverage on pools of loans either directly from an insurance provider that retains the risk, or from an insurance provider that simultaneously cedes all of its risk to one or more reinsurers. • In CIRT deals, we generally retain an initial portion of losses on the loans in the pool (for example the first 0.4% of the initial pool unpaid principal balance). Reinsurers cover losses above this retention amount up to a detachment point (for example the next 3.0% of the initial pool unpaid principal balance). We retain all losses above this detachment point. • We make premium payments on CIRT deals that we recognize in "Credit enhancement expense" in our consolidated statements of operations and comprehensive income.	• The insurance layer typically provides coverage for losses on the pool that are likely to occur only in a stressed economic environment. • Insurance benefits are received after the underlying property has been liquidated and all applicable proceeds, including private mortgage insurance benefits, have been applied to the loss. • A portion of the insurers' or reinsurers' obligations is collateralized with highly-rated liquid assets held in a trust account initially determined according to the ratings of such insurer or reinsurer. Contractual provisions require additional collateral to be posted in the event of adverse developments with the counterparty, such as a ratings downgrade. • Generally written for 10 or 12-1/2 year terms.
Lender risk-sharing	• Customized lender risk-sharing transactions. • In most transactions, lenders invest directly in a portion of the credit risk on mortgage loans they originate and/or service.	• Transactions are generally structured so that a portion of the credit risk on the underlying mortgage loans is shared without increasing our counterparty exposure. • In March 2020, FHFA instructed us to wind down our single-family lender risk-sharing transactions by the end of 2020.

The table below displays the mortgage credit risk transferred to third parties and retained by Fannie Mae pursuant to our single-family credit risk transfer transactions.

Outstanding as of December 31, 2020

(Dollars in billions)



(1) Credit risk retained by Fannie Mae in CAS, CIRT and lender risk-sharing transactions. Tranche sizes vary across programs.

(2) Credit risk transferred to third parties. Tranche sizes vary across programs.

(3) Includes mortgage pool insurance transactions covering loans with an unpaid principal balance of approximately $2.2 billion outstanding as of December 31, 2020.

(4) For some lender risk-sharing transactions, does not reflect completed transfers of risk prior to settlement.

(5) For CIRT and some lender risk-sharing transactions, "Reference Pool" reflects a pool of covered loans.

(6) For CAS transactions, "First Loss" represents all B tranche balances.

(7) For CAS and some lender risk-sharing transactions, represents outstanding reference pools, not the outstanding unpaid principal balance of the underlying loans. The outstanding unpaid principal balance for all loans covered by credit risk transfer programs, including all loans on which risk has been transferred in lender risk-sharing transactions, $955 billion as of December 31, 2020.

While these deals are expected to mitigate some of our potential future credit losses, they are not designed to shield us from all losses. We retain a portion of the risk of future credit losses on loans covered by CAS and CIRT transactions, including a portion of the first loss positions and all of the senior loss positions. In addition, on our CAS transactions, we retain a pro rata share of risk equal to approximately 5% of all notes sold in mezzanine tranches. The risk in force of these transactions, which refers to the maximum amount of losses that could be absorbed by credit risk transfer investors, was approximately $40 billion as of December 31, 2020.

We have designed our credit risk transfer transactions so that the principal payment and loss performance of the transactions correspond to the performance of the loans in the underlying reference pools. Losses are applied in reverse sequential order starting with the first loss tranche. Principal repayments may be allocated to reduce the mezzanine amounts outstanding; however, these payments may be subject to certain lock-out periods and performance triggers in order to build additional credit protection for the senior tranches retained by us. For CAS transactions, all principal payments and losses assigned to the mezzanine tranches are allocated pro rata between the sold notes and the portion we retain, when performance is above a certain threshold.

The following table displays the approximate cash paid or transferred to investors for these credit risk transfer transactions. The cash represents the portion of guaranty fee paid to investors as compensation for taking on a share of the credit risk.

Credit Risk Transfer Transactions

	For the Year Ended December 31,	
	2020	**2019**
Cash paid or transferred for:	**(Dollars in millions)**	
CAS transactions(1)	**$ 1,003**	$ 981
CIRT transactions	**382**	360
Lender risk-sharing transactions	**415**	285

(1) Consists of cash paid for interest expense net of LIBOR on outstanding CAS debt and amounts paid for both CAS REMIC® and CAS CLN transactions.

The following table displays the primary characteristics of the loans in our single-family conventional guaranty book of business without credit enhancement.

Single-Family Loans Currently without Credit Enhancement

	As of			
	December 31, 2020		**December 31, 2019**	
	Unpaid Principal Balance	**Percentage of Single-Family Conventional Guaranty Book of Business**	**Unpaid Principal Balance**	**Percentage of Single-Family Conventional Guaranty Book of Business**
	(Dollars in billions)			
Low LTV ratio or short-term(1)	**$ 938**	**29 %**	$ 736	25 %
Pre-credit risk transfer program inception(2)	**462**	**14**	608	20
Recently acquired(3)	**934**	**29**	287	10
Other(4)	**286**	**9**	246	8
Less: Loans in multiple categories	**(751)**	**(23)**	(481)	(16)
Total single-family loans currently without credit enhancement	**$ 1,869**	**58 %**	$ 1,396	47 %

(1) Represents loans with an LTV ratio less than or equal to 60% or loans with an original maturity of 20 years or less.

(2) Represents loans that were acquired before the inception of our credit risk transfer programs. Also includes Refi Plus loans.

(3) Represents loans that were recently acquired and have not been included in a reference pool.

(4) Includes adjustable-rate mortgage loans, loans with a combined LTV ratio greater than 97%, non-Refi Plus loans acquired after the inception of our credit risk transfer programs that became 30 or more days delinquent prior to inclusion in a credit risk transfer transaction, and loans that were delinquent as of December 31, 2020 or December 31, 2019.

Single-Family Problem Loan Management

Overview

Our problem loan management strategies are focused primarily on reducing defaults to avoid losses that would otherwise occur and pursuing foreclosure alternatives to mitigate the severity of the losses we incur. If a borrower does not make required payments, or is in jeopardy of not making payments, we work with the loan servicer to offer workout solutions to minimize the likelihood of foreclosure as well as the severity of loss. When appropriate, we seek to move to foreclosure expeditiously.

Below we describe the following:

- delinquency statistics on our problem loans;
- efforts undertaken to manage our problem loans, including the role of servicers in loss mitigation, forbearances, loan workouts, and sales of nonperforming loans;
- metrics regarding our loan workout activities;
- REO management; and
- other single-family credit-related information, including our credit loss performance and credit loss concentration metrics, loss reserves and TDRs resulting from loan modifications.

We also provide ongoing credit performance information on loans underlying single-family Fannie Mae MBS and loans covered by single-family credit risk transfer transactions. For loans backing Fannie Mae MBS, see the “Forbearance and Delinquency Dashboard” available in the MBS section of our Data Dynamics® tool, which is available at www.fanniemae.com/datadynamics. For loans covered by credit risk transfer transactions, see the “Deal Performance Data” report available in the CAS and CIRT sections of the tool. Information on our website is not incorporated into this report. Information in Data Dynamics may differ from similar measures presented in our financial statements and other public disclosures for a variety of reasons, including as a result of variations in the loan population covered, timing differences in reporting and other factors.

Delinquency

The tables below display the delinquency status of loans and changes in the volume of seriously delinquent loans in our single-family conventional guaranty book of business. Single-family seriously delinquent loans are loans that are 90 days or more past due or in the foreclosure process, expressed as a percentage of our single-family conventional guaranty book of business based on loan count. Management monitors the single-family serious delinquency rate as an indicator of potential future credit losses and loss mitigation activities. Serious delinquency rates are reflective of our performance in assessing and managing credit risk associated with single-family loans in our guaranty book of business. Typically, higher serious delinquency rates result in a higher allowance for loan losses.

For purposes of our disclosures regarding delinquency status, we report loans receiving COVID-19-related payment forbearance as delinquent according to the contractual terms of the loan. Pursuant to the CARES Act, for purposes of reporting to the credit bureaus, servicers must report a borrower receiving a COVID-19-related payment accommodation during the covered period, such as a forbearance plan or loan modification, as current if the borrower was current prior to receiving the accommodation and the borrower makes all required payments in accordance with the accommodation.

Delinquency Status and Activity of Single-Family Conventional Loans

	As of December 31,		
	2020	**2019**	**2018**
Delinquency status:			
30 to 59 days delinquent	**1.02 %**	1.27 %	1.37 %
60 to 89 days delinquent	**0.36**	0.35	0.38
Seriously delinquent (“SDQ”)	**2.87**	0.66	0.76
Percentage of SDQ loans that have been delinquent for more than 180 days	**67**	49	49
Percentage of SDQ loans that have been delinquent for more than two years	**3**	11	12

	For the Year Ended December 31,		
	2020	**2019**	**2018**
Single-family SDQ loans (number of loans):			
Beginning balance	**112,434**	130,440	212,183
Additions	**833,719**	199,995	227,199
Removals:			
Modifications and other loan workouts	**(246,524)**	(44,853)	(99,140)
Liquidations and sales	**(58,019)**	(55,472)	(79,105)
Cured or less than 90 days delinquent	**(145,804)**	(117,676)	(130,697)
Total removals	**(450,347)**	(218,001)	(308,942)
Ending balance	**495,806**	112,434	130,440

Our single-family serious delinquency rate increased in 2020 compared with 2019 and 2018 due to the economic dislocation caused by the COVID-19 pandemic, which sharply increased borrower participation in forbearance plans. A significant majority of our single-family seriously delinquent loan additions in 2020 have been in a COVID-19-related forbearance. As of December 31, 2020, single-family loans in forbearance comprised 78% of our single-family seriously delinquent loans.

Our single-family serious delinquency rate excluding loans in forbearance was 0.66% as of December 31, 2020. We monitor the single-family serious delinquency rate excluding loans that received a forbearance to better understand the impact that forbearance activity has had on the rate and to monitor loans that are seriously delinquent not as a result of COVID-19. We expect the COVID-19 pandemic to result in a continued higher single-family serious delinquency rate over the next several quarters compared to pre-pandemic levels.

Factors that affect our single-family serious delinquency rate include:

- the percentage of our loans that receive forbearance and the length of time they remain in forbearance;
- the pace and effectiveness of loan modifications and other workouts, including those related to the COVID-19 pandemic;
- the timing and volume of nonperforming loan sales we execute;
- pandemics and natural disasters;

- servicer performance; and
- changes in home prices, unemployment levels and other macroeconomic conditions.

Certain higher-risk loan categories, such as Alt-A loans and our 2005 through 2008 loan vintages, continue to exhibit higher-than-average delinquency rates. Single-family loans originated in 2005 through 2008 constituted 2% of our conventional single-family book of business as of December 31, 2020, but constituted 15% of our seriously delinquent single-family loans as of December 31, 2020 and drove 54% of our 2020 single-family credit losses.

The table below displays the serious delinquency rates for, and the percentage of our seriously delinquent single-family conventional loans represented by, the specified loan categories. Percentage of book amounts present the unpaid principal balance of loans for each category divided by the unpaid principal balance of our total single-family conventional guaranty book of business. The reported categories are not mutually exclusive.

Single-Family Conventional Seriously Delinquent Loan Concentration Analysis

	As of December 31,								
	2020			2019			2018		
	Percentage of Book Outstanding	Percentage of Seriously Delinquent Loans(1)	Serious Delinquency Rate	Percentage of Book Outstanding	Percentage of Seriously Delinquent Loans(1)	Serious Delinquency Rate	Percentage of Book Outstanding	Percentage of Seriously Delinquent Loans(1)	Serious Delinquency Rate
States:									
California	**19 %**	**12 %**	**2.62 %**	19 %	6 %	0.32 %	19 %	6 %	0.34 %
Florida	**6**	**9**	**4.17**	6	8	0.84	6	10	1.16
Illinois	**3**	**5**	**3.10**	4	6	0.91	4	5	0.98
New Jersey	**3**	**5**	**4.57**	3	5	1.13	4	5	1.38
New York	**5**	**7**	**4.79**	5	8	1.18	5	8	1.40
All other states	**64**	**62**	**2.59**	63	67	0.64	62	66	0.73
Product type:									
Alt-A(2)	**1**	**5**	**9.32**	2	9	2.95	2	11	3.35
Vintages:									
2004 and prior	**2**	**9**	**5.88**	2	20	2.48	3	23	2.69
2005-2008	**2**	**15**	**9.98**	4	33	4.11	5	39	4.61
2009-2020	**96**	**76**	**2.39**	94	47	0.35	92	38	0.34
Estimated mark-to-market LTV ratio:									
<= 60%	**52**	**56**	**2.52**	54	52	0.53	54	48	0.58
60.01% to 70%	**17**	**18**	**3.73**	17	17	0.80	18	17	0.87
70.01% to 80%	**18**	**14**	**3.05**	16	14	0.75	16	14	0.90
80.01% to 90%	**9**	**9**	**4.17**	8	9	1.00	8	10	1.24
90.01% to 100%	**4**	**2**	**1.85**	5	4	0.86	4	5	1.33
Greater than 100%	*	**1**	**22.43**	*	4	10.14	*	6	9.85
Credit enhanced:(3)									
Primary MI & other(4)	**21**	**27**	**4.36**	22	26	0.96	21	26	1.11
Credit risk transfer(5)	**30**	**37**	**3.69**	45	16	0.27	39	10	0.24
Non-credit enhanced	**58**	**51**	**2.36**	47	66	0.79	53	69	0.85

* Represents less than 0.5% of single-family conventional guaranty book of business.

(1) Calculated based on the number of single-family loans that were seriously delinquent for each category divided by the total number of single-family conventional loans that were seriously delinquent.

(2) For a description of our Alt-A loan classification criteria, see "MD&A—Glossary of Terms Used in This Report."

(3) The credit-enhanced categories are not mutually exclusive. A loan with primary mortgage insurance that is also covered by a credit risk transfer transaction will be included in both the "Primary MI & other" category and the "Credit risk transfer" category. As a result, the "Credit enhanced" and "Non-credit enhanced" categories do not sum to 100%. The total percentage of our single-family conventional guaranty book of business with some form of credit enhancement as of December 31, 2020 was 42%.

(4) Refers to loans included in an agreement used to reduce credit risk by requiring primary mortgage insurance, collateral, letters of credit, corporate guarantees, or other agreements to provide an entity with some assurance that it will be compensated to some degree in the event of a financial loss. Excludes loans covered by credit risk transfer transactions unless such loans are also covered by primary mortgage insurance.

(5) Refers to loans included in reference pools for credit risk transfer transactions, including loans in these transactions that are also covered by primary mortgage insurance. For CAS and some lender risk-sharing transactions, this represents outstanding unpaid principal balance of the underlying loans on the single-family mortgage credit book, not the outstanding reference pool, as of the specified date. Loans included in our credit risk transfer transactions have all been acquired since 2009.

Single-Family Loans in Forbearance

As a part of our relief programs, we are providing payment forbearance to borrowers experiencing a COVID-19-related financial hardship for up to 12 months or, for borrowers already in forbearance as of February 28, 2021, for a total of up to 15 months, provided that the forbearance does not result in the loan becoming greater than 15 months delinquent. We estimate that, through December 31, 2020, approximately 8% of the single-family loans, based on loan count of our conventional guaranty book of business as of March 31, 2020, have been in a COVID-19-related forbearance at some point between then and the end of the year (referred to as our "single-family cumulative forbearance take-up rate"). As shown in the tables below, many of these loans have since exited forbearance; therefore, the percentage of loans in our single-family conventional guaranty book of business in forbearance as of December 31, 2020 has declined to 3.0%. Some borrowers whose loans are in forbearance continue to make payments according to the original contractual terms of the loan notwithstanding the forbearance arrangement; we expect some of these borrowers will continue to do so and therefore remain current. The table below provides information on the delinquency and accrual status of our single-family loans in forbearance. We expect many of the loans in forbearance will resolve their delinquency through a payment deferral or other form of loan workout. As discussed below, servicers are required to contact borrowers prior to the end of forbearance to evaluate them for loan workout options that can support their successful transition out of forbearance.

We continue to accrue interest income on the vast majority of our single-family loans in forbearance because we have determined that collection of principal and interest on these loans is reasonably assured. For information on our updated application of our nonaccrual policy for loans negatively impacted by the COVID-19 pandemic, see "Note 1, Summary of Significant Accounting Policies."

Delinquency and Accrual Status of Single-Family Loans in Forbearance

	As of December 31, 2020			
	Number of Loans	Unpaid Principal Balance[1]	Percentage of Loans in Forbearance[2]	Percentage of Loans on Accrual Status
	(Dollars in millions)			
Delinquency status:				
Current	64,159	$ 12,110	12 %	100 %
30 to 59 days delinquent	40,653	7,672	8	97
60 to 89 days delinquent	35,107	6,658	7	85
Seriously delinquent:				
90 to 180 days delinquent	126,611	24,961	24	85
180+ days delinquent	258,025	56,379	49	82
Total seriously delinquent	384,636	81,340	73	83
Total loans in forbearance[3]	524,555	$ 107,780	100 %	86
Percentage of single-family conventional guaranty book of business	3.0 %	3.4 %		

	As of December 31, 2019			
	Number of Loans	Unpaid Principal Balance[1]	Percentage of Loans in Forbearance[2]	Percentage of Loans on Accrual Status
Delinquency status:	(Dollars in millions)			
Current	454	$ 76	8 %	100 %
30 to 59 days delinquent	592	103	11	86
60 to 89 days delinquent	710	126	13	1
Seriously delinquent:				
90 to 180 days delinquent	2,555	482	47	1
180+ days delinquent	1,104	204	21	*
Total seriously delinquent	3,659	686	68	*
Total loans in forbearance[3]	5,415	$ 991	100 %	18
Percentage of single-family conventional guaranty book of business	*	*		

* Represents less than 0.5% of single-family conventional business guaranty book of business.

(1) Does not reflect a valuation allowance recorded on the unpaid principal balance of loans in forbearance of $1.8 billion and $33 million as of December 31, 2020 and 2019, respectively.

(2) Based on loan count.

(3) Amortized cost of these loans was $110.4 billion and $989 million as of December 31, 2020 and 2019, respectively.

As of December 31, 2020, the vast majority of our single-family conventional loans in forbearance was due to borrowers experiencing a COVID-19-related financial hardship. As a result of the ongoing economic dislocation caused by the pandemic, we expect the number of single-family loans in forbearance to remain elevated through 2021 compared with pre-pandemic levels.

The table below provides information on the credit profile of our single-family loans in forbearance with select high-risk characteristics. While the credit profile of our single-family loans in forbearance is somewhat weaker than the overall credit profile of our single-family conventional guaranty book of business, only 2% of our single-family loans in forbearance with a mark-to-market LTV ratio over 80% are not covered by mortgage insurance.

Select Higher-Risk Characteristics of Single-Family Loans in Forbearance

	As of December 31, 2020		As of December 31, 2019	
	Number of Loans	Percentage of Unpaid Principal Balance in Forbearance	Number of Loans	Percentage of Unpaid Principal Balance in Forbearance
Loans in forbearance with certain higher-risk characteristics:[1]				
Estimated mark-to-market LTV ratio > 80%	**62,144**	**15 %**	1,073	24 %
Estimated mark-to-market LTV ratio > 80% without mortgage insurance	**6,811**	**2**	54	1
DTI > 43%	**201,354**	**41**	1,956	39
FICO credit score at origination < 680	**159,017**	**26**	2,395	42

(1) The higher-risk categories are not mutually exclusive.

As a part of our loss mitigation efforts, servicers must attempt to contact the borrower no later than 30 days before the end of the forbearance period to evaluate them for a workout option after the forbearance period. Those options include:

- a reinstatement (where the borrower repays all of the missed payments at one time);
- a repayment plan (where the borrower repays the missed payments over time);
- a payment deferral (where the borrower defers the missed payments to the end of the loan term, or to when the loan is refinanced, the property is sold or the loan is otherwise paid off before the end of the loan term); or
- a modification of the loan terms so that the borrower may be brought current, which typically results in the borrower making reduced monthly contractual payments over a longer period of time.

Unlike a loan modification, repayment plans and payment deferrals do not require us to purchase the loan out of trust.

The table below displays the status as of the current period end of the single-family loans in our guaranty book of business that have received a forbearance, many of which have successfully transitioned out of forbearance. As shown in the forbearance status table below, a majority of loans that received forbearance during 2020 have resolved their delinquency through reinstatement, payment deferral, or a liquidation. We expect the percentage of loans that receive a modification upon transitioning out of forbearance to increase in 2021. See "MD&A— Single-Family Business—Single-Family Mortgage Credit Risk Management—Loan Workout Metrics" for additional information about actions taken by us to help reinstate a loan to current status.

Status of Single-Family Forbearance Loans

	As of December 31, 2020	
	Number of Loans	Percentage of Loans with Forbearance by Category
Loans that received a forbearance, by status:		
Active forbearance	524,555	40 %
Payment deferral[1]	220,414	17
Modification[2]	13,277	1
Reinstated[3]	337,086	26
Other[4]	45,655	3
Total loans that received a forbearance in our single-family guaranty book of business	1,140,987	87
Loans that have received a forbearance, but liquidated	167,388	13
Total loans that have received a forbearance[5]	1,308,375	100 %

(1) As of December 31, 2020, 96% of loans that received a forbearance and subsequently received a payment deferral were current.

(2) Includes loans that are in trial modifications. As of December 31, 2020, 83% of loans that received a forbearance and subsequently received a completed modification were current.

(3) Represents loans that are no longer in forbearance but are current according to the original terms of the loan. Also includes loans that remained current throughout the forbearance arrangement and continue to perform.

(4) Includes loans that were delinquent upon the expiration of the forbearance arrangement as well as loans that exited forbearance through a repayment plan.

(5) Includes 5,415 loans that were in forbearance as of January 1, 2020.

Accrued Interest Receivable, Net on Single-Family Loans in Forbearance

As discussed in "Note 1, Summary of Significant Accounting Policies," we have updated our application of our nonaccrual accounting policy for loans negatively impacted by the COVID-19 pandemic. For loans that were current as of March 1, 2020 and subsequently become delinquent, we continue to accrue interest income for up to six months. For those loans that are in a forbearance plan where we have provided relief beyond six months of delinquency, we continue to accrue interest income provided collection of principal and interest continues to be reasonably assured according to the updated policy. Our evaluation of whether the collection of principal and interest is reasonably assured considers the probability of default, the current value of the collateral, and any proceeds that are expected from contractually attached mortgage insurance. Once the forbearance period has ended, we will also consider the extent to which the borrower and the servicer have agreed to any of the loss mitigation options that are available. We then measure an allowance for expected credit losses on the unpaid accrued interest receivable balances such that the balance sheet reflects the net amount of interest we expect to collect. This update resulted in a significant portion of delinquent loans, including those in forbearance, remaining on accrual status.

Under the updated nonaccrual accounting policy, our allowance for accrued interest receivable considers both the loan's principal and accrued interest receivable balances when assessing collectability, which requires significant management judgment. As such, our allowance for accrued interest receivable is subject to the same review processes, as well as other established governance and controls, used for our allowance for loan losses. The table below displays an aging analysis of our accrued interest receivable, net of allowance on single-family loans that are in a forbearance plan as of December 31, 2020. Accrued interest receivable on loans in forbearance as of December 31, 2019 was not material.

Aging of Accrued Interest Receivable, Net of Allowance on Single-Family Loans in Forbearance

	As of December 31, 2020
	(Dollars in millions)
Aging analysis of accrued interest receivable:	
Current	$ 32
30 to 59 days delinquent	46
60 to 89 days delinquent	55
Seriously delinquent:	
90 to 180 days delinquent	377
180+ days delinquent	1,427
Total accrued interest receivable	1,937
Allowance for accrued interest receivable	(173)
Total accrued interest receivable, net	$ 1,764

Principal and Interest Payments while Loans are in Forbearance

While a loan is in forbearance and backs an MBS trust, investors in the MBS are entitled to continue to receive principal and interest payments on the MBS even though the borrower is not required to make principal and interest payments. For the majority of loans in our single-family guaranty book of business, our Single-Family Servicing Guide has, until recently, required servicers to advance missed scheduled principal and interest payments to the MBS trusts until the loans were purchased from the MBS trusts. Because we typically do not purchase loans from MBS trusts while they are in forbearance, this servicer payment obligation could have continued for the entirety of the forbearance plan. Beginning August 2020, at FHFA's instruction, we reduced our single-family servicers' obligations to advance these missed borrower payments and only require servicers to advance missed scheduled principal and interest payments on a loan for the first four months of missed borrower payments. After four months, we make the missed scheduled principal and interest payments to the MBS trust for payment to MBS holders so long as the loan remains in the MBS trust. For the year ended December 31, 2020, we advanced $1.2 billion in missed borrower principal and interest payments to MBS trusts for payment to MBS holders. See "Retained Mortgage Portfolio" for a description of when we purchase loans from single-family MBS trusts. Also, see "Liquidity and Capital Management—Liquidity Management—Debt Funding—Debt Funding Activity" for information on the COVID-19 pandemic's impact on our liquidity and debt funding needs.

Loan Workout Metrics

As a part of our credit risk management efforts, loan workouts represent actions taken by us to help reinstate a loan to current status and help homeowners stay in their home or to otherwise avoid foreclosure. Our loan workouts reflect various types of home retention solutions, including repayment plans, payment deferrals, and loan modifications. Our loan workouts also include foreclosure alternatives, such as short sales and deeds-in-lieu of foreclosure.

We work with our servicers to implement our home retention solution and foreclosure alternative initiatives, and we emphasize the importance of early contact with borrowers and early entry into a home retention solution. We require that servicers first evaluate borrowers for eligibility under a workout option before considering foreclosure. The existence of a second lien may limit our ability to provide borrowers with loan workout options, particularly those that are part of our foreclosure prevention efforts; however, we are not required to contact a second lien holder to obtain their approval prior to providing a borrower with a loan modification.

Home Retention Solutions

When a borrower cannot bring the loan current by reinstating the loan or through a repayment plan, we use our payment deferral and loan modification workout options to help resolve the loan's delinquency. We developed a payment deferral workout option for borrowers impacted by COVID-19 that allows the borrower to defer up to 15 months of past-due payments, without interest, to the end of the loan term (or when the loan is refinanced, the property is sold or the loan is otherwise paid off before the end of the loan term). All other terms of the loan remain unchanged. We have also developed a payment deferral option for borrowers impacted by natural disasters. The total amount of principal and interest deferred to the end of the loan term for single-family loans was $1.5 billion for the year ended December 31, 2020.

Characteristics of our loan modifications may include:

- changes to the original mortgage terms such as product type, interest rate, amortization term, maturity date and/or unpaid principal balance;
- collection of less than the contractual amount due under the original loan; or
- receiving the full amount due, or certain installments due, under the loan over a period of time that is longer than the period of time originally provided for under the terms of the loan.

Our primary loan modification program is currently the Flex Modification program, which offers payment relief for eligible borrowers, targeting a 20% payment reduction.

Foreclosure Alternatives

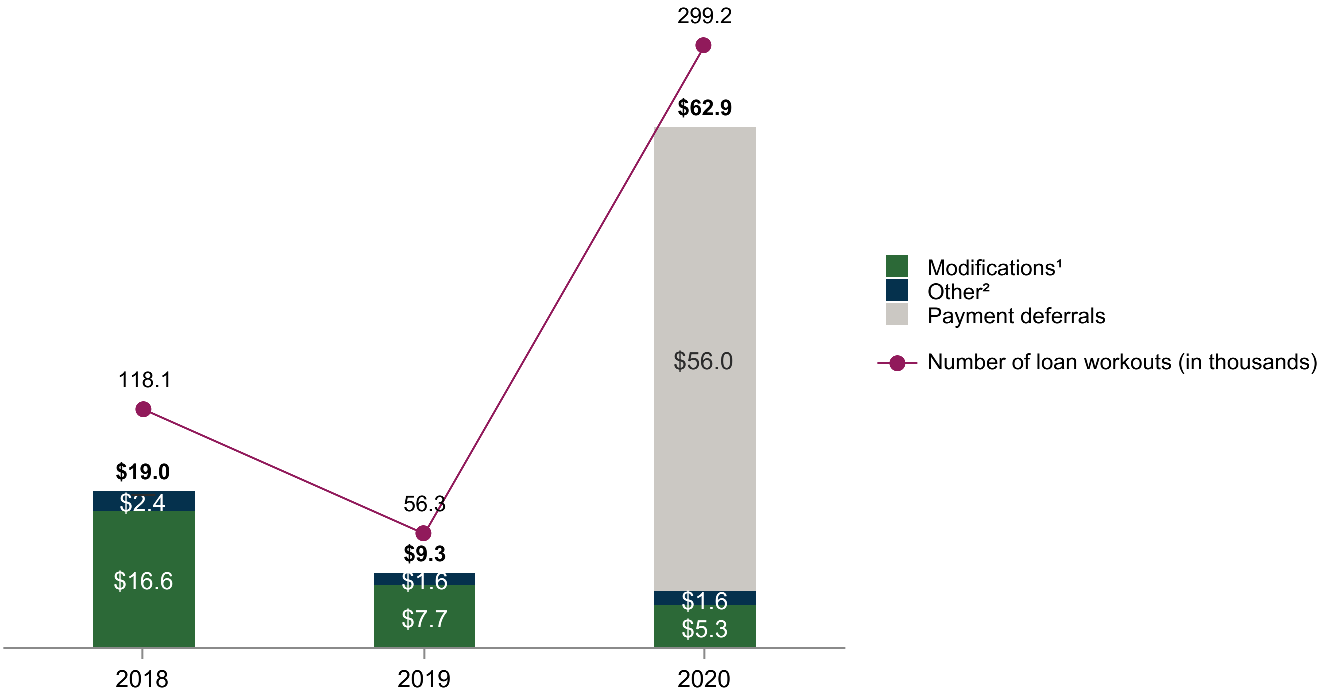
We continue to focus on foreclosure alternatives for borrowers who are unable to retain their homes. Foreclosure alternatives may be more appropriate if the borrower has experienced a significant adverse change in financial condition due to events such as long-term unemployment or reduced income, divorce, or unexpected issues like medical bills, and is therefore no longer able to make the required mortgage payments. To avoid foreclosure and satisfy the first-lien mortgage obligation, our servicers work with a borrower to:

- accept a deed-in-lieu of foreclosure, whereby the borrower voluntarily signs over the title to their property to the servicer, or
- sell the home prior to foreclosure in a short sale, whereby the borrower sells the home for less than the full amount owed to Fannie Mae under the mortgage loan.

These alternatives are designed to reduce our credit losses while helping borrowers avoid having to go through a foreclosure. We work to obtain the highest price possible for the properties sold in short sales.

The chart below displays the unpaid principal balance of our completed single-family loan workouts by type, as well as the number of loan workouts. This table does not include loans in an active forbearance arrangement, trial modifications, loans to certain borrowers who have received bankruptcy relief that are classified as troubled debt restructurings, and repayment plans that have been initiated but not completed.

Completed Loan Workout Activity (Dollars in billions)



(1) There were approximately 14,400 loans in a trial modification period that was not yet complete as of December 31, 2020.

(2) Includes repayment plans and foreclosure alternatives. Repayment plans reflect only those plans associated with loans that were 60 days or more delinquent. Beginning with the year ended December 31, 2020, we exclude completed forbearance arrangements from the table. For year ended December 31, 2019, includes $105 million of completed forbearance arrangements that involve loans that were 90 days or more delinquent. For year ended December 31, 2018, includes $271 million of completed forbearance arrangements that involve loans that were 90 days or more delinquent.

The increase in home retention solutions in 2020 compared with 2019 was primarily driven by completed COVID-19-related payment deferrals, which has been the primary loan workout solution for borrowers exiting forbearance. Given the continuing impact of the pandemic, we expect higher loan workout activity to continue into 2021.

The decrease in home retention solutions in 2019 compared with 2018 was primarily driven by improved loan performance and a decrease in the volume of modifications and forbearances granted, which was elevated in 2018 due to the number of borrowers affected by major hurricanes in the second half of 2017.

The table below displays the percentage of our single-family loan modifications completed during 2019 and 2018 that were current or paid off one year after modification and, for modifications completed during 2018, two years after modification. The performance of these modified loans was impacted in 2020 by the economic dislocation caused by the COVID-19 pandemic.

Percentage of Single-Family Completed Loan Modifications That Were Current or Paid Off at One and Two Years Post-Modification

	2019 Modifications				2018 Modifications			
	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
One Year Post-Modification	60%	58%	60%	68%	72%	79%	78%	64%
Two Years Post-Modification					69	73	71	72

Nonperforming and Reperforming Loan Sales

We also undertake efforts to mitigate credit losses and manage our problem loans by selling our reperforming and nonperforming loans, thereby removing them from our guaranty book of business. This problem loan management strategy is intended to reduce: the number of seriously-delinquent loans, the severity of losses incurred on these loans, and the capital we would be required to hold for such loans.

In recent years, this has been an integral component of our credit loss mitigation strategy. In 2020, we suspended new sales of nonperforming and reperforming loans in the second quarter, as investor interest in purchasing these loans was severely impacted by the COVID-19 pandemic. However, market conditions for the sale of these loans, particularly reperforming loans, improved following the second quarter, and we resumed sales of reperforming loans in the third quarter. During 2020, we sold approximately 50,500 reperforming loans with an aggregate unpaid principal balance of $7.5 billion.

FHFA is currently examining potential issues relating to sales of nonperforming and reperforming loans during the COVID-19 national emergency and has instructed us to refrain from engaging in such sales until at least February 28, 2021, or later if instructed by FHFA, while FHFA evaluates what additional loss mitigation requirements will apply to any future sales. For instance, although we already require purchasers to perform workout solutions like modifications to avoid foreclosure, we may attach additional terms to these sales that would require purchasers to offer borrowers protections included in existing legislation.

REO Management

If a loan defaults, we may acquire the property through foreclosure or a deed-in-lieu of foreclosure. The table below displays our REO activity by region. Regional REO acquisition trends generally follow a pattern that is similar to, but lags, that of regional delinquency trends.

Single-Family REO Properties

	For the Year Ended December 31,		
	2020	**2019**	**2018**
Single-family REO properties (number of properties):			
Beginning of period inventory of single-family REO properties(1)	**17,501**	20,156	26,311
Acquisitions by geographic area:(2)			
Midwest	**1,507**	4,881	6,107
Northeast	**1,237**	4,867	6,460
Southeast	**1,859**	6,360	7,814
Southwest	**1,021**	2,892	3,713
West	**433**	1,667	2,001
Total REO acquisitions (1)	**6,057**	20,667	26,095
Dispositions of REO	**(15,585)**	(23,322)	(32,250)
End of period inventory of single-family REO properties(1)	**7,973**	17,501	20,156
Carrying value of single-family REO properties (dollars in millions)	**$ 1,149**	$ 2,290	$ 2,503
Single-family foreclosure rate(3)	**0.04 %**	0.12 %	0.15 %
REO net sales price to unpaid principal balance(4)	**88 %**	78 %	77 %
Short sales net sales price to unpaid principal balance(5)	**81 %**	78 %	77 %

(1) Includes held-for-use properties, which are reported in our consolidated balance sheets as a component of "Other assets."

(2) See footnote 8 to the "Key Risk Characteristics of Single-Family Conventional Business Volume and Guaranty Book of Business" table for states included in each geographic region.

(3) Reflects the total number of properties acquired through foreclosure or deeds-in-lieu of foreclosure as a percentage of the total number of loans in our single-family conventional guaranty book of business as of the end of each period.

(4) Calculated as the amount of sale proceeds received on disposition of REO properties during the respective periods, excluding those subject to repurchase requests made to our sellers or servicers, divided by the aggregate unpaid principal balance of the related loans at the time of foreclosure. Net sales price represents the contract sales price less selling costs for the property and other charges paid by the seller at closing.

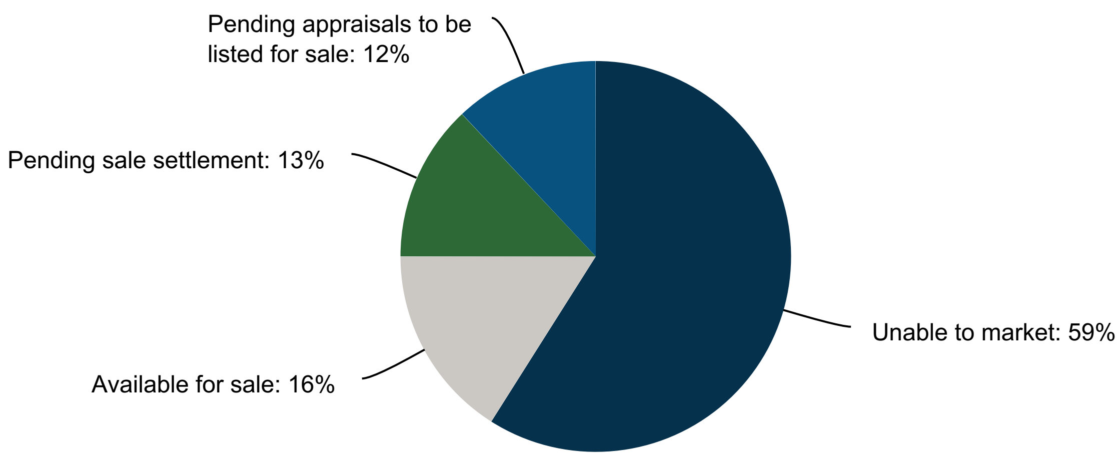
(5) Calculated as the amount of sale proceeds received on properties sold in short sale transactions during the respective periods divided by the aggregate unpaid principal balance of the related loans. Net sales price includes borrower relocation incentive payments and subordinate lien(s) negotiated payoffs.

The decline in single-family REO properties in 2020 compared with 2019 was primarily due to the suspension of foreclosures. In response to the pandemic and with instruction from FHFA, we have prohibited our servicers from completing foreclosures on our single-family loans through at least March 31, 2021, except in the case of vacant or abandoned properties.

We market and sell the majority of our foreclosed properties through local real estate professionals. Our primary objectives are both to minimize the severity of loss to Fannie Mae by maximizing sales prices and to stabilize neighborhoods by preventing empty homes from depressing home values. In some cases, we use alternative methods of disposition, including selling homes to municipalities, other public entities or non-profit organizations, and selling properties through public auctions. We also engage in third-party sales at foreclosure, which allow us to avoid maintenance and other REO expenses we would have incurred had we acquired the property.

As shown in the chart below, the majority of our REO properties are unable to be marketed at any given time because the properties are occupied, under repair, or are subject to state or local redemption or confirmation periods, or eviction moratoriums, which delays the marketing and disposition of these properties.

REO Property Status
As of December 31, 2020



Although the total number of our REO properties decreased in 2020 compared with 2019, the COVID-19-related eviction moratorium on single-family REOs led to a larger portion of properties being classified as "unable to market," as the majority of these properties were occupied.

Other Single-Family Credit Information

Single-Family Credit Loss Metrics and Loan Sale Performance

The single-family credit loss and loan sale performance measures below present information about gains or losses we realized on our single-family loans during the periods presented. The amount of these gains or losses in a given period is driven by foreclosures, pre-foreclosure sales, REO activity, mortgage loan redesignations, and other events that trigger write-offs and recoveries. The single-family credit loss metrics we present are not defined terms within GAAP and may not be calculated in the same manner as similarly titled measures reported by other companies. Management uses these measures to evaluate the effectiveness of our single-family credit risk management strategies in conjunction with leading indicators such as serious delinquency and forbearance rates, which are potential indicators of future realized single-family credit losses. We believe these measures provide useful information about our single-family credit performance and the factors that impact our credit performance.

We revised the presentation of our single-family credit loss metrics in connection with our implementation of the CECL standard in January 2020, principally by separating the “Charge-offs, net of recoveries” line item into three line items: “Write-offs,” “Recoveries,” and “Write-offs on the redesignation of mortgage loans from HFI to HFS.” Because sales of nonperforming and reperforming loans have been an important part of our credit loss mitigation strategy in recent periods, we also provide information in the table below on our loan sale performance through the “Gains on sales and other valuation adjustments” line item.

The table below displays the components of our single-family credit loss metrics and loan sale performance.

Single-Family Credit Loss Metrics and Loan Sale Performance

	For the Year Ended December 31,					
	2020		2019		2018	
	Amount	Ratio[1]	Amount	Ratio[1]	Amount	Ratio[1]
	(Dollars in millions)					
Write-offs	**$ (177)**		$ (318)		$ (698)	
Recoveries	**111**		117		323	
Foreclosed property expense	**(157)**		(523)		(604)	
Credit losses and credit loss ratio	**(223)**	**0.7 bps**	(724)	2.5 bps	(979)	3.4 bps
Write-offs on the redesignation of mortgage loans from HFI to HFS[2]	**(291)**		(995)		(1,478)	
Gains on sales and other valuation adjustments[3]	**704**		1,270		492	
Net gains (losses) from credit losses, write-offs on redesignation, and gains on sales and other valuation adjustments, and related ratios	**$ 190**	**(0.6) bps**	$ (449)	1.5 bps	$ (1,965)	6.8 bps

(1) Basis points are calculated based on the amount of each line item divided by the average single-family conventional guaranty book of business during the period.

(2) Consists of the lower of cost or fair value adjustment at time of redesignation.

(3) Consists of gains or losses realized on the sales of nonperforming and reperforming mortgage loans during the period and temporary lower-of-cost-or-market adjustments on HFS loans, which are recognized in “Investment gains, net” in our consolidated statements of operations and comprehensive income.

Our single-family credit losses and credit loss ratios decreased in 2020 compared with 2019 primarily due to reduced foreclosures driven mostly by the COVID-19-related foreclosure moratorium.

Our single-family write-offs on redesignation decreased in 2020 compared with 2019 primarily as a result of a reduction in the volume of reperforming loans redesignated from HFI to HFS in 2020.

Gains on sales and other valuation adjustments decreased in 2020 compared with 2019 primarily driven by a significant decrease in the volume of sales of single-family HFS loans.

We do not expect a substantial increase in our single-family credit losses in the near term as a result of COVID-19, as we are currently offering up to 15 months of forbearance to eligible single-family borrowers suffering financial hardship relating to the pandemic and because we have suspended foreclosures and certain foreclosure-related activities for single-family properties through at least March 31, 2021. Over the longer term, we expect the COVID-19 pandemic will result in higher single-family credit losses, as reflected in our increased allowance for loan losses since the inception of the pandemic. See “Risk Factors” for additional information on the potential credit risk impact of the COVID-19 pandemic.

For information on our credit-related income or expense, which includes changes in our allowance, see “Consolidated Results of Operations—Credit-Related Income (Expense)” and “Single-Family Business Financial Results.”

The table below displays concentrations of our single-family credit losses based on geography, credit characteristics and loan vintages.

Single-Family Credit Loss Concentration Analysis

	Percentage of Single-Family Conventional Guaranty Book of Business Outstanding[(1)]		Percentage of Single-Family Credit Losses[(2)]	
	As of December 31,		As of December 31,	
	2020	2019	2020	2019
Geographical distribution:				
California	**19 %**	19 %	**7 %**	9 %
Florida	**6**	6	**9**	12
Illinois	**3**	4	**14**	10
New Jersey	**3**	3	**8**	10
New York	**5**	5	**9**	9
All other states	**64**	63	**53**	50
Select higher-risk products:				
Alt-A loans	**1**	2	**14**	17
Vintages:[(3)]				
2004 and prior	**2**	2	**13**	12
2005 - 2008	**2**	4	**54**	61
2009 - 2020	**96**	94	**33**	27

(1) Calculated based on the aggregate unpaid principal balance of single-family loans for each category divided by the aggregate unpaid principal balance of loans in our single-family conventional guaranty book of business as of the end of each period.

(2) Excludes the impact of recoveries resulting from resolution agreements related to representation and warranty matters and compensatory fee income related to servicing matters that have not been allocated to specific loans.

(3) Credit losses on mortgage loans typically do not peak until the third through sixth years following origination; however, this range can vary based on many factors, including changes in macroeconomic conditions and foreclosure timelines.

The majority of our single-family credit losses in 2020 continued to be driven by loans originated in 2005 through 2008. However, these loans accounted for the majority of the decrease in our credit losses in 2019 compared with 2020. As a result, the percentage of overall credit losses driven by loans originated in more recent years increased, to 33% in 2020 from 27% in 2019, even as the amount of credit losses from these loans decreased.

Single-Family Loss Reserves

Our single-family loss reserves, which include our allowance for loan losses and the related accrued interest receivable, and our reserve for guaranty losses, provide for an estimate of credit losses in our single-family guaranty book of business. For periods beginning January 1, 2020, our measurement of loss reserves reflects a lifetime credit loss methodology pursuant to our adoption of the CECL standard and requires consideration of a broader range of reasonable and supportable forecast information to develop credit loss estimates. For prior periods, single-family loss reserves were measured using an incurred loss impairment methodology for loans that were collectively evaluated for impairment. For further details on our previous single-family loss reserves methodology, refer to “Note 1, Summary of Significant Accounting Policies.”

The table below summarizes the changes in our single-family loss reserves, excluding credit losses on our AFS securities. For a discussion of changes in our single-family benefit or provision for credit losses see "Consolidated Results of Operations—Credit-Related Income (Expense)."

Single-Family Loss Reserves

	For the Year Ended December 31,				
	2020	**2019**	**2018**	**2017**	**2016**
	(Dollars in millions)				
Changes in loss reserves:					
Beginning balance	**$ (8,779)**	$(14,007)	$(19,155)	$(23,639)	$(28,325)
Transition impact of the adoption of the CECL standard	**(1,231)**	—	—	—	—
Benefit (provision) for credit losses	**(73)**	4,038	3,313	2,090	2,092
Write-offs	**468**	1,313	2,176	2,868	3,323
Recoveries	**(111)**	(117)	(323)	(445)	(638)
Other	**153**	(6)	(18)	(29)	(91)
Ending balance	**$ (9,573)**	$ (8,779)	$(14,007)	$(19,155)	$(23,639)
Write-offs, net of recoveries, as a percentage of the average single-family conventional guaranty book of business (in bps)	**1.2**	4.1	6.4	8.3	9.3
Loss reserves as a percentage of single-family:					
Conventional guaranty book of business	**0.30 %**	0.30 %	0.49 %	0.65 %	0.83 %
Nonaccrual loans at amortized cost	**34.63**	30.58	44.24	40.80	53.67
Certain higher risk loan categories as a percentage of single-family loss reserves:					
2005-2008 loan vintages	**46 %**	72 %	76 %	78 %	81 %
Alt-A loans	**13**	21	20	22	23

Troubled Debt Restructurings and Nonaccrual Loans

As discussed above, we modify loans as part of our home retention solutions. The majority of these loans, including those with trial modifications and loans to certain borrowers who received bankruptcy relief, are classified as TDRs.

The table below displays the unpaid principal balance of single-family HFI loans classified as TDRs.

Single-Family TDR Activity on HFI Loans

	For the Year Ended December 31,		
	2020	**2019**	**2018**
	(Dollars in millions)		
Beginning balance	**$ 101,938**	$ 123,951	$ 143,843
New TDRs	**5,860**	8,319	14,867
Foreclosures[1]	**(689)**	(1,794)	(2,446)
Payoffs and other reductions	**(19,944)**	(28,538)	(32,313)
Ending balance	**$ 87,165**	$ 101,938	$ 123,951

(1) Consists of foreclosures, deeds-in-lieu of foreclosure, short sales and third-party sales.

In addition, we had single-family HFS loans classified as TDRs with an unpaid principal balance of $2.2 billion as of December 31, 2020, $2.0 billion as of December 31, 2019 and $2.1 billion as of December 31, 2018.

The decline in new TDRs in 2020 compared with 2019 and 2018 was a result of our election to account for certain eligible loss mitigation activities under the COVID-19 relief granted pursuant to the CARES Act and extended by the Consolidated Appropriations Act of 2021. To be eligible for this treatment, a loan must not have been more than 30 days delinquent as of December 31, 2019, and the activity must occur between March 1, 2020 and the earlier of January 1, 2022 or 60 days after the date on which the COVID-19 pandemic national emergency terminates. Accordingly, we do not expect to a see a significant increase in our single-family TDRs in 2021.

The decline in single-family foreclosures in 2020 compared with 2019 and 2018 was primarily due to the temporary suspension of foreclosures. In response to the pandemic and with instruction from FHFA, we have prohibited our servicers from completing foreclosures on our single-family loans through at least March 31, 2021, except in the case of vacant or abandoned properties.

The table below displays the single-family loans classified as TDRs that were on accrual status and single-family loans on nonaccrual status. The table includes our amortized cost in HFI and HFS single-family mortgage loans, as well as interest income forgone and recognized for on-balance sheet TDRs on accrual status and nonaccrual loans. For more information on TDRs and nonaccrual loans, see “Note 3, Mortgage Loans.”

Single-Family TDRs on Accrual Status and Nonaccrual Loans

	As of December 31,				
	2020	2019	2018	2017	2016
	(Dollars in millions)				
TDRs on accrual status	**$ 69,503**	$ 81,634	$ 98,320	$110,043	$127,353
Nonaccrual loans	**27,643**	28,708	31,658	46,945	44,047
Total TDRs on accrual status and nonaccrual loans	**$ 97,146**	$110,342	$129,978	$156,988	$171,400
Accruing on-balance sheet loans past due 90 days or more(1)	**$ 77,181**	$ 191	$ 228	$ 353	$ 402

	For the Year Ended December 31,				
	2020	2019	2018	2017	2016
	(Dollars in millions)				
Interest related to on-balance sheet TDRs on accrual status and nonaccrual loans:					
Interest income forgone(2)	**$ 1,462**	$ 1,524	$ 2,000	$ 3,009	$ 4,102
Interest income recognized(3)	**3,691**	4,513	5,292	5,705	5,996

(1) Includes loans that, as of the end of each period, are 90 days or more past due and continuing to accrue interest. As of December 31, 2020, the substantial majority of these loans had a COVID-19-related forbearance.

(2) Represents the amount of interest income we did not recognize, but would have recognized during the period for nonaccrual loans and TDRs on accrual status as of the end of each period had the loans performed according to their original contractual terms.

(3) Primarily includes amounts accrued while the loans were performing, including the amortization of any deferred cost basis adjustments, and cash payments received on nonaccrual loans held as of the end of each period.

Our updated nonaccrual policy, combined with the elevated number of borrowers in forbearance, contributed to a significant increase in loans accruing on-balance sheet that were past due 90 days or more as of December 31, 2020. As discussed in “Note 1, Summary of Significant Accounting Policies,” we have updated the application of our accounting policy for nonaccrual loans that were negatively impacted by the COVID-19 pandemic. For loans that were current as of March 1, 2020 and subsequently become delinquent, we continue to accrue interest income for up to six months. If those loans are in a forbearance plan, where we have provided relief beyond six months of delinquency, we continue to accrue interest income provided collection of principal and interest continues to be reasonably assured according to the updated policy. We then measure an allowance for expected credit losses on the unpaid accrued interest receivable balances such that the balance sheet reflects the net amount of interest we expect to collect.

This nonaccrual policy update resulted in an increase in our accrued interest receivable balance, as a significant portion of delinquent loans negatively impacted by the COVID-19 pandemic remained on accrual status. We have established a valuation allowance of $209 million as of December 31, 2020 on the total single-family accrued interest receivable balance based on our assessment of collectability. For those single-family loans that are six or more months delinquent as of December 31, 2020, we have recorded a total accrued interest receivable balance of $1.7 billion, for which we have established a valuation allowance of $167 million.

Multifamily Business

Multifamily Primary Business Activities

Providing Liquidity for Multifamily Mortgage Loans

Our Multifamily business provides mortgage market liquidity primarily for properties with five or more residential units, which may be apartment communities, cooperative properties, seniors housing, dedicated student housing or manufactured housing communities. Our Multifamily business works with our lender customers to provide funds to the mortgage market primarily by securitizing multifamily mortgage loans acquired from these lenders into Fannie Mae MBS, which are sold to investors or dealers. We also purchase multifamily mortgage loans and provide credit enhancement for bonds issued by state and local housing finance authorities to finance multifamily housing. Our Multifamily business also supports liquidity in the mortgage market through other activities, such as issuing structured MBS backed by Fannie Mae multifamily MBS and buying and selling multifamily agency mortgage-backed securities. We also continue to invest in low-income housing tax credit ("LIHTC") multifamily projects to help support and preserve the supply of affordable housing.

Key Characteristics of the Multifamily Business

The Multifamily business has a number of key characteristics that distinguish it from our Single-Family business.

- *Collateral:* Multifamily loans are collateralized by properties that generate cash flows and effectively operate as businesses, such as garden and high-rise apartment complexes, seniors housing communities, cooperatives, dedicated student housing and manufactured housing communities.
- *Borrowers and sponsors:* Multifamily borrowers are entities that are typically owned, directly or indirectly, by for-profit corporations, limited liability companies, partnerships, real estate investment trusts and individuals who invest in real estate for cash flow and expected returns in excess of their original contribution of equity. Borrowers are typically single-asset entities, with the property as their only asset. The ultimate owner of a multifamily borrower is referred to as the borrower's "sponsor." We evaluate both the borrowing entity and its sponsor when considering a new transaction or managing our business. In this report, we refer to both the borrowing entities and their sponsors as "borrowers." When considering a multifamily borrower, creditworthiness is evaluated through a combination of quantitative and qualitative data including liquid assets, net worth, number of units owned, experience in a market and/or property type, multifamily portfolio performance, access to additional liquidity, debt maturities, asset/property management platform, senior management experience, reputation, and exposures to lenders and Fannie Mae.
- *Recourse:* Multifamily loans are generally non-recourse to the borrowers.
- *Lenders:* During 2020, we executed multifamily transactions with 28 lenders. Of these, 23 lenders delivered loans to us under our DUS program described below. In determining whether to partner with a multifamily lender, we consider the lender's financial strength, multifamily underwriting and servicing experience, portfolio performance and willingness and ability to share in the risk of loss associated with the multifamily loans they originate.
- *Loan size:* The average size of a loan in our multifamily guaranty book of business is $13 million.
- *Underwriting process:* Multifamily loans require detailed underwriting of the property's operating cash flow. Our underwriting includes an evaluation of the property's ability to support the loan, property quality, market and submarket factors, and ability to exit at maturity.
- *Term and lifecycle:* In contrast to the standard 30-year single-family residential loan, multifamily loans typically have terms of 5, 7 or 10 years, with balloon payments due at maturity.
- *Prepayment terms:* To protect against prepayments, most multifamily Fannie Mae loans and MBS impose prepayment premiums, primarily yield maintenance, consistent with standard commercial investment terms. This is in contrast to single-family loans, which typically do not have prepayment protection.

Delegated Underwriting and Servicing

Fannie Mae's DUS program, which was initiated in 1988, is a unique business model in the commercial mortgage industry. Our DUS model aligns the interests of the lender and Fannie Mae. Our current 23-member DUS lender network, which is comprised of large financial institutions and independent mortgage lenders, continues to be our principal source of multifamily loan deliveries. DUS lenders are pre-approved and delegated the authority to underwrite and service loans on behalf of Fannie Mae in accordance with our standards and requirements. Delegation permits lenders to respond to customers more rapidly, as the lender generally has the authority to approve a loan within prescribed parameters. Based on a given loan's unique characteristics and Fannie Mae's established delegation criteria, lenders assess whether a loan must be reviewed by Fannie Mae. If review is required, Fannie Mae's internal credit team will assess the loan's risk profile to determine if it meets our risk tolerances. DUS lenders are required to share with us the risk of loss over the life of the loan, as discussed in more detail in "Multifamily Mortgage Credit Risk Management." Since DUS lenders share in the credit risk, the servicing fee to the lenders includes compensation for credit risk.

Multifamily Mortgage Servicing

Multifamily mortgage servicing is typically performed by the lenders who sell mortgages to us. Because of our loss-sharing arrangements with our multifamily lenders, transfers of multifamily servicing rights are infrequent, and we monitor our servicing relationships and enforce our right to approve servicing transfers. As a seller-servicer, the lender is responsible for ongoing evaluation of the financial condition of properties and property owners, administering various types of loan and property-level agreements (including agreements covering replacement reserves, completion or repair, and operations and maintenance), as well as conducting routine property inspections.

Multifamily Credit Risk and Credit Loss Management

Our Multifamily business:

- Prices and manages the credit risk on loans in our multifamily guaranty book of business. Lenders retain a portion of the credit risk in most multifamily transactions.
- Has entered into transactions that transfer an additional portion of Fannie Mae's credit risk on some of the loans in our multifamily guaranty book of business through back-end credit risk transfer transactions.
- Works to maintain the credit quality of the multifamily book of business, prevent foreclosures through certain loss mitigation strategies such as forbearance or modification, reduce costs of defaulted multifamily loans, manage our REO inventory, and pursue contractual remedies from lenders, servicers, borrowers, and providers of credit enhancement.

See "Multifamily Mortgage Credit Risk Management" for discussion of our strategies for managing credit risk and credit losses on multifamily loans.

The Multifamily Markets in Which We Operate

In the multifamily mortgage market, we aim to address the rental housing needs of a wide range of the population in all markets across the country, with the substantial majority of our focus on supporting rental housing that is affordable to families earning at or below the median income in their area. We serve the market steadily, rather than moving in and out depending on market conditions. Through the secondary mortgage market, we support rental housing for the workforce population, for senior citizens and students, and for families with the greatest economic need. Over 90% of the multifamily units we financed in 2020 were affordable to families earning at or below 120% of the median income in their area, providing support for both workforce housing and affordable housing.

Our Multifamily business is organized and operated as an integrated commercial real estate finance business, addressing the spectrum of multifamily housing finance needs, including the need for smaller multifamily property financing and financing that serves low- and very low-income households.

- To meet the growing need for smaller multifamily property financing, we focus on the acquisition of small multifamily loans, which includes loans of up to $6 million in original unpaid principal balance. As of December 31, 2020, small loans represented 45% of our multifamily guaranty book of business by loan count and 7% based on unpaid principal balance.
- To serve low- and very low-income households, we have a team that focuses exclusively on relationships with lenders financing privately-owned multifamily properties that receive public subsidies in exchange for maintaining long-term affordable rents. We enable borrowers to leverage housing programs and subsidies provided by local, state and federal agencies. These public subsidy programs are largely targeted to provide housing to families earning less than 60% of area median income (as defined by HUD) and are structured to ensure that the low- and very low-income households who benefit from the subsidies pay no more than 30% of their gross monthly income for rent and utilities. As of December 31, 2020, affordable loans represented approximately 10% of our multifamily guaranty book of business, based on unpaid principal balance, including $9.4 billion in bond credit enhancements.

Multifamily Customers

Our multifamily lenders are primarily mortgage banking companies, large diversified financial institutions, and banks. During 2020, we executed multifamily transactions with 28 lenders. During 2020, our top five multifamily lender customers, in the aggregate, accounted for approximately 47% of our multifamily business volume, compared with approximately 48% in 2019. One of our customers, Walker & Dunlop, accounted for 15% of our 2020 multifamily business volume. No other customers accounted for more than 10% of our multifamily business volume in 2020.

We have a diversified funding base of domestic and international investors. Purchasers of multifamily Fannie Mae MBS include fund managers, commercial banks, pension funds, insurance companies, corporations, state and local governments, and other municipal authorities. Our Multifamily Connecticut Avenue Securities™ ("MCAS™") investors include fund managers, hedge funds and insurance companies, while our Multifamily CIRT™ ("MCIRT™") transactions are executed with insurers and reinsurers.

Multifamily Competition

Our primary competitors for the acquisition of multifamily mortgage assets and issuance of multifamily mortgage-related securities are Freddie Mac, life insurers, U.S. banks and thrifts, other institutional investors, Ginnie Mae and private-label issuers of commercial mortgage-backed securities.

Competition to acquire mortgage assets is significantly affected by both our and our competitors' pricing, credit standards and loan structures, as well as investor demand for our and our competitors' mortgage-related securities. Our competitive environment also may be affected by many other factors, including changes in our obligations under our senior preferred stock purchase agreement with Treasury or in our capital requirements; new legislation or regulations applicable to us, our customers or investors; and digital innovation and disruption in our markets. The Director of FHFA has indicated that, during conservatorship, Fannie Mae and Freddie Mac should reduce competition with each other and FHA. As a result, our ability to compete depends on our pricing and on our ability to address and adapt to changing lender and borrower preferences and changes made in pursuit of housing finance reform. See "Business—Conservatorship, Treasury Agreements and Housing Finance Reform," "Business—Legislation and Regulation," and "Risk Factors" for information on matters that could affect our business and competitive environment.

Multifamily Mortgage Market

Multifamily market fundamentals, which include factors such as vacancy rates and rents, were negatively impacted in many parts of the country throughout 2020 by the economic dislocation stemming from the COVID-19 pandemic.

- *Vacancy rates.* Based on preliminary third-party data, the estimated national multifamily vacancy rate for institutional investment-type apartment properties as of December 31, 2020 increased to 6.0% compared with 5.8% as of September 30, 2020 and 5.5% as of December 31, 2019. The estimated vacancy rate is consistent with its estimated average rate of about 6.0% over the last 10 years. We believe that elevated levels of new supply delivered during the fourth quarter, especially in higher cost metros and submarkets that have been experiencing a decline in multifamily demand, pushed the national vacancy level higher at year-end 2020.
- *Rents.* Effective rents are estimated to have declined by 0.8% in 2020 and by 0.5% during the fourth quarter of 2020 compared with a decline of 0.3% in the third quarter of 2020. Assuming full-year 2020 has negative national rent growth, this would mark the first time that annualized rent growth was negative since 2009.

Vacancy rates and rents are important to loan performance because multifamily loans are generally repaid from the cash flows generated by the underlying property. Several years of improvement in these fundamentals helped to increase property values in most metropolitan areas. Based on current multifamily property sales data, transaction volumes in 2020 were lower than in previous years yet capitalization rates appear to have remained low. This may be due to property owners choosing to retain their multifamily properties despite declining rent levels rather than accepting a discounted offer, as well as commercial real estate investors remaining interested in multifamily rather than other hard-hit sectors such as hospitality and retail, thus keeping overall property values relatively stable.

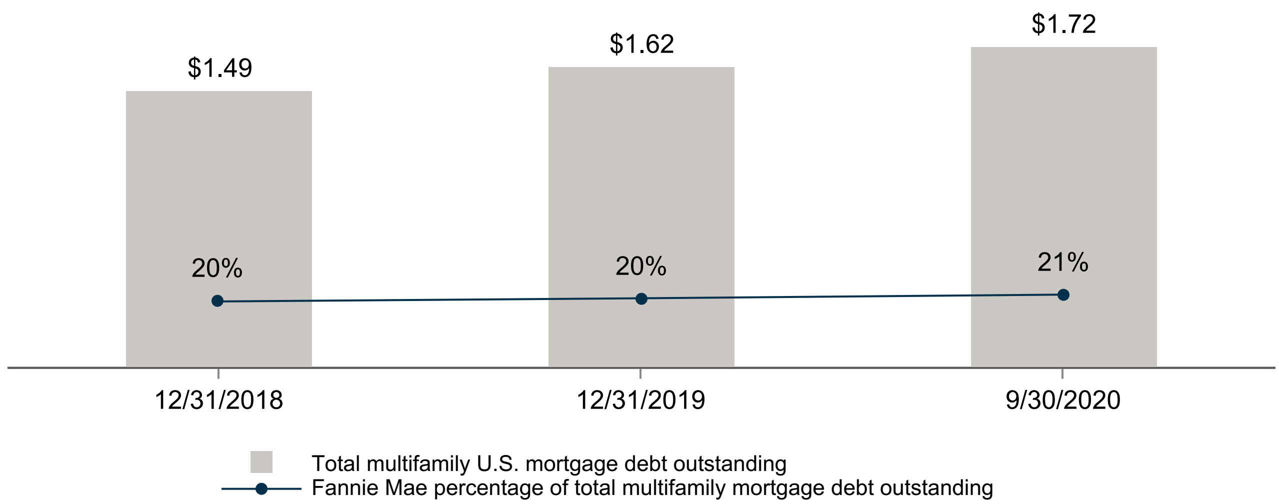
Despite construction delays earlier in the year, the most recent third-party estimates indicate that approximately 396,000 new multifamily units were completed in 2020. We believe this additional supply resulted in rising concession rates overall in many places across the country.

We expect the multifamily sector to be impacted in the first half of 2021 from a rising national vacancy rate and declining rents, but overall we still expect the multifamily residential sector to perform well relative to other commercial real estate property types for the year.

Multifamily Market Activity

We remained a continuous source of liquidity in the multifamily market in 2020. We owned or guaranteed approximately 21% of the outstanding debt on multifamily properties as of September 30, 2020 (the latest date for which information is available).

Multifamily Mortgage Debt Outstanding[1]
(Dollars in trillions)

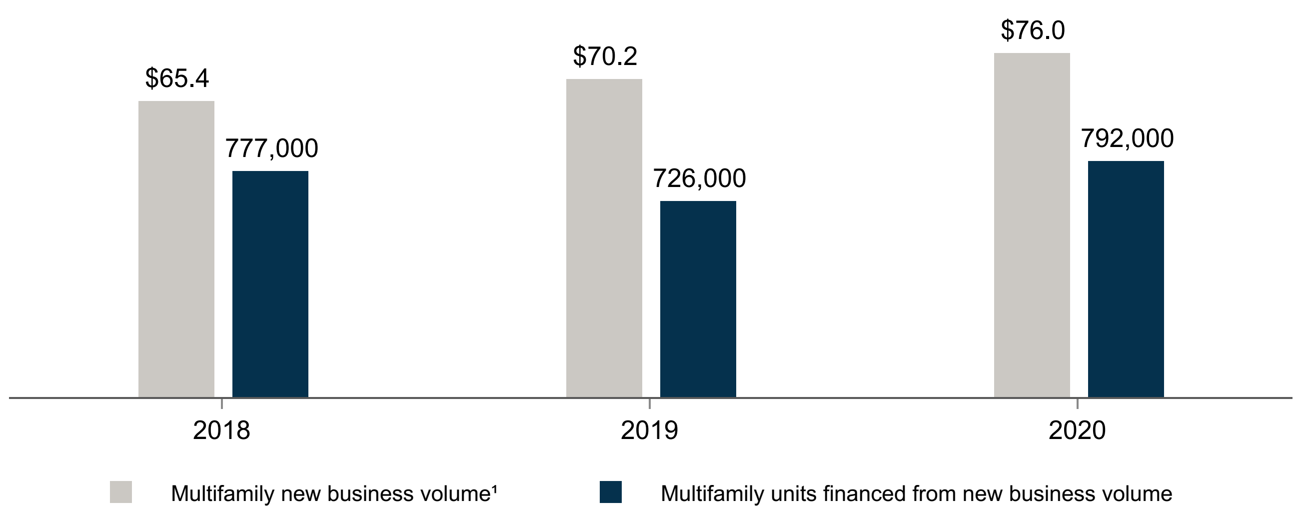


(1) The mortgage debt outstanding as of September 30, 2020 is based on the Federal Reserve's December 2020 mortgage debt outstanding release, the latest date for which the Federal Reserve has estimated mortgage debt outstanding for multifamily residences. Prior-period amounts have been updated to reflect revised historical data from the Federal Reserve.

Multifamily Business Metrics

The multifamily loans we acquired in 2020 had a strong overall credit risk profile, consistent with our acquisition policy and standards, which we describe in "Multifamily Mortgage Credit Risk Management—Multifamily Acquisition Policy and Underwriting Standards."

Multifamily New Business Volume
(Dollars in billions)



(1) Reflects unpaid principal balance of multifamily Fannie Mae MBS issued, multifamily loans purchased, and credit enhancements provided on multifamily mortgage assets during the period.

Our multifamily new business volume increased in 2020 compared with 2019 driven by the economic dislocation resulting from the COVID-19 pandemic as some other market participants were less active in the market.

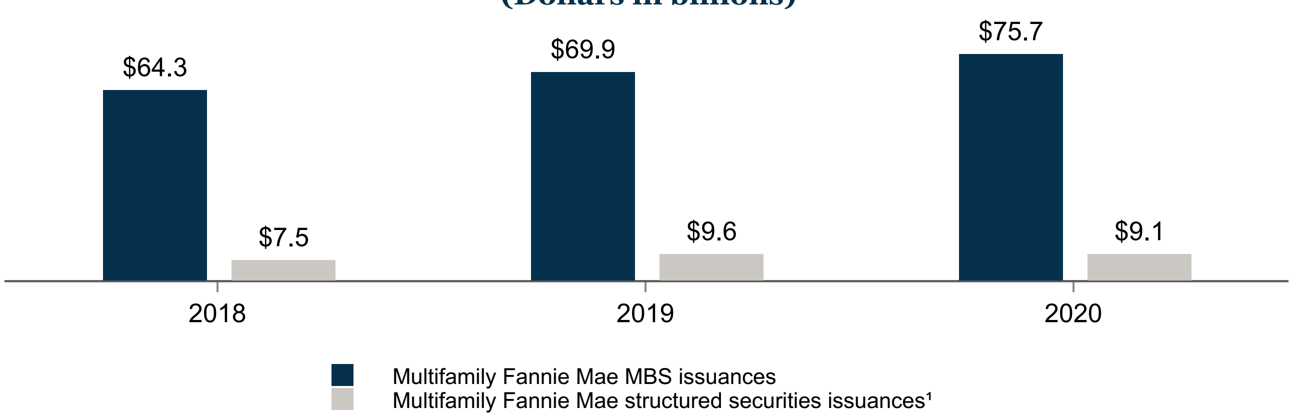
FHFA's 2020 conservatorship scorecard included an objective to maintain the dollar volume of new multifamily business at or below $100 billion for the five-quarter period from October 1, 2019 through December 31, 2020. Pursuant to FHFA's guidelines, at least 37.5% of our multifamily business during that time period had to be mission-driven, affordable housing, which includes loans on targeted affordable properties and loans on other properties with affordable units that meet certain income criteria. Our multifamily new business volume remained under the cap by $5.9 billion. Acquisition volume was $18.1 billion for the fourth quarter of 2019 and $76.0 billion for 2020 to total $94.1 billion over the five-quarter period, including over 37.5% in mission-driven, affordable housing activity.

In the fourth quarter of 2020, FHFA established a 2021 multifamily volume cap of $70 billion in new business volume over the four-quarter period from January 1, 2021 through December 31, 2021. FHFA also announced the requirement that at least 50% of our 2021 multifamily business volume must be mission-driven, focused on certain affordable and underserved market segments, which consists of loans on properties affordable for residents who earn 80% of area median income or below, with special provisions for rural housing and for manufactured housing communities. Furthermore, FHFA's 2021 multifamily volume cap requires that a minimum of 20% of our multifamily loan purchases in 2021 must be affordable to residents at 60% of area median income or below. Loan purchases that meet the minimum 20% requirement may also count as loan purchases that meet the minimum 50% requirement.

Included in the January 2021 amendment to the senior preferred stock purchase agreement are certain restrictions on Fannie Mae's business activities, including our Multifamily business volume. We may not acquire more than $80 billion in multifamily mortgage assets calculated in any 52-week period. FHFA will adjust the dollar amount of this limitation on multifamily mortgage purchase activity up or down at the end of each calendar year based on changes to the consumer price index. Additionally, at least 50% of our multifamily acquisitions in any calendar year must, at the time of acquisition, be classified as mission-driven, consistent with FHFA guidelines. We understand that the $70 billion multifamily volume cap and related requirements established by FHFA in the fourth quarter of 2020 remain in effect for calendar year 2021, and that the $80 billion limit on multifamily mortgage purchase activity established under the senior preferred stock purchase agreement operates as an independent limit on our prospective multifamily loan acquisitions. We are assessing the operational and business impacts of the new covenants in the senior preferred stock purchase agreement and our compliance with them, including how these new limitations will impact, and may require changes to our underwriting standards and requirements for acquisitions of multifamily loans. These changes may impact the overall volume and types of multifamily loans we acquire in 2021. We also continue to discuss certain interpretive questions about the new covenants with FHFA. For information on how conservatorship may affect our business activities see, "Risk Factors."

Our multifamily business securitizes the vast majority of mortgage loans we acquire through lender swap transactions. We also support liquidity in the market through issuing structured MBS backed by Fannie Mae MBS.

Multifamily Fannie Mae MBS Issuances
(Dollars in billions)

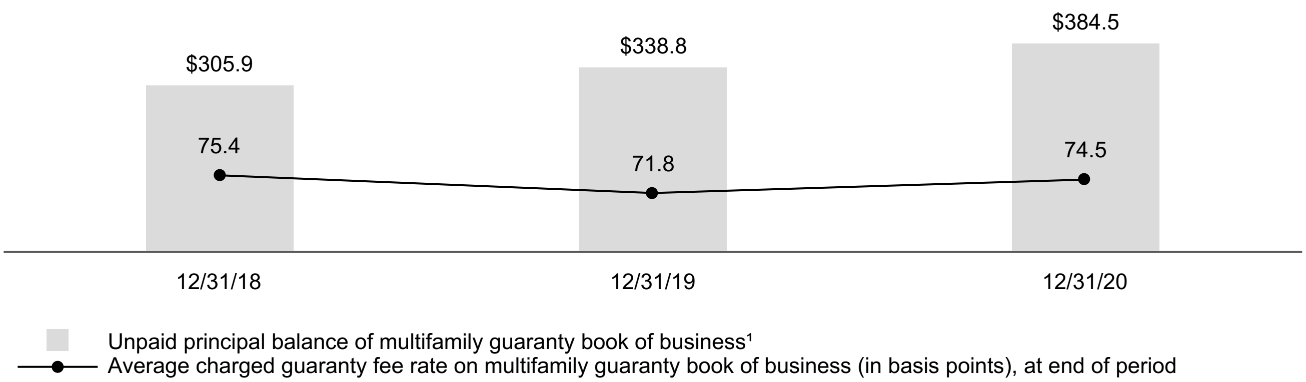


(1) A portion of structured securities issuances may be backed by Fannie Mae MBS issued during the same period and held by Fannie Mae. Structured securities backed by Fannie Mae MBS held by a third party are not included in the multifamily Fannie Mae MBS structured security issuance amounts.

Presentation of Our Multifamily Guaranty Book of Business

For purposes of the information reported in this "Multifamily Business" section, we measure our multifamily guaranty book of business using the unpaid principal balance of mortgage loans underlying Fannie Mae MBS. By contrast, the multifamily guaranty book of business presented in the "Composition of Fannie Mae Guaranty Book of Business" table in the "Guaranty Book of Business" section is based on the unpaid principal balance of Fannie Mae MBS outstanding, rather than the unpaid principal balance of the underlying mortgage loans. These amounts differ primarily as a result of payments we receive on underlying loans that have not yet been remitted to the MBS holders. As measured for purposes of the information reported below, the following chart displays our multifamily guaranty book of business.

Multifamily Guaranty Book of Business
(Dollars in billions)



(1) Our multifamily guaranty book of business primarily consists of multifamily mortgage loans underlying Fannie Mae MBS outstanding, multifamily mortgage loans of Fannie Mae held in our retained mortgage portfolio, and other credit enhancements that we provide on multifamily mortgage assets. It does not include non-Fannie Mae multifamily mortgage-related securities held in our retained mortgage portfolio for which we do not provide a guaranty.

Average charged guaranty fee represents our effective revenue rate relative to the size of our multifamily guaranty book of business. Management uses this metric to assess the reasonableness of our annual compensation rate for the multifamily credit risk we manage. While our multifamily guaranty fee pricing is primarily based on the individual credit risk characteristics of the loans we acquire, it is also influenced by market forces such as the availability of other sources of liquidity, our mission-related goals, the FHFA volume cap and the management of our overall portfolio composition.

Multifamily Business Financial Results[1]

	For the Year Ended December 31,			Variance	
	2020	**2019**	**2018**	**2020 vs. 2019**	**2019 vs. 2018**
			(Dollars in millions)		
Net interest income	**$ 3,364**	$ 3,280	3,111	$ 84	$ 169
Fee and other income	**94**	113	105	(19)	8
Net revenues	**3,458**	3,393	3,216	65	177
Fair value gains (losses), net	**38**	2	(89)	36	91
Administrative expenses	**(509)**	(458)	(428)	(51)	(30)
Credit-related expense[2]	**(623)**	(19)	(17)	(604)	(2)
Credit enhancement expense	**(220)**	(207)	(165)	(13)	(42)
Change in expected credit enhancement recoveries[3]	**144**	—	—	144	—
Other income, net[4]	**103**	170	128	(67)	42
Income before federal income taxes	**2,391**	2,881	2,645	(490)	236
Provision for federal income taxes	**(467)**	(558)	(432)	91	(126)
Net income	**$ 1,924**	$ 2,323	2,213	$ (399)	$ 110

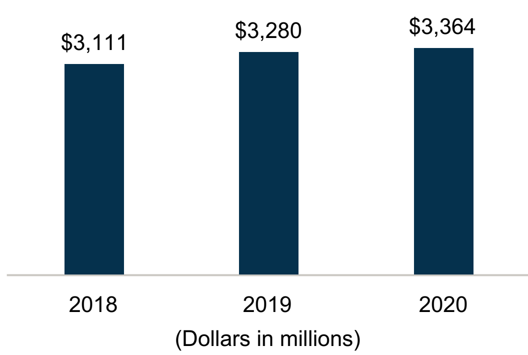
(1) See "Note 1, Summary of Significant Accounting Policies" for more information about the change in presentation of our yield maintenance fees. Prior-period amounts have been adjusted to reflect the current year change in presentation. Also see "Note 10, Segment Reporting" for information about our segment allocation methodology.

(2) Consists of the benefit or provision for credit losses and foreclosed property income or expense. The presentation of our credit-related expense for the year ended December 31, 2019 and 2018 represents amounts recognized prior to our transition to the lifetime loss model prescribed by the CECL standard.

(3) Consists of change in benefits recognized from our freestanding credit enhancements that primarily relates to our Delegated Underwriting and Servicing ("DUS®") lender risk-sharing. See "Note 1, Summary of Significant Accounting Policies" for more information about our change in presentation.

(4) Consists of investment gains or losses, gains or losses from partnership investments, debt extinguishment gains or loss, and other income or expenses.

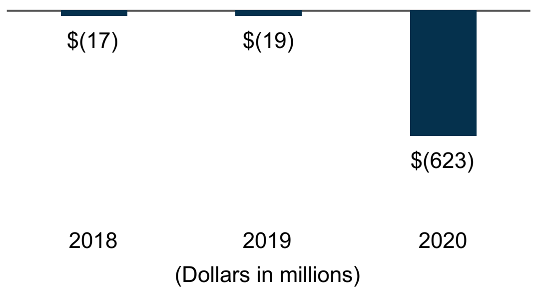
Net interest income



Multifamily net interest income increased in 2020 compared with 2019 primarily due to higher guaranty fee income due to an increase in our multifamily guaranty book of business and an increase in average charged guaranty fees, partially offset by lower yield maintenance fees and lower net interest income on other portfolios as a result of declining interest rates.

Multifamily net interest income increased in 2019 compared with 2018 primarily due to an increase in guaranty fee income as a result of growth in the size of our multifamily guaranty book of business, partially offset by a decrease in average charged guaranty fees on the multifamily guaranty book.

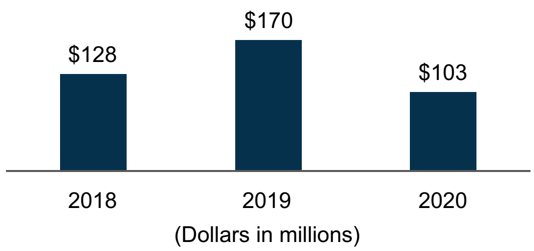
Credit-related expense



Credit-related expense in 2020 was primarily driven by an increase in our allowance due to losses we expect to incur as a result of the COVID-19 pandemic.

See “Consolidated Results of Operations—Credit-Related Income (Expense)” in this report for more information on our multifamily provision for credit losses.

Other income, net



Other income, net decreased in 2020 compared with 2019 primarily due to higher debt extinguishment losses in 2020, driven by the interest rate environment in the first quarter of 2020.

Multifamily Mortgage Credit Risk Management

The credit risk profile of a loan in our multifamily book of business is influenced by:

- the current and anticipated cash flows from the property;
- the type and location of the property;
- the condition and value of the property;
- the financial strength of the borrower;
- market trends; and
- the structure of the financing.

These and other factors affect both the amount of expected credit loss on a given loan and the sensitivity of that loss to changes in the economic environment.

Multifamily Acquisition Policy and Underwriting Standards

Our Multifamily business is responsible for pricing and managing the credit risk on our multifamily guaranty book of business, with oversight from our Enterprise Risk Management division. Multifamily loans that we purchase or that back Fannie Mae MBS are underwritten by a Fannie Mae-approved lender and may be subject to our underwriting review prior to closing, depending on the product type, loan size, market and/or other factors. Our underwriting standards generally include, among other things, property cash flow analysis and third-party appraisals. Additionally, our standards for multifamily loans specify maximum original LTV ratio and minimum original debt service coverage ratio (“DSCR”) values that vary based on loan characteristics. Our experience has been that original LTV ratio and DSCR values have been reliable indicators of future credit performance. At underwriting, we evaluate the DSCR based on both actual and underwritten debt service payments. The original DSCR is calculated using the underwritten debt service payments for the loan, which assumes both principal and interest payments, rather than the actual debt service payments. Depending on the loan’s interest rate and structure, using the underwritten debt service payments may result in a more conservative estimate of the debt service payments (for example, loans with an interest-only period). This approach is used for all loans, including those with full and partial interest-only terms.

To address possible fluctuations in borrower income and expenses resulting from the COVID-19 pandemic, we instituted additional reserve requirements in 2020 for certain new multifamily loan acquisitions depending on the product type, LTV ratio and DSCR.

Key Risk Characteristics of Multifamily Guaranty Book of Business

	As of December 31,		
	2020	**2019**	**2018**
Weighted-average original LTV ratio	**66 %**	66 %	66 %
Original LTV ratio greater than 80%	**1**	1	1
Original DSCR less than or equal to 1.10	**10**	11	12
Full interest-only loans	**30**	27	24
Partial interest-only loans(1)	**51**	51	49

(1) Consists of mortgage loans that were underwritten with an interest-only term, regardless of whether the loan is currently in its interest-only period.

We provide additional information on the credit characteristics of our multifamily loans in quarterly financial supplements, which we furnish to the SEC with current reports on Form 8-K. Information in our quarterly financial supplements is not incorporated by reference into this report.

Transfer of Multifamily Mortgage Credit Risk

Lender risk-sharing is a cornerstone of our Multifamily business. We primarily transfer risk through our DUS program, which delegates to DUS lenders the ability to underwrite and service multifamily loans, in accordance with our standards and requirements. DUS lenders receive credit risk-related revenues for their respective portion of credit risk retained and, in turn, are required to fulfill any loss-sharing obligation. This aligns the interests of the lender and Fannie Mae throughout the life of the loan. We monitor the capital resources and loss sharing capacity of our DUS lenders on an ongoing basis.

Our DUS model typically results in our lenders sharing approximately one-third of the credit risk on our multifamily loans. Lenders in the DUS program may also share in loan-level credit losses up to the first 5% of the unpaid principal balance of the loan and then share with us any remaining losses up to a prescribed limit.

Loans serviced by DUS lenders and their affiliates represented substantially all of our multifamily guaranty book of business as of December 31, 2020, 2019 and 2018. In certain situations, to effectively manage our counterparty risk, we do not allow the lender to fully share in one-third of the credit risk, but have them share in a smaller portion.

While not a large portion of our multifamily guaranty book of business, our non-DUS lenders typically also have lender risk-sharing, where the lenders typically share or absorb losses based on a negotiated percentage of the loan or the pool balance. These risk-sharing agreements not only transfer credit risk, but also better align our interests with those of the lenders.

Our maximum potential loss recovery from lenders under current risk-sharing agreements represented over 20% of the unpaid principal balance of our multifamily guaranty book of business as of December 31, 2020 and as of December 31, 2019.

To complement our front-end lender-risk sharing program through our DUS model, we engage in back-end credit risk transfer transactions through our multifamily CIRT and MCAS transactions. In our multifamily CIRT transactions we transfer a portion of Fannie Mae's mortgage credit risk on multifamily loans in our multifamily guaranty book of business to insurers or reinsurers. We retain an initial portion of losses on the loans in the pool and reinsurers cover losses above this retention amount up to a detachment point. We retain all losses above this detachment point. The insurance layer typically provides coverage for losses on the pool that are likely to occur only in a stressed economic environment.

We did not enter into new credit risk transfer transactions in the second quarter of 2020 due to adverse market conditions resulting from the COVID-19 pandemic. Market conditions improved in the second half of 2020, but we have not entered into any new transactions as we evaluate their costs and benefits, including a reduction in the capital relief these transactions provide under FHFA's enterprise regulatory capital framework. We may engage in credit risk transfer transactions in the future, which could help us manage capital and manage within our risk appetite, particularly given the growth and turnover in our book in 2020. The structure of and extent to which we engage in any additional credit risk transfer transactions will be affected by the enterprise regulatory capital framework, our risk appetite, the strength of future market conditions, including the cost of these transactions, and the review of our overall business and capital plan.

The table below displays the number of transactions and unpaid principal balance of multifamily mortgage loans covered by a back-end credit risk transfer transaction at the time of issuance. The table also includes the total unpaid principal balance and percentage of loans in our multifamily guaranty book of business that are covered by a back-end credit risk transfer transaction. The table does not reflect front-end lender risk-sharing arrangements, as only a small portion of our multifamily guaranty book of business does not include these arrangements.

Multifamily Back-End Credit Risk Transfer Activity

	For the Year Ended December 31, 2020		Inception to December 31, 2020	
	Number of Back-End Credit Risk Transfer Transactions	Unpaid Principal Balance Covered at Issuance	Number of Back-End Credit Risk Transfer Transactions	Unpaid Principal Balance Covered at issuance
	(Dollars in millions)			
MCIRT	1	$ 8,720	8	$ 80,617
MCAS	1	12,212	2	29,293
Total	2	$ 20,932	10	$ 109,910

Multifamily Loans in Back-End Credit Risk Transfer Transactions

	As of December 31,			
	2020		2019	
	Unpaid Principal Balance	Percentage of Multifamily Guaranty Book of Business	Unpaid Principal Balance	Percentage of Multifamily Guaranty Book of Business
	(Dollars in millions)			
MCIRT	**$ 72,166**	**19 %**	$ 66,851	20 %
MCAS	**28,968**	**7**	17,077	5
Total	**$ 101,134**	**26 %**	$ 83,928	25 %

Our back-end multifamily credit-risk sharing transactions were primarily designed to further reduce the capital requirements associated with loans in the reference pool under FHFA's conservatorship capital framework with the associated benefit of additional credit risk protection in the event of a stress environment. We transfer multifamily credit risk through lender risk sharing at the time of acquisition, but our multifamily back-end credit risk transfer activity occurs later, typically up to a year or more after acquisition.

Multifamily Portfolio Diversification and Monitoring

Diversification within our multifamily book of business by geographic concentration, term to maturity, interest rate structure, borrower concentration, loan size, and credit enhancement coverage are important factors that influence credit performance and may help reduce our credit risk.

As part of our ongoing credit risk management process, we and our lenders monitor the performance and risk characteristics of our multifamily loans and the underlying properties on an ongoing basis throughout the loan term at the asset and portfolio level. We require lenders to provide quarterly and annual financial updates for the loans for which we are contractually entitled to receive such information. We closely monitor loans with an estimated current DSCR below 1.0, as that is an indicator of heightened default risk. The percentage of loans in our multifamily guaranty book of business, calculated based on unpaid principal balance, with a current DSCR less than 1.0 was approximately 2% as of December 31, 2020 and 2019. Our estimates of current DSCRs are based on the latest available income information for these properties and exclude co-op loans. Although we use the most recently available results from our multifamily borrowers, there is a lag in reporting, which typically can range from three to six months, but in some cases may be longer. Accordingly, the financial information we have received from borrowers may not reflect the most recent impacts of the COVID-19 pandemic.

In addition to the factors described above, we track credit risk characteristics to determine the loan credit quality indicators, which are the internal risk categories we use and are further discussed in "Note 3, Mortgage Loans":

- the physical condition of the property;
- delinquency status;

- the relevant local market and economic conditions that may signal changing risk or return profiles; and
- other risk factors.

For example, we closely monitor rental payment trends and vacancy levels in local markets, as well as capitalization rates, to identify loans that merit closer attention or loss mitigation actions. We manage our exposure to refinancing risk for multifamily loans maturing in the next several years. We have a team that proactively manages upcoming loan maturities to minimize losses on maturing loans. This team assists lenders and borrowers with timely and appropriate refinancing of maturing loans with the goal of reducing defaults and foreclosures related to these loans. The primary asset management responsibilities for our multifamily loans are performed by our DUS and other multifamily lenders. We periodically evaluate these lenders' performance for compliance with our asset management criteria.

Multifamily Problem Loan Management and Foreclosure Prevention

In addition to the credit performance information on our multifamily loans provided below, we provide information about multifamily loans in a COVID-19-related forbearance that back MBS and whole loan REMICs in a "Multifamily MBS COVID-19 Forbearance List" in the "Data Collections" section of our DUS Disclose® tool, available at www.fanniemae.com/dusdisclose. Information on our website is not incorporated into this report.

We periodically refine our underwriting standards in response to market conditions and implement proactive portfolio management and monitoring which are each designed to keep credit losses and delinquencies to a low level relative to our multifamily guaranty book of business.

Delinquency Statistics on our Problem Loans

The percentage of our multifamily loans classified as substandard increased as of December 31, 2020 compared with December 31, 2019, due to loans in a COVID-19-related forbearance. Substandard loans are loans that have a well-defined weakness that could impact their timely full repayment. While the majority of the substandard loans in our multifamily guaranty book of business are currently making timely payments or are in forbearance, we continue to monitor the performance of the full substandard loan population. For more information on our credit quality indicators, including our population of substandard loans, see "Note 3, Mortgage Loans."

Our multifamily serious delinquency rate increased to 0.98% as of December 31, 2020, compared with 0.04% as of December 31, 2019, due to the economic dislocation caused by the COVID-19 pandemic, which increased borrower participation in forbearance plans. Our multifamily serious delinquency rate consists of multifamily loans that were 60 days or more past due based on unpaid principal balance, expressed as a percentage of our multifamily guaranty book of business. Management monitors the multifamily serious delinquency rate as an indicator of potential future credit losses and loss mitigation activities. Serious delinquency rates are reflective of our performance in assessing and managing credit risk associated with multifamily loans in our guaranty book of business. Typically, higher serious delinquency rates result in a higher allowance for loan losses.

Our multifamily serious delinquency rate, excluding loans that received a forbearance, was 0.03% as of December 31, 2020. We monitor the multifamily serious delinquency rate excluding loans that received a forbearance to better understand the impact that forbearance activity has had on the rate and to monitor loans that are seriously delinquent not as a result of COVID-19.

COVID-19 Forbearance and Multifamily Eviction Moratorium

We initially offered forbearance relief to multifamily borrowers by delegating to our lenders the authority to execute a forbearance agreement with a multifamily borrower experiencing a documented financial hardship due to the COVID-19 pandemic for up to three monthly payments, beginning with the first missed monthly payment occurring after February 1, 2020. Effective July 1, 2020, we delegated to our lenders the ability to extend forbearance for up to three additional monthly payments for most loan types. For certain types of loans, such as seniors housing loans and loans with unpaid principal balances above $50 million, Fannie Mae determines whether to extend forbearance relief. For any forbearance request extending beyond six months, Fannie Mae does not delegate the decision and will determine itself whether to extend relief. For forbearance of any duration after July 1, 2020, the borrower is required to bring the loan current within a time period determined by multiplying the number of months of forbearance by four. For example, if a borrower receives a six-month forbearance period, the borrower would be required to make all missed payments over a period of 24 months. The borrower may also repay the missed payments in a lump sum at any time. In exchange for receiving forbearance, borrowers must agree to suspend tenant evictions for nonpayment of rent, provide monthly operating statements and remit any excess cash flow to our servicers on a monthly basis, to be held until the end of the forbearance period and then applied to missed mortgage payments. In addition, effective August 20, 2020, borrowers with new, extended or amended forbearance agreements must also provide each residential tenant with specified written notices regarding the protections available to them and certify their compliance with these notification requirements.

In January 2021, the CDC extended the moratorium on evictions through March 31, 2021, as described in "Business—Legislation and Regulation—U.S. Government Response to COVID-19—Relief for Individuals and Businesses; Federal Eviction Moratoriums."

Multifamily Loan Forbearance

Since the COVID-19 pandemic was declared a national emergency in March 2020, we have broadly offered forbearance to affected multifamily borrowers. We estimate that, through December 2020, approximately 1.5% of our multifamily book of business as of March 31, 2020, based on unpaid principal balance, had been in a COVID-19-related forbearance at some point in time. As shown in the table below, some of these loans have exited forbearance into a repayment plan, have reinstated, have defaulted, or have since liquidated.

The table below displays the status as of December 31, 2020 of the multifamily loans in our guaranty book of business that have received a forbearance, as well as the serious delinquency rate of such loans. As of December 31, 2020, nearly all of our multifamily loans in forbearance were associated with a COVID-19-related financial hardship. Seniors housing loans, which constituted 4.5% of our multifamily guaranty book of business as of December 31, 2020, comprised approximately 40% of the total unpaid principal balance of multifamily loans that received a forbearance and remained in our multifamily guaranty book as of December 31, 2020.

Status and SDQ Rate of Multifamily Forbearance Loans

	As of December 31, 2020					
	Number of Loans	Unpaid Principal Balance	Percentage of Unpaid Principal Balance in Book of Business	Percentage of Unpaid Principal Balance with Forbearance by Category	Percentage of Loans on Accrual Status	Serious Delinquency Rate
	(Dollars in millions)					
Loans that received a forbearance, by status:(1)						
Active forbearance(2)	88	$ 1,689	0.4 %	32 %	32 %	100 %
Repayment plan	183	2,707	0.8	52	82	61
Reinstated(3)	56	491	0.1	10	100	—
Defaulted(4)	33	325	0.1	6	—	100
Total loans that received a forbearance	360	5,212	1.4	100 %	63	71
Loans that have not received a forbearance	28,285	379,335	98.6	—	100	0.03
Total multifamily guaranty book of business	28,645	$ 384,547	100 %	1.4 %	99 %	0.98 %

(1) Does not include $123 million in Multifamily loans that received a forbearance, but liquidated prior to period end.

(2) Includes loans that are in the process of extending their forbearance.

(3) Represents loans that are no longer in forbearance but are current according to the original terms of the loan.

(4) Includes loans that are no longer in forbearance and are not on a repayment plan. Loans in this population may proceed to other loss mitigation activities, such as foreclosure or modification.

As discussed in "Note 1, Summary of Significant Accounting Policies," we have updated our application of our nonaccrual accounting policy for those loans negatively impacted by the COVID-19 pandemic. For loans that were current as of March 1, 2020 and subsequently become delinquent, we continue to accrue interest income for up to six months. Multifamily loans that are in a forbearance plan beyond six months past due are placed on nonaccrual status unless the loan is both well secured and in the process of collection.

For multifamily loans that received forbearance and were in our book of business as of December 31, 2020, we have recorded a total accrued interest receivable balance of $84 million, for which we have established a valuation allowance of $7 million.

REO Management

The number of multifamily foreclosed properties held for sale was 14 properties with a carrying value of $114 million as of December 31, 2020, compared with 12 properties with a carrying value of $72 million as of December 31, 2019. We expect an increase in our multifamily foreclosed properties due to loans that receive a COVID-19 forbearance but do not enter a repayment plan or other modification.

Other Multifamily Credit Information

Multifamily Credit Loss Performance Metrics

The amount of multifamily credit loss or income we realize in a given period is driven by foreclosures, pre-foreclosure sales, REO activity and write-offs, net of recoveries. Our multifamily credit loss performance metrics are not defined terms within GAAP and may not be calculated in the same manner as similarly titled measures reported by other companies. We believe our multifamily credit losses and our multifamily credit losses, net of freestanding loss-sharing benefit, may be useful to stakeholders because they display our credit losses in the context of our guaranty book of business, including the benefit we receive from loss-sharing arrangements. Management views multifamily credit losses, net of freestanding loss-sharing benefit as a key metric related to our multifamily business model and our strategy to share multifamily credit risk.

The table below displays the components of our multifamily credit loss performance metrics, as well as our multifamily initial write-off severity rate.

Multifamily Credit Loss Performance Metrics

	For the Year Ended December 31,		
	2020	**2019**	**2018**
	(Dollars in millions)		
Write-offs(1)	**$ (136)**	$ (8)	$ (4)
Recoveries(2)	**1**	4	—
Foreclosed property income (expense)	**(20)**	8	(13)
Credit income (losses)	**(155)**	4	(17)
Freestanding loss-sharing benefit(3)	**21**	—	—
Credit income (losses), net of freestanding loss-sharing benefit	**$ (134)**	$ 4	$ (17)
Credit (income) loss ratio (in bps)(4)	**4.3**	(0.1)	0.6
Credit (income) loss ratio, net of freestanding loss-sharing benefit (in bps)(2)(3)	**3.7**	N/A	N/A
Multifamily initial write-off severity rate(5)	**22.8 %**	21.6 %	17.1 %
Multifamily loan write-off count	**11**	5	11

(1) Includes loan write-offs pursuant to the Advisory Bulletin. Write-offs associated with non-REO sales are net of loss sharing.

(2) For 2020, excludes estimated recoveries of $61 million relating to amounts previously written off pursuant to the Advisory Bulletin. Under the CECL standard we adopted on January 1, 2020, estimated recoveries of amounts previously written off due to improved valuations are recorded as a component of "Benefit (provision) for credit losses" in our consolidated statements of operations and comprehensive income and are adjusted over time as expectations change. The changes in expected loss-sharing benefit associated with these recoveries are included in the Freestanding loss-sharing benefit.

(3) Represents expected benefits that we receive upon foreclosure as a result of certain freestanding credit enhancements, primarily multifamily DUS lender risk-sharing transactions, as well as the expected loss-sharing benefit from write-offs pursuant to the Advisory Bulletin. These benefits are recorded in "Change in expected credit enhancement recoveries" in our consolidated statements of operations and comprehensive income. Prior to the adoption of the CECL standard, benefits from lender risk-sharing transactions were included in "Benefit (provision) for credit losses" in our consolidated statements of operations and comprehensive income.

(4) Calculated based on the amount of "credit income (losses)" and "credit income (losses), net of freestanding loss-sharing benefit," divided by the average multifamily guaranty book of business during the period.

(5) Rate is calculated as the initial write-off amount divided by the average defaulted unpaid principal balance. The rate excludes write-offs pursuant to the provisions of the Advisory Bulletin and any costs, gains or losses associated with REO after initial acquisition through final disposition. Write-offs are net of lender loss-sharing agreements.

Our multifamily credit losses increased in 2020 compared with 2019 driven by a write down in the value of a seniors housing portfolio during 2020 following its default on its forbearance agreement.

We expect our multifamily credit losses will be higher over the long term as a result of the COVID-19 pandemic as reflected in our increased allowance for loan losses since the inception of the pandemic. See “Risk Factors” for additional information on the potential credit risk impact of the COVID-19 pandemic.

Multifamily Loss Reserves

Our multifamily loss reserves, which include our allowance for loan losses and the related accrued interest receivable, and our reserve for guaranty losses, provide for an estimate of credit losses in our multifamily guaranty book of business. For periods beginning January 1, 2020, our measurement of loss reserves reflects a lifetime credit loss methodology pursuant to our adoption of the CECL standard and requires consideration of a broader range of reasonable and supportable forecast information to develop credit loss estimates. For prior periods, multifamily loss reserves were measured using an incurred loss methodology. For further details on our previous multifamily loss reserves methodology, refer to “Note 1, Summary of Significant Accounting Policies.”

The table below summarizes the changes in our multifamily loss reserves, excluding credit losses on our AFS securities. For a discussion of changes in our multifamily provision for credit losses, see “Consolidated Results of Operations—Credit-Related Income (Expense).”

Multifamily Loss Reserves

	For the Year Ended December 31,				
	2020	**2019**	**2018**	**2017**	**2016**
	(Dollars in millions)				
Changes in loss reserves:					
Beginning balance	**$ (268)**	$ (245)	$ (245)	$ (196)	$ (265)
Transition impact of the adoption of the CECL standard[1]	**(490)**	—	—	—	—
Benefit (provision) for credit losses	**(602)**	(27)	(4)	(49)	63
Write-offs	**136**	8	4	3	11
Recoveries	**(1)**	(4)	—	(3)	(6)
Other	**—**	—	—	—	1
Ending balance	**$(1,225)**	$ (268)	$ (245)	$ (245)	$ (196)
Expected benefit of freestanding credit enhancements on multifamily loans not netted against loss reserves as of the end of the period[2]	**$ 358**	N/A	N/A	N/A	N/A
Loss reserves as a percentage of multifamily guaranty book of business	**0.32 %**	0.08 %	0.08 %	0.09 %	0.08 %

(1) Includes the transition impact of $221 million for the reclassification of freestanding credit enhancements, such as DUS lender risk-sharing, to “Other assets” from “Allowance for loan losses” on our consolidated balance sheets.

(2) Prior to our adoption of the CECL standard on January 1, 2020, benefits for freestanding credit enhancements of $92 million as of December 31, 2019, $82 million as of December 31, 2018, $83 million as of December 31, 2017 and $85 million as of December 31, 2016 were netted against our multifamily loss reserves. As of January 1, 2020, these credit enhancements are recorded in “Other assets” in our consolidated balance sheets.

Troubled Debt Restructurings and Nonaccrual Loans

The table below displays the multifamily loans classified as TDRs that were on accrual status and multifamily loans on nonaccrual status. The table includes our amortized cost in HFI multifamily mortgage loans, as well as interest income forgone and recognized for on-balance sheet TDRs on accrual status and nonaccrual loans. For more information on TDRs and nonaccrual loans, see “Note 3, Mortgage Loans.”

Multifamily TDRs on Accrual Status and Nonaccrual Loans

	As of December 31,				
	2020	**2019**	**2018**	**2017**	**2016**
	(Dollars in millions)				
TDRs on accrual status	**$ 29**	$ 66	$ 55	$ 87	$ 141
Nonaccrual loans	**2,073**	439	492	424	403
Total TDRs on accrual status and nonaccrual loans	**$ 2,102**	$ 505	$ 547	$ 511	$ 544
Accruing on-balance sheet loans past due 90 days or more	**$ 610**	$ —	$ —	$ —	$ —

	For the Year Ended December 31,				
	2020	**2019**	**2018**	**2017**	**2016**
	(Dollars in millions)				
Interest related to on-balance sheet TDRs on accrual status and nonaccrual loans:					
Interest income forgone[(1)]	**$ 19**	$ 16	$ 22	$ 17	$ 21
Interest income recognized[(2)]	**60**	3	3	7	9

(1) Represents the amount of interest income we did not recognize, but would have recognized during the period, for nonaccrual loans and TDRs on accrual status as of the end of each period had the loans performed according to their original contractual terms.

(2) Represents interest income recognized during the period, including the amortization of any deferred cost basis adjustments, for loans classified as TDRs on accrual status or nonaccrual loans held as of the end of each period. Primarily includes amounts accrued while the loans were performing. For 2020, as a result of the update to our application of our nonaccrual policy, cash received on nonaccrual loans in a forbearance plan are applied as a reduction of accrued interest receivable until the receivable has been reduced to zero, and then recognized as interest income.

The decrease in TDRs on accrual status in 2020 compared with prior years was a result of our election to account for eligible COVID-19-related loss mitigation activities as permitted under the CARES Act and extended by the Consolidated Appropriations Act of 2021, which provide relief from TDR accounting and disclosure requirements for our forbearance plans and loan modifications.

In the second quarter of 2020, we updated our application of our nonaccrual accounting policy for those loans negatively impacted by the COVID-19 pandemic. For loans that were current as of March 1, 2020 and subsequently become delinquent, we continue to accrue interest income for up to six months according to the updated policy. Multifamily loans in a forbearance plan beyond six months past due are placed on nonaccrual status unless the loan is both well secured and in the process of collection. See “Note 1, Summary of Significant Accounting Policies” for more information on our accounting for TDRs and nonaccrual loans.

The update to the nonaccrual policy, combined with elevated levels of multifamily loans that received a COVID-19 related forbearance during 2020, contributed to an increase in loans accruing on-balance sheet that were past due 90 days or more as of December 31, 2020, to the extent that the loans were not beyond six months past due or both in the process of collection and well secured. Loans that received a COVID-19 forbearance that became more than six months delinquent and were placed on nonaccrual status contributed to the increase in nonaccrual loans as of December 31, 2020.

Liquidity and Capital Management

Liquidity Management

Our business activities require that we maintain adequate liquidity to fund our operations. Our liquidity risk management requirements are designed to address our liquidity and funding risk, which is the risk that we will not be able to meet our obligations when they come due, including the risk associated with the inability to access funding sources or manage fluctuations in funding levels. Liquidity and funding risk management involves forecasting funding requirements, maintaining sufficient capacity to meet our needs based on our ongoing assessment of financial market liquidity and adhering to our regulatory requirements.

Primary Sources and Uses of Funds

Our liquidity depends largely on our ability to issue debt in the capital markets, including both corporate debt and sales of our MBS securities. Our status as a government-sponsored enterprise and federal government support of our business continue to be essential to maintaining our access to the debt markets.

Our primary sources of cash include:

- issuance of long-term and short-term corporate debt;
- proceeds from the sale of mortgage-related securities, mortgage loans and other investments portfolio, including proceeds from sales of foreclosed real estate assets;
- principal and interest payments received on mortgage loans, mortgage-related securities and non-mortgage investments we own;
- guaranty fees received on Fannie Mae MBS, including the TCCA fees collected by us on behalf of Treasury;
- payments received from mortgage insurance counterparties and other providers of credit enhancement; and
- borrowings we may make under a secured intraday funding line of credit or against mortgage-related securities and other investment securities we hold pursuant to repurchase agreements and loan agreements.

Our primary uses of funds include:

- the repayment of matured, redeemed and repurchased debt;
- the purchase of mortgage loans (including delinquent loans from MBS trusts), mortgage-related securities and other investments;
- interest payments on outstanding debt;
- administrative expenses;
- losses, including advances for past due principal and interest, incurred in connection with our Fannie Mae MBS guaranty obligations;
- payments of federal income taxes;
- payments of TCCA fees to Treasury; and
- payments associated with our credit risk transfer programs.

Liquidity and Funding Risk Management Practices and Contingency Planning

Our liquidity position could be adversely affected by many factors, both internal and external to our business, including:

- actions taken by FHFA, the Federal Reserve, Treasury or other government agencies;
- legislation relating to us or our business;
- a U.S. government payment default on its debt obligations;
- a downgrade in the credit ratings of our senior unsecured debt or the U.S. government's debt from the major ratings organizations;
- a systemic event leading to the withdrawal of liquidity from the market;
- an extreme market-wide widening of credit spreads;
- public statements by key policy makers;
- a significant decline in our net worth;
- potential investor concerns about the adequacy of funding available to us under or changes to the senior preferred stock purchase agreement;
- loss of demand for our debt, or certain types of our debt from a significant number of investors;
- a significant credit event involving one of our major institutional counterparties;
- a sudden catastrophic operational failure in the financial sector; or
- elimination of our status as a government-sponsored enterprise.

See "Risk Factors" for a discussion of factors that could adversely affect our liquidity.

We maintain a liquidity management framework and conduct liquidity contingency planning to prepare for an event in which our access to the unsecured debt markets becomes limited. In June 2020, FHFA instructed that we update our liquidity management framework to meet prescriptive liquidity requirements. In December 2020, those requirements became effective and FHFA issued a proposed rule in line with the updated requirements. Under the requirements, we must hold more liquid assets than under our previous framework, which we expect will negatively impact our net interest income.

Our liquidity requirements, as revised, have four components we must meet:

- a short-term cash flow metric that requires us to meet our expected cash outflows and continue to provide liquidity to the market over a 30-day period of stress, plus an additional $10 billion buffer;
- an intermediate cash flow metric that requires us to meet our expected cash outflows and continue to provide liquidity to the market over a 365-day period of stress;
- a specified minimum long-term debt to less-liquid asset ratio. Less-liquid assets are those that are not eligible to be pledged as collateral to the Fixed Income Clearing Corporation; and
- a requirement that we fund our assets with liabilities that have a specified minimum term relative to the term of the assets.

As of December 31, 2020, we were in compliance with these requirements.

We run routine operational testing of our ability to rely upon mortgage and U.S. Treasury collateral to obtain financing. We enter into relatively small repurchase agreements in order to confirm that we have the operational and systems capability to do so. In addition, we have provided collateral in advance to clearing banks in the event we seek to enter into repurchase agreements in the future. We do not, however, have committed repurchase agreements with specific counterparties, as historically we have not relied on this form of funding. As a result, our use of such facilities and our ability to enter into them in significant dollar amounts may be challenging in a stressed market environment. See “Other Investments Portfolio” for further discussions of our alternative sources of liquidity if our access to the debt markets were to become limited.

While our liquidity contingency planning attempts to address stressed market conditions and our status in conservatorship, we believe those plans could be difficult or impossible to execute under stressed conditions for a company of our size in our circumstances. See “Risk Factors—Liquidity and Funding Risk” for a description of the risks associated with our ability to fund operations and our liquidity contingency planning.

Debt Funding

We separately present the debt from consolidations (“debt of consolidated trusts”) and the debt issued by us (“debt of Fannie Mae”) in our consolidated balance sheets. This discussion regarding debt funding focuses on the debt of Fannie Mae. In addition to MBS issuances, we fund our business through the issuance of a variety of short-term and long-term debt securities in the domestic and international capital markets. Accordingly, we are subject to “roll over,” or refinancing, risk on our outstanding debt.

Our debt securities are actively traded in the over-the-counter market. We have a diversified funding base of domestic and international investors. Purchasers of our debt securities are geographically diversified and include fund managers, commercial banks, pension funds, insurance companies, foreign central banks, corporations, state and local governments, and other municipal authorities. We compete for low-cost debt funding with institutions that hold mortgage portfolios, including Freddie Mac and the FHLBs.

Our debt funding needs and debt funding activity may vary from period to period depending on market conditions, including refinance volumes, the continued impact of the COVID-19 pandemic, our capital and liquidity management, the size of our retained mortgage portfolio, and the impact of business restrictions recently imposed under the terms of our senior preferred stock purchase agreement with Treasury, particularly new volume limits on single-family loans acquired through the whole loan conduit. See “Retained Mortgage Portfolio” for information about our retained mortgage portfolio and limits on its size.

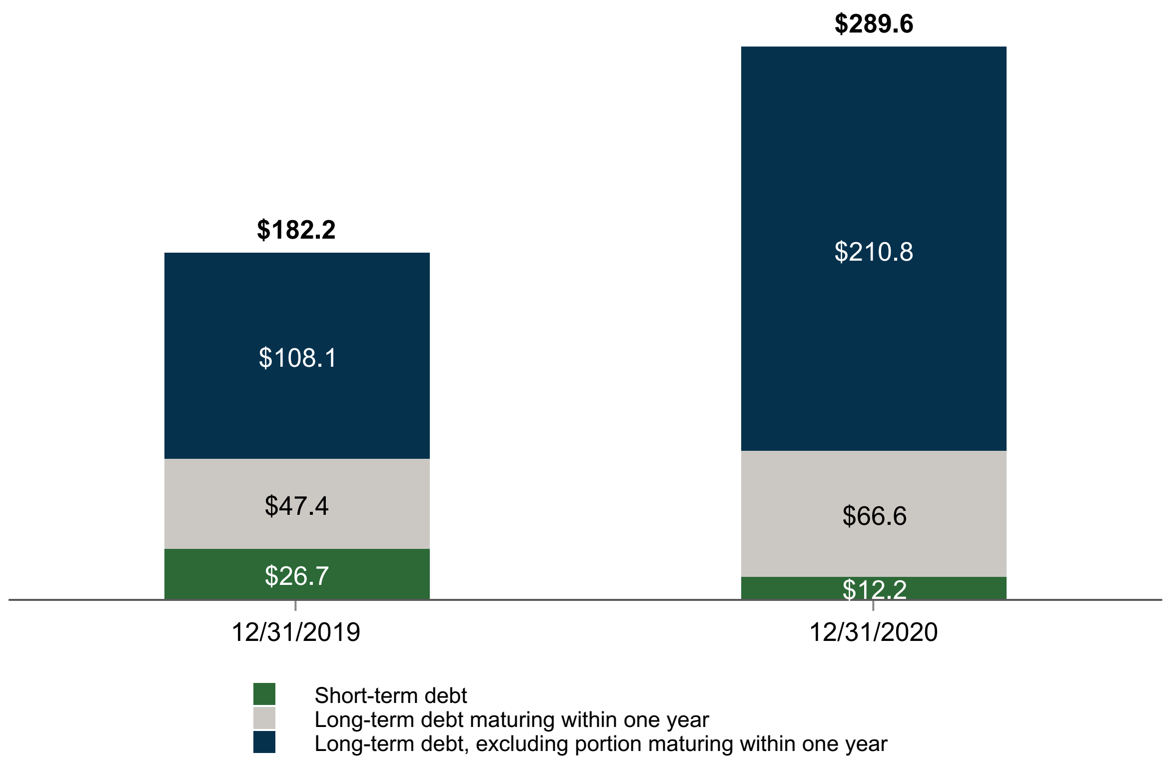
We are currently subject to a $300 billion debt limit under our senior preferred stock purchase agreement with Treasury, which will decrease to $270 billion as of December 31, 2022. The unpaid principal balance of our aggregate indebtedness was $290.0 billion as of December 31, 2020. Pursuant to the terms of the senior preferred stock purchase agreement, we are prohibited from issuing debt without the prior consent of Treasury if it would result in our aggregate indebtedness exceeding our outstanding debt limit. The calculation of our indebtedness for purposes of complying with our debt limit reflects the unpaid principal balance and excludes debt basis adjustments and debt of consolidated trusts. Because of our debt limit, our business activities may be constrained.

Outstanding Debt

Total outstanding debt of Fannie Mae includes short-term and long-term debt and excludes debt of consolidated trusts. Short-term debt of Fannie Mae consists of borrowings with an original contractual maturity of one year or less and, therefore, does not include the current portion of long-term debt. Long-term debt of Fannie Mae consists of borrowings with an original contractual maturity of greater than one year.

The following chart and table display information on our outstanding short-term and long-term debt based on original contractual maturity. The drivers for the increase in long-term debt from December 31, 2019 to December 31, 2020 are discussed below.

Debt of Fannie Mae[1]
(Dollars in billions)



(1) Includes the effects of discounts, premiums, other cost basis and fair value adjustments associated with debt that we elected to carry at fair value. Reported amounts include net discount unamortized cost basis adjustments and fair value adjustments of $393 million and $28 million as of December 31, 2020 and 2019, respectively.

Selected Debt Information

	As of	
	December 31, 2020	December 31, 2019
	(Dollars in billions)	
Selected Weighted-Average Interest Rates[1]		
Interest rate on short-term debt	**0.18 %**	1.56 %
Interest rate on long-term debt, including portion maturing within one year	**1.34 %**	2.86 %
Interest rate on callable long-term debt	**1.40 %**	3.39 %
Selected Maturity Data		
Weighted-average maturity of debt maturing within one year (in days)	**196**	137
Weighted-average maturity of debt maturing in more than one year (in months)	**52**	66
Other Data		
Outstanding callable long-term debt	**57.5**	38.5
Connecticut Avenue Securities debt[2]	**15.0**	21.4

(1) Includes the effects of discounts, premiums and other cost basis adjustments.

(2) Represents CAS debt issued prior to November 2018. See "Single-Family Business—Single-Family Mortgage Credit Risk Management—Single-Family Credit Enhancement and Transfer of Mortgage Credit Risk—Credit Risk Transfer Transactions" for information regarding our Connecticut Avenue Securities.

We intend to repay our short-term and long-term debt obligations as they become due primarily through proceeds from the issuance of additional debt securities and cash from business operations.

For information on the maturity profile of our outstanding long-term debt for each of the years 2021 through 2025 and thereafter, see "Note 7, Short-Term and Long-Term Debt."

Debt Funding Activity

The COVID-19 pandemic has resulted in significantly higher rates of loan delinquencies, which has increased the relief we are offering impacted borrowers as well as support to our servicers. These factors, combined with low mortgage interest rates, have affected both our debt funding needs and related debt funding activity. We significantly increased our long-term debt issuances in 2020 due to:

- increased volume in the whole loan conduit driven by a significant increase in refinance and purchase activity;
- paying off callable debt;
- preparation for the implementation in December 2020 of the new liquidity risk management requirements issued by FHFA;
- increased payments of, and reimbursements for servicer advances of, principal and interest payments to MBS trusts due to missed borrower payments; and
- anticipated potential future liquidity needs due to the pandemic, including loss mitigation activities and loan buyouts from trusts.

See "Single-Family Business—Single-Family Mortgage Credit Risk Management—Single-Family Problem Loan Management—Principal and Interest Payments while Loans are in Forbearance" for information on advances of scheduled principal and interest payments to MBS trusts while loans are in forbearance.

Adverse market conditions in early 2020 limited our ability to issue debt with a maturity greater than two years. As a result, most of the debt we issued in the first quarter of 2020 had terms from three to twenty-four months. Market conditions improved after the first quarter of 2020 and we were able to issue notes with maturities greater than two years during the remainder of the year. If market conditions deteriorate again such that our ability to issue longer-term debt is limited, we may need to fund longer-term assets with short-term debt, which would increase the roll-over risk on our outstanding debt.

The table below displays activity in debt of Fannie Mae. This activity excludes the debt of consolidated trusts and intraday loans. Activity in short-term debt of Fannie Mae relates to borrowings with an original contractual maturity of one year or less while activity in long-term debt of Fannie Mae relates to borrowings with an original contractual maturity of greater than one year. The reported amounts of debt issued and paid off during each period represent the face amount of the debt at issuance and redemption.

The decrease in short-term debt issued and paid off during 2020 compared with 2019 was primarily driven by a significant reduction in the utilization of short-term notes with overnight maturities throughout 2020 as well as a shift to long-term debt to meet our revised liquidity requirements. The increase in long-term debt issued during 2020 compared with the 2019 was primarily driven by the funding needs discussed above.

Activity in Debt of Fannie Mae

	For the Year Ended December 31,		
	2020	**2019**	**2018**
	(Dollars in millions)		
Issued during the period:			
Short-term:			
Amount	**$ 194,604**	$ 562,189	$ 540,686
Weighted-average interest rate	**1.04 %**	2.13 %	1.63 %
Long-term:[1]			
Amount	**$ 198,528**	$ 21,545	$ 22,014
Weighted-average interest rate	**0.52 %**	2.20 %	3.07 %
Total issued:			
Amount	**$ 393,132**	$ 583,734	$ 562,700
Weighted-average interest rate	**0.77 %**	2.13 %	1.68 %
Paid off during the period:[2]			
Short-term:			
Amount	**$ 209,595**	$ 559,938	$ 549,184
Weighted-average interest rate	**1.09 %**	1.99 %	1.51 %
Long-term:[1]			
Amount	**$ 76,308**	$ 73,547	$ 58,497
Weighted-average interest rate	**1.77 %**	2.38 %	1.48 %
Total paid off:			
Amount	**$ 285,903**	$ 633,485	$ 607,681
Weighted-average interest rate	**1.27 %**	2.04 %	1.51 %

(1) Includes credit risk-sharing securities issued as CAS debt prior to November 2018. For information on our credit risk transfer transactions, see "Single-Family Business—Single-Family Mortgage Credit Risk Management—Single-Family Credit Enhancement and Transfer of Mortgage Credit Risk—Credit Risk Transfer Transactions."

(2) Consists of all payments on debt, including regularly scheduled principal payments, payments at maturity, payments resulting from calls and payments for any other repurchases. Repurchases of debt and early retirements of zero-coupon debt are reported at original face value, which does not equal the amount of actual cash payment.

Many factors could influence our debt activity, affect the amount, mix and cost of our debt funding, reduce demand for our debt securities, increase our liquidity or roll over risk, or otherwise have a material adverse impact on our liquidity, including:

- changes or perceived changes in federal government support of our business or our debt securities;
- changes in our status as a government-sponsored enterprise;
- future changes or disruptions in the financial markets;
- changes in requirements by FHFA, Treasury or other regulators;
- a change or perceived change in the creditworthiness of the U.S. government, due to our reliance on the U.S. government's support; or
- a downgrade in our credit ratings.

We believe that continued federal government support of our business, as well as our status as a government-sponsored enterprise, are essential to maintaining our access to debt funding. See "Risk Factors" for a discussion of the risks we face relating to:

- the uncertain future of our company;
- our reliance on the issuance of debt securities to obtain funds for our operations and the relative cost to obtain these funds;
- our liquidity contingency plans;
- our credit ratings; and
- other factors that could adversely affect our ability to obtain adequate debt funding or otherwise negatively impact our liquidity, including the factors listed above.

Also see "Business—Conservatorship, Treasury Agreements and Housing Finance Reform—Treasury Agreements."

The table below displays additional information for each category of our short-term debt based on original contractual terms.

Outstanding Short-Term Debt[1]

	2020	2019	2018
	(Dollars in millions)		
Federal funds purchased and securities sold under agreements to repurchase:			
Amount outstanding, as of December 31	**$ —**	$ 478	$ —
Weighted-average interest rate	**— %**	1.67 %	— %
Average outstanding, during the year[2]	**$ 419**	$ 234	$ 83
Weighted-average interest rate	**0.14 %**	1.95 %	1.08 %
Maximum outstanding, during the year[3]	**$ 9,000**	$ 1,726	$ 1,500
Total short-term debt of Fannie Mae:			
Amount outstanding, as of December 31	**$ 12,173**	$ 26,662	$ 24,896
Weighted-average interest rate	**0.18 %**	1.56 %	2.29 %
Average outstanding, during the year[2]	**$ 20,952**	$ 18,547	$ 23,237
Weighted-average interest rate	**0.70 %**	2.08 %	1.73 %
Maximum outstanding, during the year[3]	**$ 40,800**	$ 33,461	$ 37,446

(1) Includes the effects of discounts, premiums and other cost basis adjustments.

(2) Average amount outstanding has been calculated using daily balances.

(3) Maximum outstanding represents the highest daily outstanding balance during the year.

Contractual Obligations

The table below displays, by remaining maturity, our future cash obligations related to our long-term debt, including announced calls, operating leases, purchase obligations and other material non-cancelable contractual obligations. This table excludes certain contractual obligation transactions that could significantly affect our short- and long-term liquidity and capital resource needs. These transactions, which are listed below, are excluded because they involve future cash payments that are considered uncertain and may vary based upon future conditions.

- Future payments of principal and interest related to debt securities of consolidated trusts;
- Future payments associated with our CIRT, CAS REMIC, MCAS, and CAS CLN transactions, because the amount and timing of such payments are contingent upon the occurrence of future credit and prepayment events on the related reference pool of mortgage loans and are therefore uncertain;
- Future payments related to our interest-rate risk management derivatives that may require cash settlement in future periods, because the amount and timing of such payments are dependent upon items such as changes in interest rates; and
- Future payments on our obligations to stand ready to perform under our guarantees relating to Fannie Mae MBS and other financial guarantees, including Fannie Mae commingled structured securities, because the amount and timing of payments under these arrangements are generally contingent upon the occurrence of future events. For a description of the amount of our on- and off-balance sheet Fannie Mae MBS and other financial guarantees as of December 31, 2020, see "Guaranty Book of Business" and "Off-Balance Sheet Arrangements."

Contractual Obligations

	Payment Due by Period as of December 31, 2020				
	Total	Less than 1 Year	1 to < 3 Years	3 to 5 Years	More than 5 Years
	(Dollars in millions)				
Long-term debt obligations(1)	$277,399	$ 66,631	$ 96,539	$ 59,355	$ 54,874
Contractual interest on long-term obligations	23,456	3,592	5,872	4,876	9,116
Operating lease obligations(2)	1,239	55	145	163	876
Purchase obligations:					
Mortgage commitments(3)	189,259	189,259	—	—	—
Other purchase obligations(4)	303	130	168	5	—
Other liabilities reflected in our consolidated balance sheets(5)	1,806	1,248	495	27	36
Total contractual obligations	$493,462	$260,915	$103,219	$ 64,426	$ 64,902

(1) Represents the carrying amount of our long-term debt assuming payments are made in full at maturity. Includes the effects of discounts, premiums and other cost basis adjustments.

(2) Includes amounts related to office buildings and equipment leases.

(3) Includes on- and off-balance sheet commitments to purchase mortgage loans and mortgage-related securities.

(4) Includes unconditional purchase obligations that are subject to a cancellation penalty for certain telecommunications services, software and computer services, and other agreements.

(5) Includes cash received as collateral and future cash payments due under our contractual obligations to fund low-income housing tax credit partnership investments and other partnerships that are unconditional and legally binding, which are included in our consolidated balance sheets under “Other liabilities.”

Equity Funding

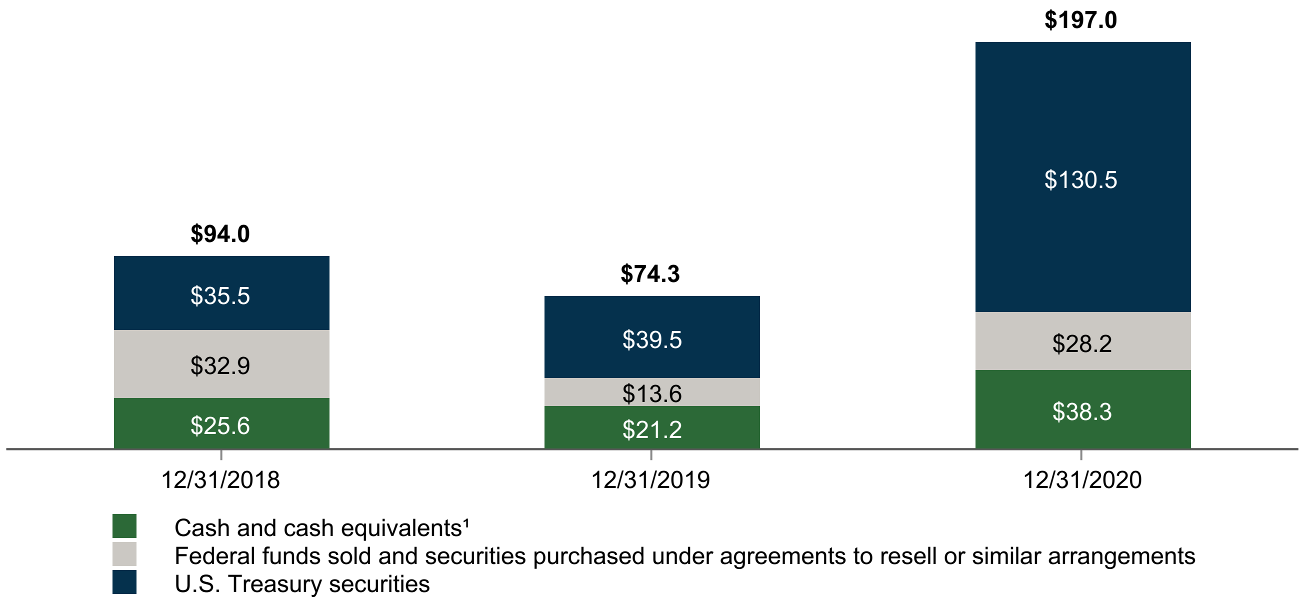
At this time, as a result of the covenants under the senior preferred stock purchase agreement, Treasury’s ownership of the warrant to purchase up to 79.9% of the total shares of our common stock outstanding and the uncertainty regarding our future, we do not have access to equity funding except through draws under the senior preferred stock purchase agreement. For a description of the funding available and the covenants under the senior preferred stock purchase agreement, see “Business—Conservatorship, Treasury Agreements and Housing Finance Reform—Treasury Agreements.”

Other Investments Portfolio

The chart below displays information on the composition of our other investments portfolio. The balance of our other investments portfolio fluctuates as a result of changes in our cash flows, liquidity in the fixed-income markets, and our liquidity risk management framework and practices.

Our other investments portfolio increased significantly during 2020 primarily due to an increase in our investment in U.S. Treasury securities and in cash and cash equivalents driven by proceeds from significantly increased debt issuances as well as proceeds from loan payoffs.

Other Investments Portfolio
(Dollars in billions)



(1) Cash equivalents are comprised of overnight repurchase agreements and U.S. Treasuries that have a maturity at the date of acquisition of three months or less.

Credit Ratings

Our credit ratings from the major credit ratings organizations, as well as the credit ratings of the U.S. government, are primary factors that could affect our ability to access the capital markets and our cost of funds. In addition, our credit ratings are important when we seek to engage in certain long-term transactions, such as derivative transactions. Standard & Poor's Global Ratings ("S&P"), Moody's Investors Services ("Moody's") and Fitch Ratings Limited ("Fitch") have all indicated that, if they were to lower the sovereign credit ratings on the U.S., they would likely lower their ratings on the debt of Fannie Mae and certain other government-related entities. In addition, actions by governmental entities impacting Treasury's support for our business or our debt securities could adversely affect the credit ratings of our senior unsecured debt. See "Risk Factors—Liquidity and Funding Risk" for a discussion of the risks to our business relating to a decrease in our credit ratings, which could include an increase in our borrowing costs, limits on our ability to issue debt, and additional collateral requirements under our derivatives contracts.

The table below displays the credit ratings issued by the three major credit rating agencies.

Fannie Mae Credit Ratings

	December 31, 2020		
	S&P	**Moody's**	**Fitch**
Long-term senior debt	AA+	Aaa	AAA
Short-term senior debt	A-1+	P-1	F1+
Preferred stock	D	Ca(hyb)	C/RR6
Outlook	Stable (for Long-Term Senior Debt)	Stable	Negative (for AAA rated Long-Term Issuer Default Ratings)

In August 2020, Fitch affirmed our "AAA" long-term issuer default rating, but lowered our rating outlook from stable to negative, following its affirmation of the United States' "AAA" issuer default rating and revision of the United States' rating outlook from stable to negative. Fitch noted that Fannie Mae's long-term issuer default rating is directly linked to the United States' long-term issuer default rating, based on Fitch's view of the U.S. government's direct financial support of Fannie Mae. We have no covenants in our existing debt agreements that would be violated by a downgrade in our credit ratings. However, in connection with certain derivatives counterparties, we could be required to provide additional collateral to or terminate transactions with certain counterparties in the event that our senior unsecured debt ratings are downgraded.

Cash Flows

Year Ended December 31, 2020. Cash, cash equivalents and restricted cash increased from $61.4 billion as of December 31, 2019 to $115.6 billion as of December 31, 2020. The increase was primarily driven by cash inflows from (1) proceeds from repayments and sales of loans, (2) the sale of Fannie Mae MBS to third parties, and (3) the issuance of funding debt, which outpaced redemptions, primarily for the reasons described above.

Partially offsetting these cash inflows were cash outflows primarily from (1) payments on outstanding debt of consolidated trusts, (2) purchases of loans held for investment, and (3) an increase in our investment in U.S. Treasury securities.

Year Ended December 31, 2019. Cash, cash equivalents and restricted cash increased from $49.4 billion as of December 31, 2018 to $61.4 billion as of December 31, 2019. The increase was primarily driven by cash inflows from (1) proceeds from repayments and sales of loans, (2) the sale of Fannie Mae MBS to third parties, and (3) the net decrease in federal funds sold and securities purchased under agreements to resell or similar agreements.

Partially offsetting these cash inflows were cash outflows primarily from (1) payments on outstanding debt of consolidated trusts, (2) purchases of loans held for investment, and (3) the redemption of funding debt, which outpaced issuances due to lower funding needs.

Capital Management

Regulatory Capital

FHFA stated that, during conservatorship, our existing statutory and FHFA-directed regulatory capital requirements will not be binding and that FHFA will not issue quarterly capital classifications. We report GAAP net worth and the deficit of our core capital over statutory minimum capital in our periodic reports on Form 10-Q and Form 10-K. As we discuss in "Business—Legislation and Regulation—GSE Act and Other Legislative and Regulatory Matters—Capital," FHFA, in its capacity as our regulator, has issued a new rule finalizing the enterprise regulatory capital framework. We estimate that, had the new framework been applicable to us as of December 31, 2020, we would have been required to hold approximately $185 billion in adjusted total capital, of which approximately $135 billion must be in the form of common equity tier 1 capital. Prescribed buffers drive approximately $75 billion of the total requirements.

Capital Activity

Under the terms governing the senior preferred stock, no dividends were payable to Treasury for the fourth quarter of 2020 and none are payable for the first quarter of 2021. Also, the aggregate liquidation preference of the senior preferred stock increased to $142.2 billion as of December 31, 2020 and will further increase to $146.8 billion as of March 31, 2021. As of December 31, 2020, our net worth was $25.3 billion.

See "Business—Conservatorship, Treasury Agreements and Housing Finance Reform—Treasury Agreements" for more information on the terms of our senior preferred stock.

Off-Balance Sheet Arrangements

We enter into certain business arrangements to facilitate our statutory purpose of providing liquidity to the secondary mortgage market and to reduce our exposure to interest rate fluctuations. Some of these arrangements are not recorded in our consolidated balance sheets or may be recorded in amounts different from the full contract or notional amount of the transaction, depending on the nature or structure of, and the accounting required to be applied to, the arrangement. These arrangements are commonly referred to as "off-balance sheet arrangements" and expose us to potential losses in excess of the amounts recorded in our consolidated balance sheets.

Our off-balance sheet arrangements result primarily from the following:

- our guaranty of mortgage loan securitization and resecuritization transactions, and other guaranty commitments, over which we do not have control;

- liquidity support transactions; and
- partnership interests.

Since we began issuing UMBS in June 2019, some of the securities we issue are structured securities backed, in whole or in part, by Freddie Mac securities. When we issue a structured security, we provide a guaranty that we will supplement amounts received from the underlying mortgage-related security as required to permit timely payment of principal and interest on the certificates related to the resecuritization trust. Accordingly, when we issue structured securities backed in whole or in part by Freddie Mac securities, we extend our guaranty to the underlying Freddie Mac security included in the structured security. Our issuance of structured securities backed in whole or in part by Freddie Mac securities creates additional off-balance sheet exposure as we do not have control over the Freddie Mac mortgage loan securitizations. Because we do not have the power to direct matters (primarily the servicing of mortgage loans) that impact the credit risk to which we are exposed, which constitute control of these securitization trusts, we do not consolidate these trusts in our consolidated balance sheet, giving rise to off-balance sheet exposure.

The total amount of our off-balance sheet exposure related to unconsolidated Fannie Mae MBS net of any beneficial interest that we retain, and other financial guarantees was $153.6 billion as of December 31, 2020. Approximately $110.7 billion of this amount consisted of the unpaid principal balance of Freddie Mac-issued UMBS backing Fannie Mae-issued Supers. Additionally, off-balance sheet exposure includes approximately $26.6 billion of the unpaid principal balance of Freddie Mac securities backing Fannie Mae-issued REMICs. We expect our off-balance sheet exposure to Freddie Mac securities to increase as we issue more structured securities backed by Freddie Mac securities in the future. The total amount of our off-balance sheet exposure related to unconsolidated Fannie Mae MBS and other financial guarantees was $68.6 billion as of December 31, 2019. Approximately $37.8 billion of this amount consisted of the unpaid principal balance of Freddie Mac-issued UMBS backing Fannie Mae-issued Supers and $12.3 billion of this amount consisted of the unpaid principal balance of Freddie Mac securities backing Fannie Mae-issued REMICs. Our total exposure as of December 31, 2019 to Freddie Mac securities backing Fannie Mae-issued REMICs may have been lower than the amount disclosed because a portion of the Freddie Mac securities backing these Fannie Mae-issued REMICs may have been backed by Fannie Mae MBS. See “Note 6, Financial Guarantees” for more information regarding our maximum exposure to loss on unconsolidated Fannie Mae MBS and Freddie Mac securities.

We also have off-balance sheet exposure to losses from liquidity support transactions and partnership interests.

- Our total outstanding liquidity commitments to advance funds for securities backed by multifamily housing revenue bonds totaled $6.4 billion as of December 31, 2020 and $7.2 billion as of December 31, 2019. These commitments require us to advance funds to third parties that enable them to repurchase tendered bonds or securities that are unable to be remarketed. We hold cash and cash equivalents in our other investments portfolio in excess of these commitments to advance funds.
- We make investments in various limited partnerships and similar legal entities, which consist of low-income housing tax credit investments, community investments and other entities. When we do not have a controlling financial interest in those entities, our consolidated balance sheets reflect only our investment rather than the full amount of the partnership’s assets and liabilities. See “Note 2, Consolidations and Transfers of Financial Assets— Unconsolidated VIEs” for information regarding our limited partnerships and similar legal entities.

Risk Management

We manage the risks that arise from our business activities through our enterprise risk management program. Our risk management activities are based on principles aligned with the principles set forth by the Committee of Sponsoring Organizations of the Treadway Commission's ("COSO") Enterprise Risk Management ("ERM"): Integrating with Strategy and Performance framework.

We are exposed to the following major risk categories:

- ***Credit Risk***. Credit risk is the risk of loss arising from another party's failure to meet its contractual obligations. For financial securities or instruments, credit risk is the risk of not receiving principal, interest or other financial obligation on a timely basis. Our credit risk exposure exists primarily in connection with our guaranty book of business and our institutional counterparties.
- ***Market Risk***. Market risk is the risk of loss resulting from changes in the economic environment. Market risk arises from fluctuations in interest rates, exchange rates and other market rates and prices. Market risk includes interest-rate risk, which is the risk that movements in interest rates will adversely affect the value of our assets or liabilities or our future earnings. Market risk also includes spread risk, which can result in losses from changes in the spreads between our mortgage assets and our debt and derivatives we use to hedge our position.
- ***Liquidity and Funding Risk***. Liquidity and funding risk is the risk to our financial condition and resilience arising from an inability to meet obligations when they come due, including the risk associated with the inability to access funding sources or manage fluctuations in funding levels.
- ***Operational Risk***. Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems or disruptions from external events. Operational risk includes cyber/information security risk, third-party risk and model risk.

We are also exposed to these additional risk categories:

- ***Strategic Risk***. Strategic risk is the risk of loss resulting from poor business decisions, poor implementation of business decisions or the failure to respond appropriately to changes in the industry or external environment.
- ***Compliance Risk***. Compliance risk is the risk of legal or regulatory sanctions, damage to current or projected financial condition, damage to business resilience or damage to reputation resulting from nonconformance with compliance obligations. These obligations include laws or regulations, prescribed practices, MBS trust agreements, supervisory guidance, conservator instruction, internal policies and procedures or ethical standards governing how we operate. Compliance risk exposes us to adverse actions by regulators, law enforcement or other government agencies, or private civil action, and financial losses incurred through fines, legal judgments, voiding of contracts or civil penalties. Compliance risk can result in damaged or diminished reputation, limited business opportunities and lessened expansion potential.
- ***Reputational Risk***. Reputational risk is the risk that substantial negative publicity may cause a decline in public perception of us, a decline in our customer base, costly litigation, revenue reductions or losses.

For a more detailed discussion of these and other risks that could materially adversely affect our business, results of operations, financial condition, liquidity and net worth, see "Risk Factors."

Components of Risk Management

Our risk management program is comprised of five inter-related components that are designed to work together as a comprehensive risk management system aimed at enhancing our performance.

Governance & Culture

We develop and execute our strategy and business objectives in alignment with our vision and values, which promote our inclusive culture and define how we want to conduct business. Our risk governance structure establishes authority, responsibility and accountability for risk management, which we conduct through a variety of controls designed to act in concert, including delegations of authority, risk committees, risk policies, risk appetite and risk limits.

Strategy & Objective Setting

Risk management is integrated with our strategy and business objectives. This integration provides insight into the risk profile associated with our strategy.

Risk Identification and Assessment

We identify, assess, respond to and monitor risks generated in the pursuit of our strategy and objectives. Performing these activities across the company allows us to address risks arising from different sources and tailor appropriate responses.

Review & Revision

We evaluate our enterprise risk management framework and policies periodically to ensure they continue to support our needs and reflect our current practices and regulatory expectations.

Risk Information, Communication & Reporting

We identify, capture and communicate relevant information so that stakeholders can carry out their responsibilities and make sound and informed risk management decisions.

Risk Management Governance

We manage risk by using the industry standard "three lines of defense" structure. Our Board of Directors and management-level risk committees are also integral to our risk management program.

Governance

Board of Fannie Mae

- Oversees our enterprise risk management program and its alignment with our strategy and business objectives
- Approves Board-level risk policies, risk appetite and risk limits
- Delegates authorities to the Chief Executive Officer and management-level risk committees
- Certain activities require conservator decision or notification

Risk Policy & Capital Committee

- Assists the Board in overseeing enterprise risk management and recommends for Board approval Board-level risk policies, risk appetite and risk limits

Audit Committee

- Reviews the system of internal controls we rely on to provide reasonable assurance of compliance with our enterprise risk management processes

Management-Level Risk Committees

- Consist of committees overseeing risk across the company, including risks associated with our business, assets and liabilities, operations, third-parties, models and technology
- Include members of management from the first, second and third lines of defense functions
- Approve management-level policies, establish risk parameters and recommend risk policies
- Provide a cross-functional forum for discussing and documenting risks and responses
- Review decisions on matters that may expose our enterprise to significant, new or unusual risk

Lines of Defense

Business Units & Operations

First Line: *Generate, own and manage risks*

- Responsible for identifying, assessing, responding to, monitoring and reporting on risks arising from group operations, activities and systems
- Conform to the risk appetite, policies, standards, and limits or thresholds approved by FHFA, the Board and the relevant management-level risk committees

ERM, Compliance & Ethics, Support Functions

Second Line: *Independent monitoring and oversight of risk*

- Consists of groups responsible for independent risk management oversight and monitoring, such as Enterprise Risk Management and Compliance & Ethics
- Also includes independent support functions such as Finance (including SOX) and Human Resources

Internal Audit

Third Line: *Independent assurance*

- An independent, objective assurance and advisory function
- Provides an independent evaluation of the effectiveness of internal controls employed by management

Mortgage Credit Risk Management

Overview

Mortgage credit risk arises from the risk of loss resulting from the failure of a borrower to make required mortgage payments. We are exposed to credit risk on our book of business because we either hold mortgage assets, have issued a guaranty in connection with the creation of Fannie Mae MBS backed by mortgage assets or have provided other credit enhancements on mortgage assets. For more information on how we manage mortgage credit risk, see "Business—Managing Mortgage Credit Risk," "Single-Family Business—Single-Family Mortgage Credit Risk Management," and "Multifamily Business—Multifamily Mortgage Credit Risk Management."

Natural Disaster and Climate Risk Management

Major weather events or other natural disasters expose us to credit risk in a variety of ways, including by damaging properties that secure mortgage loans in our book of business and by negatively impacting the ability of borrowers to make payments on their mortgage loans. The amount of losses we incur as a result of a major weather event or natural disaster depends significantly on the extent to which the resulting property damage is covered by hazard or flood insurance and whether borrowers are able and willing to continue making payments on their mortgages. The amount of losses we incur can also be affected by the extent that a disaster impacts the region, especially if it depresses the local economy, and by the availability of federal, state, or local assistance to borrowers affected by a disaster. To date, our losses from natural disasters have been limited by geographic diversity in our book of business, the availability of insurance coverage for damages sustained and borrowers with equity in their homes continuing to pay their mortgages.

For our multifamily loans, our multifamily lenders typically share with us approximately one-third of the credit risk through our DUS program. For single-family and multifamily loans covered in back-end credit risk transfer transactions, we retain a portion of the risk of future losses, including all or a portion of the first loss risk in most transactions. To the extent weather and disaster-related losses on loans covered by these transactions were to exceed the amount of first loss we retain, a portion of those losses would be covered by the transactions. Mortgage insurance does not protect us from default risk for properties that suffer damages not covered by the hazard or flood insurance we require. For more information on our single-family credit risk transfer transactions, see “Single-Family Business—Single-Family Mortgage Credit Risk Management—Single-Family Credit Enhancement and Transfer of Mortgage Credit Risk—Credit Risk Transfer Transactions” and for more information on our multifamily credit risk transfer transactions and our DUS program, see “Multifamily Business—Multifamily Mortgage Credit Risk Management—Transfer of Multifamily Mortgage Credit Risk.”

In general, we require borrowers to obtain property insurance to cover the risk of damage to their property resulting from hazards such as fire, wind and, for properties in areas identified by FEMA as Special Flood Hazard Areas, flooding. At the time of origination, a borrower is required to provide proof of such insurance, and our servicers have the right and the obligation to obtain such insurance, at the borrower’s cost, if the borrower allows the policy to lapse. We do not generally require property insurance to cover damages from flooding in areas outside a Special Flood Hazard Area, or to cover earthquake damage to single-family properties and to multifamily properties unless required by a seismic-risk assessment.

In the event of a natural or other disaster, our servicers work with affected borrowers to develop a plan that addresses the borrower’s specific situation. Depending on the circumstances, the plan may include one or more of the following: a payment forbearance plan; a repayment or reinstatement plan; a payment deferral; loan modification; coordination with insurance companies and administration of insurance proceeds; and, if necessary, foreclosure alternatives such as short sales and deeds-in-lieu of foreclosure, or foreclosure. We have also established Fannie Mae’s Disaster Response Network™ to offer our eligible single-family borrowers free support from HUD-approved housing advisors, including help in developing a recovery assessment and action plan, filing claims, working with mortgage servicers, and identifying and navigating sources of federal, state and local assistance. These activities are designed to assist borrowers affected by disasters and thereby help reduce our losses, and we continue to evaluate their impact and seek new options and resources to deploy in response to disasters.

Recent years have seen frequent and severe natural disasters in the U.S., including hurricanes, wildfires and floods. There are concerns that the frequency and intensity of major weather-related events is indicative of the impact of climate change and that this change will persist and intensify in the future. Population growth and an increase in people living in high-risk areas, such as coastal areas vulnerable to severe storms and flooding, has also increased the impact of these events. Low- and moderate-income and minority households are disproportionately exposed to risks from severe weather events and low- and moderate-income households have limited financial resources to withstand the economic impact.

We recognize that the increased frequency, intensity and unpredictability of major natural disasters poses risks for all stakeholders in the housing system, including borrowers, renters, lenders, investors, insurers and us. In the first half of 2020, we established a dedicated team within Fannie Mae to work on climate risk. Our Climate Impact team is focused on the physical and transition risks associated with climate change, as defined by the Taskforce on Climate-Related Financial Disclosures, to better understand our future exposure and to develop strategies to help manage and mitigate our climate risk.

We are exploring the role we, along with FHFA and others, can play in helping to address some of these risks. For example, we are currently examining flood risk and insurance beyond our current requirements and considering how we can help develop solutions to address this risk, especially solutions that would not merely transfer risk away from us, but that would reduce the risks for all involved. Developing solutions to these challenges is complicated by the range and diversity of affected stakeholders, the possible need for legislative or regulatory action, industry insurance capacity, and the need to balance risk mitigation, affordability and sustainability.

See “Risk Factors—Credit Risk” for additional information on the risks we face from the occurrence of major natural or other disasters, including additional ways that such events could negatively impact our business, results and liquidity.

Institutional Counterparty Credit Risk Management

Overview

Institutional counterparty credit risk is the risk of loss resulting from the failure of an institutional counterparty to fulfill its contractual obligations to us. Our primary exposure to institutional counterparty credit risk exists with our:

- credit guarantors, including mortgage insurers, reinsurers and multifamily lenders with risk sharing arrangements;
- mortgage sellers and servicers;
- financial institutions that issue investments included in our other investments portfolio; and
- derivatives counterparties.

We routinely enter into a high volume of transactions with counterparties in the financial services industry resulting in a significant credit concentration with respect to this industry. We also may have multiple exposures to particular counterparties, as many of our institutional counterparties perform several types of services for us. Accordingly, if one of these counterparties were to default on its obligations to us, it could harm our business and financial results in a variety of ways. Our overall objective in managing institutional counterparty credit risk is to maintain individual and portfolio-level counterparty exposures within acceptable ranges based on our risk-based rating system. We achieve this objective through the following:

- establishment and observance of counterparty eligibility standards appropriate to each exposure type and level;
- establishment of risk limits;
- requiring collateralization of exposures where appropriate; and
- exposure monitoring and management.

See “Risk Factors—Credit Risk” for additional discussion of the risks to our business if one or more of our institutional counterparties fails to fulfill their contractual obligations to us.

Establishment and Observance of Counterparty Eligibility Standards

The institutions with which we do business vary in size, complexity and geographic footprint. Because of this, counterparty eligibility criteria vary depending upon the type and magnitude of the risk exposure incurred. We use a risk-based approach to assess the credit risk of our counterparties through regular examination of their financial statements, confidential communication with the management of those counterparties and regular monitoring of publicly available credit rating information. This and other information is used to develop proprietary credit rating metrics that we use to assess credit quality. Factors including corporate or third-party support or guaranties, our knowledge of the counterparty and its management, reputation, quality of operations and experience are also important in determining the initial and continuing eligibility of a counterparty.

Establishment of Risk Limits

Institutions are assigned a risk limit to ensure that our risk exposure is maintained at a level appropriate for the institution’s credit assessment and the time horizon for the exposure, as well as to diversify exposure so that we adequately manage our concentration risk. A corporate risk limit is first established at the counterparty level for the aggregate of all activity and then is divided among our individual business units. Our business units may further subdivide limits among products or activities.

Collateralization of Exposures

We may require collateral, letters of credit or investment agreements as a condition to approving exposure to a counterparty. Collateral requirements are determined after a comprehensive review of the credit quality and the level of risk exposure of each counterparty. We may require that a counterparty post collateral in the event of an adverse event such as a ratings downgrade. Collateral requirements are monitored and adjusted daily.

Exposure Monitoring and Management

The risk management functions of the individual business units are responsible for managing the counterparty exposures associated with their activities within risk limits. An oversight team that reports to our Chief Risk Officer is responsible for establishing and enforcing corporate policies and procedures regarding counterparties, establishing corporate limits and aggregating and reporting institutional counterparty exposure. We regularly update exposure limits for individual institutions and communicate changes to the relevant business units. We regularly report exposures against the risk limits to the Risk Policy and Capital Committee of the Board of Directors.

Mortgage Insurers

We are generally required, pursuant to our charter, to obtain credit enhancements on single-family conventional mortgage loans that we purchase or securitize with LTV ratios over 80% at the time of purchase. We use several types of credit enhancements to manage our single-family mortgage credit risk, including primary and pool mortgage insurance coverage. Our primary exposure associated with mortgage insurers is that they will fail to fulfill their obligations to reimburse us for claims under our insurance policies.

Actions we take to manage this risk include:

- maintaining financial and operational eligibility requirements that an insurer must meet to become and remain a qualified mortgage insurer;
- regularly monitoring our exposure to individual mortgage insurers and mortgage insurer credit ratings, including in-depth financial reviews and analyses of the insurers' portfolios and capital adequacy under hypothetical stress scenarios;
- requiring certification and supporting documentation annually from each mortgage insurer; and
- performing periodic reviews of mortgage insurers to confirm compliance with eligibility requirements and to evaluate their management, control and underwriting practices.

The master policies issued by our primary mortgage insurers govern their claim-paying obligations to us, including circumstances in which significant underwriting or servicing defects might permit the mortgage insurer to rescind coverage or deny a claim. Where a claim has not been properly paid as a result of lender non-compliance with their obligation to maintain coverage, the lender is required to make us whole for losses not covered by the insurer. In recent years, the risk of coverage rescission has been mitigated both by the quality control standards required by private mortgage insurer eligibility requirements ("PMIERs"), which have helped reduce the number of significant underwriting defects, and also by rescission relief principles we require in mortgage insurer master policies. Generally, the rescission relief principles align with our representations and warranties framework and require our primary mortgage insurers to waive their rescission rights after a mortgage has performed for at least 36 months or if they have completed a full review of the loan and found no significant defects. See below for a discussion of the PMIERs.

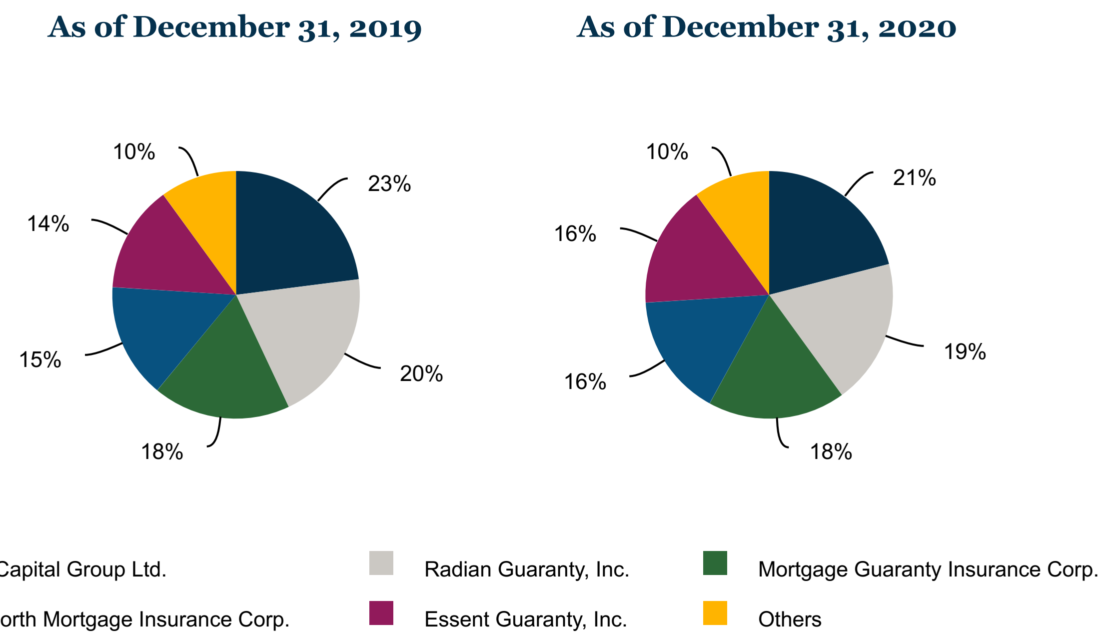
In describing our mortgage insurance coverage, "insurance in force" refers to the unpaid principal balance of single-family loans in our conventional guaranty book of business covered under the applicable mortgage insurance policies. Our total mortgage insurance in force was $675.0 billion, or 21% of our single-family conventional guaranty book of business, as of December 31, 2020, compared with $638.8 billion, or 22% of our single-family conventional guaranty book of business, as of December 31, 2019.

"Risk in force" refers to the maximum potential loss recovery under the applicable mortgage insurance policies in force and is generally based on the loan-level insurance coverage percentage and, if applicable, any aggregate pool loss limit, as specified in the policy. As of December 31, 2020, our total mortgage insurance risk in force was $171.2 billion, or 5% of our single-family conventional guaranty book of business, compared with $163.2 billion, or 6% of our single-family conventional guaranty book of business, as of December 31, 2019.

Our total mortgage insurance in force and risk in force excludes insurance coverage provided by federal government entities and credit insurance obtained through CIRT deals.

The charts below display our mortgage insurer counterparties that provided approximately 10% or more of the risk-in-force mortgage insurance coverage on the single-family loans in our conventional guaranty book of business.

Mortgage Insurer Concentration(1)



(1) Insurance coverage amounts provided for each counterparty may include coverage provided by affiliates and subsidiaries of the counterparty.

Of our total risk-in-force coverage, 1% as of December 31, 2020, compared with 2% as of December 31, 2019, was held with three mortgage insurers that are in run-off, and therefore are no longer approved to write new insurance with us. See “Risk Factors—Credit Risk” for a discussion of the risks to our business of claims under our mortgage insurance policies not being paid in full or at all, including the risks associated with our three mortgage insurance counterparties that are in run-off.

Mortgage insurers must meet and maintain compliance with the PMIERs to be eligible to write mortgage insurance on loans acquired by Fannie Mae. The PMIERs are designed to ensure that mortgage insurers have sufficient liquid assets to pay all claims under a hypothetical future stress scenario. Under FHFA guidance, we and Freddie Mac published several revisions to the PMIERs in 2020, which initially became effective June 30, 2020. The revisions include (1) a temporary adjustment when calculating risk-based required assets for nonperforming mortgage loans that became newly delinquent after the onset of the COVID-19 crisis or that are subject to a forbearance plan granted in response to a financial hardship related to COVID-19, and (2) through June 30, 2021, a requirement for private mortgage insurers to secure prior approval from Fannie Mae to enable payment of dividends or certain new transfers of cash. The adjustment provides partial relief to mortgage insurers’ capital requirements under the PMIERs for the impacted loans.

Reinsurers

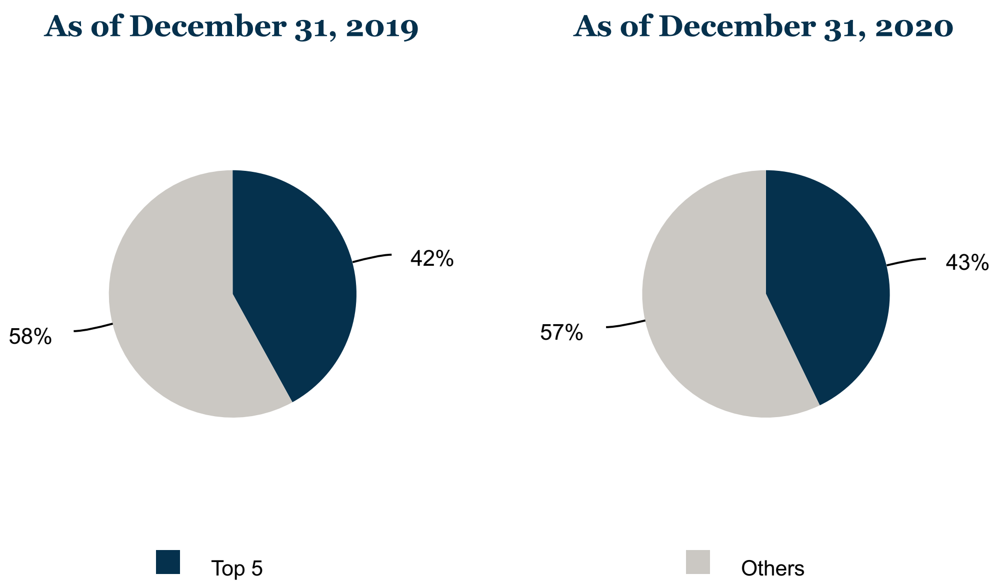
We use CIRT deals to transfer credit risk on a pool of loans to an insurance provider that retains the risk, or to an insurance provider that simultaneously cedes all of its risk to one or more reinsurers. In CIRT transactions, we select the insurance providers and approve the allocation of coverage that may be simultaneously transferred to reinsurers by a direct provider of our CIRT insurance coverage. We take certain steps to increase the likelihood that we will recover on the claims we file with the insurers, including the following:

- In our approval and selection of CIRT insurers and reinsurers, we take into account the financial strength of those companies and the concentration risk that we have with those counterparties.
- We monitor the financial strength of CIRT insurers and reinsurers to confirm compliance with our requirements and to minimize potential exposure. Changes in the financial strength of an insurer or reinsurer may impact our future allocation of new CIRT insurance coverage to those providers. In addition, a material deterioration of the financial strength of a CIRT insurer or reinsurer may permit us to terminate existing CIRT coverage pursuant to terms of the CIRT insurance policy.

- We require a portion of the insurers' or reinsurers' obligations in a CIRT transaction to be collateralized with highly-rated liquid assets held in a trust account. The required amount of collateral is initially determined according to the ratings of the insurer or reinsurer. Contractual provisions require additional collateral to be posted in the event of adverse developments with the counterparty, such as a ratings downgrade.

The charts below display the concentration of our credit risk exposure to our top five CIRT counterparties, measured by maximum liability to us, excluding the benefit of collateral we hold to secure the counterparties' obligations.

CIRT Counterparty Concentration



- As of December 31, 2020, our CIRT counterparties had a maximum liability to us of $11.5 billion.
- As of December 31, 2020, $3.3 billion in liquid assets securing CIRT counterparties' obligations were held in trust accounts.
- Our top five CIRT counterparties had a maximum liability to us of $4.9 billion as of December 31, 2020, compared with $4.1 billion as of December 31, 2019.

For information on our credit risk transfer transactions, see "Single-Family Business—Single-Family Mortgage Credit Risk Management—Single-Family Credit Enhancement and Transfer of Mortgage Credit Risk—Credit Risk Transfer Transactions" and "Multifamily Business—Multifamily Mortgage Credit Risk Management—Transfer of Multifamily Mortgage Credit Risk."

Multifamily Lenders with Risk Sharing

We enter into risk sharing agreements with multifamily lenders, primarily through the DUS program, pursuant to which the lenders agree to bear all or some portion of the credit losses on the covered loans. Our maximum potential loss recovery from lenders under risk sharing agreements on multifamily loans was $92.9 billion as of December 31, 2020, compared with $81.4 billion as of December 31, 2019. As of both December 31, 2020 and December 31, 2019, 51% of our maximum potential loss recovery on multifamily loans was from five DUS lenders.

As noted above in "Multifamily Business—Multifamily Mortgage Credit Risk Management—Transfer of Multifamily Mortgage Credit Risk," our primary multifamily delivery channel is our DUS program, which is comprised of lenders that range from large depositories to independent non-bank financial institutions. As of December 31, 2020, approximately 35% of the unpaid principal balance of loans in our multifamily guaranty book of business serviced by our DUS lenders was from institutions with an external investment grade credit rating or a guaranty from an affiliate with an external investment grade credit rating, compared with approximately 37% as of December 31, 2019. Given the recourse nature of the DUS program, DUS lenders are bound by eligibility standards that dictate, among other items, minimum capital and liquidity levels, and the posting of collateral at a highly rated custodian to secure a portion of the lenders' future obligations. We actively monitor the financial condition of these lenders to help ensure the level of risk remains within our standards and to ensure required capital levels are maintained and are in alignment with actual and modeled loss projections.

Mortgage Servicers and Sellers

Mortgage Servicers

The primary risk associated with mortgage servicers that service the loans in our guaranty book of business is that they will fail to fulfill their servicing obligations. See "Single-Family Business—Single-Family Primary Business Activities—Single-Family Mortgage Servicing" and "Multifamily Business—Multifamily Primary Business Activities—Multifamily Mortgage Servicing" for more discussion on the services performed by our mortgage servicers.

A servicing contract breach could result in credit losses for us or could cause us to incur the cost of finding a replacement servicer. We likely would incur costs and potential increases in servicing fees and could also face operational risks if we replace a mortgage servicer. If a mortgage servicer defaults, it could result in a temporary disruption in servicing and loss mitigation activities relating to the loans serviced by that mortgage servicer, particularly if there is a loss of experienced servicing personnel. See "Risk Factors—Credit Risk" for a discussion of additional risks to our business and financial results associated with mortgage servicers.

We mitigate these risks in several ways, including:

- establishing minimum standards and financial requirements for our servicers;
- monitoring financial and portfolio performance as compared with peers and internal benchmarks; and
- for our largest mortgage servicers, conducting periodic financial reviews to confirm compliance with servicing guidelines and servicing performance expectations.

We may take one or more of the following actions to mitigate our credit exposure to mortgage servicers that present a higher risk:

- require a guaranty of obligations by higher-rated entities;
- transfer exposure to third parties;
- require collateral;
- establish more stringent financial requirements;
- work with underperforming major servicers to improve operational processes; and
- suspend or terminate the selling and servicing relationship if deemed necessary.

A large portion of our single-family guaranty book is serviced by non-depository servicers, particularly our delinquent single-family loans. Compared with depository financial institutions, these institutions pose additional risks to us because they may not have the same financial strength or operational capacity, or be subject to the same level of regulatory oversight, as our largest mortgage servicer counterparties, which are mostly depository institutions.

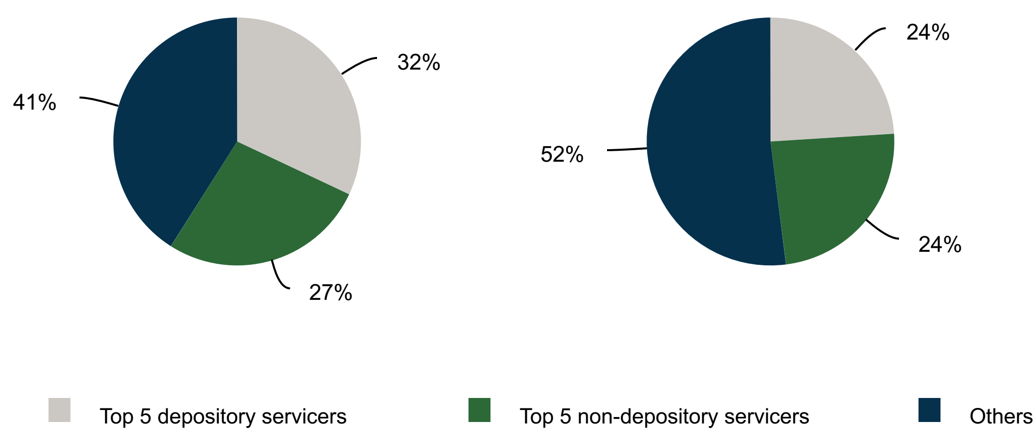
We have previously established minimum liquidity requirements for single-family non-depository servicers to maintain eligibility with Fannie Mae. With the increase in delinquent loans in forbearance plans as a result of the unprecedented circumstances of the COVID-19 pandemic and the CARES Act, we temporarily modified our minimum liquidity requirements for single-family non-depository servicers to maintain eligibility with Fannie Mae. Beginning with the second quarter of 2020, when calculating the minimum liquidity requirement for seriously delinquent mortgage loans for non-depository servicers, an adjustment is included for mortgage loans in a COVID-19-related forbearance plan that are 90 days or more delinquent and were current at the inception of the plan. The adjustment provides partial relief of the minimum liquidity requirements for the servicers of these impacted loans.

In June 2020, FHFA announced that it would re-propose the minimum financial eligibility requirements for Fannie Mae and Freddie Mac sellers and servicers due to market volatility driven by the COVID-19 pandemic. In January 2021, FHFA issued its re-proposal which, if adopted as proposed, may increase capital and liquidity requirements for our single family non-depository sellers and servicers. FHFA has indicated the new requirements are expected to become effective December 31, 2021.

The charts below display the percentage of our single-family guaranty book of business serviced by our top five depository single-family mortgage servicers and top five non-depository single-family mortgage servicers.

Single-Family Mortgage Servicer Concentration

As of December 31, 2019 **As of December 31, 2020**

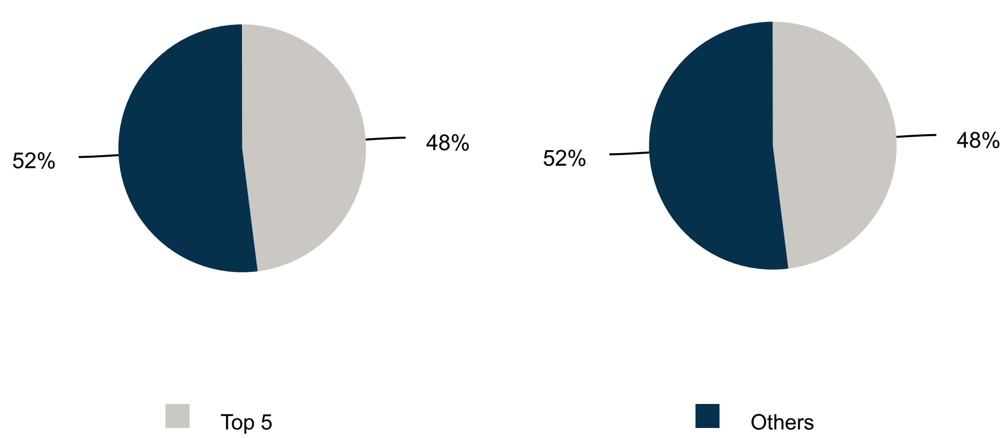


- As of December 31, 2020, Wells Fargo Bank, N.A., together with its affiliates, serviced approximately 13% of our single-family guaranty book of business, compared with 17% as of December 31, 2019.
- The decrease in concentration of our top five single-family depository and non-depository servicers from December 31, 2019 to December 31, 2020 was primarily due to higher refinance activity which increased the volume of mortgage loans serviced by smaller non-depository servicers.

The charts below display the percentage of our multifamily guaranty book of business serviced by our top five multifamily mortgage servicers.

Multifamily Mortgage Servicer Concentration

As of December 31, 2019 **As of December 31, 2020**



- As of December 31, 2020 and 2019, Wells Fargo Bank, N.A., together with its affiliates, and Walker & Dunlop, LLC each serviced over 10% of our multifamily guaranty book of business.

Counterparty Credit Exposure of Investments Held in our Other Investments Portfolio

The primary credit exposure associated with investments held in our other investments portfolio is that issuers will not repay principal and interest in accordance with the contractual terms. If one of these counterparties fails to meet its obligations to us under the terms of the investments, it could result in financial losses to us and have a material adverse effect on our earnings, liquidity, financial condition and net worth. We believe the risk of default is low because our other investments portfolio consists of instruments broadly traded in the financial markets, including cash and cash equivalents, securities purchased under agreements to resell or similar arrangements and U.S. Treasury securities.

As of December 31, 2020, our other investments portfolio totaled $197.0 billion and included $130.5 billion of U.S. Treasury securities. As of December 31, 2019, our other investments portfolio totaled $74.3 billion and included $39.5 billion of U.S. Treasury securities. We mitigate our risk by monitoring the credit risk position of our other investments portfolio. As of December 31, 2020, we held $8.1 billion in overnight unsecured deposits with four financial institutions, compared with $8.7 billion held with seven financial institutions as of December 31, 2019. The short-term credit ratings for each of these financial institutions by S&P, Moody's and Fitch were at least A-1 or the Moody's or Fitch equivalent of A-1.

See "Liquidity and Capital Management—Liquidity Management—Other Investments Portfolio" for more information on our other investments portfolio.

Derivative Counterparty Credit Exposure

The primary credit exposure that we have on a derivative transaction is that a counterparty will default on payments due, which could result in us having to acquire a replacement derivative from a different counterparty at a higher cost or we may be unable to find a suitable replacement. Our derivative counterparty credit exposure relates principally to interest-rate derivative contracts.

Historically, our risk management derivative transactions have been made pursuant to bilateral contracts with a specific counterparty governed by the terms of an International Swaps and Derivatives Association Inc. master agreement. Pursuant to regulations implementing the Dodd-Frank Act, we are required to submit certain categories of interest-rate swaps to a derivatives clearing organization. We refer to our derivative transactions made pursuant to bilateral contracts as our OTC derivative transactions and our derivative transactions accepted for clearing by a derivatives clearing organization as our cleared derivative transactions.

Actions we take to manage our derivative counterparty credit exposure relating to our OTC derivative transactions include:

- entering into enforceable master netting arrangements with these counterparties, which allow us to net derivative assets and liabilities with the same counterparty; and
- requiring counterparties to post collateral, which includes cash, U.S. Treasury securities, agency debt and agency mortgage-related securities.

We manage our credit exposure relating to our cleared derivative transactions through enforceable master netting arrangements. These arrangements allow us to net our exposure to cleared derivatives by clearing organization and by clearing member.

Our cleared derivative transactions are submitted to a derivatives clearing organization on our behalf through a clearing member of the organization. A contract accepted by a derivatives clearing organization is governed by the terms of the clearing organization's rules and arrangements between us and the clearing member of the clearing organization. As a result, we are exposed to the institutional credit risk of both the derivatives clearing organization and the member who is acting on our behalf.

We estimate our exposure to credit loss on derivative instruments by calculating the replacement cost, on a present value basis, to settle at current market prices all outstanding derivative contracts in a net gain position at the counterparty level where the right of legal offset exists.

As of December 31, 2020 and 2019, we had thirteen counterparties with which we may transact OTC derivative transactions, all of which were subject to enforceable master netting arrangements. We had outstanding notional amounts with all of these OTC counterparties, and the highest concentration by total outstanding notional amount was approximately 4% as of December 31, 2020 compared with 7% as of December 31, 2019, measured based on all derivatives outstanding.

Total exposure represents our exposure to credit loss on derivative instruments less the cash and non-cash collateral posted by our counterparties to us. This does not include collateral held in excess of exposure. Our total exposure to credit loss on derivative instruments was $179 million as of December 31, 2020 and $40 million as of December 31, 2019.

See "Note 8, Derivative Instruments" and "Note 14, Netting Arrangements" for additional information on our derivative contracts as of December 31, 2020 and 2019.

Other Counterparties

Counterparty Credit Risk Exposure Arising from the Resecuritization of Freddie Mac-Issued Securities

We began resecuritizing Freddie Mac-issued securities in June 2019 when we began issuing UMBS, which has increased our credit risk exposure and operational risk exposure to Freddie Mac, and our risk exposure to Freddie Mac is expected to increase as we issue more structured securities backed by Freddie Mac securities going forward. Our inclusion of Freddie Mac securities as collateral for the structured securities that we issue increases our counterparty credit risk exposure to Freddie Mac. In the event Freddie Mac were to fail (for credit or operational reasons) to make a payment on a payment date on Freddie Mac securities that we had resecuritized in a Fannie Mae-issued structured security, we would be responsible for making the entire payment on the Freddie Mac securities included in that structured security in order to make payments on any of our outstanding single-family Fannie Mae MBS to be paid on that payment date. Accordingly, as the amount of structured securities we issue that are backed by Freddie Mac securities grows, if Freddie Mac were to fail to meet its obligations to us under the terms of these securities, it could have a material adverse effect on our earnings and financial condition. We believe the risk of default by Freddie Mac is negligible because of the funding commitment available to Freddie Mac through its senior preferred stock purchase agreement with Treasury.

As of December 31, 2020, approximately $137.3 billion in Freddie Mac securities were backing Fannie Mae-issued structured securities. As of December 31, 2019, approximately $50.1 billion in Freddie Mac securities were backing Fannie Mae-issued structured securities. See "Business—Mortgage Securitizations—Uniform Mortgage-Backed Securities, or UMBS" and "Risk Factors—GSE and Conservatorship Risk" for more information on risks associated with our issuance of UMBS.

Central Counterparty Clearing Institutions

Fannie Mae is a clearing member of two divisions of the Fixed Income Clearing Corporation ("FICC"), a central counterparty ("CCP"). One FICC division clears our trades involving securities purchased under agreements to resell, securities sold under agreements to repurchase, and other non-mortgage related securities. The other division clears our forward purchase and sale commitments of mortgage-related securities, including dollar roll transactions. As a result of these trades , we are required to post initial and variation margin payments and are exposed to the risk that FICC fails to perform. As a clearing member of FICC, we are exposed to the risk that the CCP or one or more of the CCP's clearing members fails to perform its obligations as described below.

- A default by or the financial or operational failure of FICC would require us to replace contracts cleared through FICC, thereby increasing operational costs and potentially resulting in losses.
- We may also be exposed to losses if a clearing member of FICC defaults on its obligations as each clearing member is required to absorb a portion of those fellow-clearing member losses. As a result, we could lose the margin that we have posted to FICC. Moreover, our exposure could exceed the amount of margin that we previously posted to FICC, since FICC's rules require non-defaulting clearing members to cover, on a pro rata basis, losses caused by a clearing member's default.

We are unable to develop an estimate of the maximum potential amount of future payments that we could be required to make to FICC under these arrangements as our exposure is dependent on the volume of trades FICC clearing members execute now and in the future, which varies daily. Although we are unable to develop an estimate of our maximum exposure, we expect that losses caused by any clearing member would be partially offset by the fair value of margin posted by the defaulting clearing member and any other available assets of the CCP for those purposes. We believe that the risk of loss is remote due to the FICC's initial and daily mark-to-market margin requirements, guarantee funds and other resources that are available in the event of a default.

We actively monitor the risks associated FICC in order to effectively manage this counterparty risk and our associated liquidity exposure

Custodial Depository Institutions

Our mortgage servicer counterparties are required by our Servicing Guide to use custodial depository institutions to hold remittances of borrower payments of principal and interest on our behalf. If a custodial depository institution were to fail while holding such remittances, we would be exposed to risk for balances in excess of the deposit insurance protection and might not be able to recover all of the principal and interest payments being held by the depository on our behalf, or there might be a substantial delay in receiving these amounts. If this were to occur, we would be required to replace these amounts with our own funds to make payments that are due to Fannie Mae MBS certificateholders. Accordingly, the insolvency of one of our principal custodial depository institutions could result in significant financial losses to us. To mitigate these risks, our Servicing Guide requires our mortgage servicer counterparties to use custodial depository institutions that are insured, that are rated as "well capitalized" by their regulator and that meet certain minimum financial ratings from third-party agencies.

Mortgage Originators, Investors and Dealers

We are routinely exposed to pre-settlement risk through the purchase or sale of mortgage loans and mortgage-related securities with mortgage originators, mortgage investors and mortgage dealers. The risk is the possibility that the counterparty will be unable or unwilling to either deliver mortgage assets or compensate us for the cost to cancel or replace the transaction. We manage this risk by determining position limits with these counterparties, based upon our assessment of their creditworthiness, and by monitoring and managing these exposures.

Debt Security Dealers

The credit risk associated with dealers that commit to place our debt securities is that they will fail to honor their contracts to take delivery of the debt, which could result in delayed issuance of the debt through another dealer. We manage these risks by establishing approval standards, monitoring our exposure positions and monitoring changes in the credit quality of dealers.

Document Custodians

We use third-party document custodians to provide loan document certification and custody services for some of the loans that we purchase and securitize. In many cases, our lender customers or their affiliates also serve as document custodians for us. Our ownership rights to the mortgage loans that we own or that back our Fannie Mae MBS could be challenged if a lender intentionally or negligently pledges or sells the loans that we purchased or fails to obtain a release of prior liens on the loans that we purchased, which could result in financial losses to us. When a lender or one of its affiliates acts as a document custodian for us, the risk that our ownership interest in the loans may be adversely affected is increased, particularly in the event the lender were to become insolvent. We mitigate these risks through legal and contractual arrangements with these custodians that identify our ownership interest, as well as by establishing qualifying standards for document custodians and requiring removal of the documents to our possession or to an independent third-party document custodian if we have concerns about the solvency or competency of the document custodian.

The MERS System

The MERS® System is an electronic registry owned by Intercontinental Exchange that is widely used by participants in the mortgage finance industry to track servicing rights and ownership of loans in the United States. A large portion of the loans we own or guarantee are registered and tracked in the MERS System. Though we believe it is unlikely, if we are unable to use the MERS System, or if our use of the MERS System adversely affects our ability to enforce our rights with respect to our loans registered and tracked in the MERS System, it could create operational and legal risks for us and increase the costs and time it takes to record loans or foreclose on loans.

Market Risk Management, including Interest-Rate Risk Management

We are subject to market risk, which includes interest-rate risk and spread risk. These risks arise from our mortgage asset investments. Interest-rate risk is the risk that movements in interest rates will adversely affect the value of our assets or liabilities or our future earnings. Spread risk can result from changes in the spread between our mortgage assets and our debt and derivatives we use to hedge our position. As described in "Risk Factors" in this report, the COVID-19 pandemic has increased our market risk.

Interest-Rate Risk Management

Our goal is to manage market risk to be neutral to movements in interest rates and volatility, subject to model constraints and prevailing market conditions. We employ an integrated interest-rate risk management strategy that allows for informed risk taking within pre-defined corporate risk limits. Decisions regarding our strategy in managing interest-rate risk are based upon our corporate market risk policy and limits that are approved by our Board of Directors.

We have actively managed the interest-rate risk of our "net portfolio", which is defined below, through the following techniques:

- asset selection and structuring (that is, by identifying or structuring mortgage assets with attractive prepayment and other risk characteristics);
- issuing a broad range of both callable and non-callable debt instruments; and

- using interest-rate derivatives.

We have not actively managed or hedged our spread risk, which would include the impact of changes in the spread between our mortgage assets and debt (referred to as mortgage-to-debt spreads) after we purchase mortgage assets, other than through asset monitoring and disposition. For mortgage assets in our portfolio that we intend to hold to maturity to realize the contractual cash flows, we accept period-to-period volatility in our financial performance attributable to changes in mortgage-to-debt spreads that occur after our purchase of mortgage assets. See "Risk Factors—Market and Industry Risk" for a discussion of the risks to our business posed by changes in interest rates and changes in spreads.

We monitor current market conditions, including the interest-rate environment, to assess the impact of these conditions on individual positions and our interest-rate risk profile. In addition to qualitative factors, we use various quantitative risk metrics in determining the appropriate composition of our retained mortgage portfolio, our investments in non-mortgage securities and relative mix of debt and derivatives positions in order to remain within pre-defined risk tolerance levels that we consider acceptable. We regularly disclose two interest-rate risk metrics that estimate our interest-rate exposure: (1) fair value sensitivity to changes in interest-rate levels and the slope of the yield curve and (2) duration gap.

The metrics used to measure our interest-rate exposure are generated using internal models. Our internal models, consistent with standard practice for models used in our industry, require numerous assumptions. There are inherent limitations in any methodology used to estimate the exposure to changes in market interest rates. The reliability of our prepayment estimates and interest-rate risk metrics depends on the availability and quality of historical data for each of the types of securities in our net portfolio. When market conditions change rapidly and dramatically, the assumptions of our models may no longer accurately capture or reflect the changing conditions. On a continuous basis, management makes judgments about the appropriateness of the risk assessments indicated by the models. See "Risk Factors—Market and Industry Risk" for a discussion of the risks associated with our reliance on models to manage risk.

Sources of Interest-Rate Risk Exposure

The primary source of our interest-rate risk is the composition of our net portfolio. Our net portfolio consists of our retained mortgage portfolio assets; other investments portfolio; our outstanding debt of Fannie Mae that is used to fund the retained mortgage portfolio assets and other investments portfolio; mortgage commitments and risk management derivatives. Risk management derivatives along with our debt instruments are used to manage interest-rate risk.

Our mortgage assets consist mainly of single-family and multifamily mortgage loans. For single-family loans, borrowers have the option to prepay at any time before the scheduled maturity date or continue paying until the stated maturity. Given this prepayment option held by the borrower, we are exposed to uncertainty as to when or at what rate prepayments will occur, which affects the length of time our mortgage assets will remain outstanding and the timing of the cash flows related to these assets. This prepayment uncertainty results in a potential mismatch between the timing of receipt of cash flows related to our assets and the timing of payment of cash flows related to our liabilities.

Changes in interest rates, as well as other factors, influence mortgage prepayment rates and duration and also affect the value of our mortgage assets. When interest rates decrease, prepayment rates on fixed-rate mortgages generally accelerate because borrowers usually can pay off their existing mortgages and refinance at lower rates. Accelerated prepayment rates have the effect of shortening the duration and average life of the fixed-rate mortgage assets we hold in our net portfolio. In a declining interest-rate environment, existing mortgage assets held in our net portfolio tend to increase in value or price because these mortgages are likely to have higher interest rates than new mortgages, which are being originated at the then-current lower interest rates. Conversely, when interest rates increase, prepayment rates generally slow, which extends the duration and average life of our mortgage assets and results in a decrease in value.

Interest-Rate Risk Management Strategy

Our goal for managing the interest-rate risk of our net portfolio is to be neutral to movements in interest rates and volatility. This involves asset selection and structuring of our liabilities to match and offset the interest-rate characteristics of our retained mortgage portfolio and our investments in non-mortgage securities. Our strategy consists of the following principal elements:

- *Debt Instruments.* We issue a broad range of both callable and non-callable debt instruments to manage the duration and prepayment risk of expected cash flows of the mortgage assets we own.
- *Derivative Instruments.* We supplement our issuance of debt with derivative instruments to further reduce duration and prepayment risks.
- *Monitoring and Active Portfolio Rebalancing.* We continually monitor our risk positions and actively rebalance our portfolio of interest rate-sensitive financial instruments to maintain a close match between the duration of our assets and liabilities.

Debt Instruments

Historically, the primary tool we have used to fund the purchase of mortgage assets and manage the interest-rate risk implicit in our mortgage assets is the variety of debt instruments we issue. The debt we issue is a mix that typically consists of short- and long-term, non-callable and callable debt. The varied maturities and flexibility of these debt combinations help us in reducing the mismatch of cash flows between assets and liabilities in order to manage the duration risk associated with an investment in long-term fixed-rate assets. Callable debt helps us manage the prepayment risk associated with fixed-rate mortgage assets because the duration of callable debt changes when interest rates change in a manner similar to changes in the duration of mortgage assets. See "Liquidity and Capital Management—Liquidity Management—Debt Funding" for additional information on our debt activity.

Derivative Instruments

Derivative instruments also are an integral part of our strategy in managing interest-rate risk. Derivative instruments may be privately negotiated contracts, which are often referred to as over-the-counter derivatives, or they may be listed and traded on an exchange. When deciding whether to use derivatives, we consider a number of factors, such as cost, efficiency, the effect on our liquidity and results of operations, and our interest-rate risk management strategy.

The derivatives we use for interest-rate risk management purposes fall into these broad categories:

- *Interest-rate swap contracts.* An interest-rate swap is a transaction between two parties in which each agrees to exchange, or swap, interest payments. The interest payment amounts are tied to different interest rates or indices for a specified period of time and are generally based on a notional amount of principal. The types of interest-rate swaps we use include pay-fixed swaps, receive-fixed swaps and basis swaps.
- *Interest-rate option contracts.* These contracts primarily include pay-fixed swaptions, receive-fixed swaptions, cancellable swaps and interest-rate caps. A swaption is an option contract that allows us or a counterparty to enter into a pay-fixed or receive-fixed swap at some point in the future.
- *Foreign currency swaps.* These swaps convert debt that we issue in foreign denominated currencies into U.S. dollars. We enter into foreign currency swaps only to the extent that we hold foreign currency debt.
- *Futures.* These are standardized exchange-traded contracts that either obligate a buyer to buy an asset or a seller to sell an asset, in each case at a predetermined date and price. The types of futures contracts we enter into include SOFR and U.S. Treasuries.

We use interest-rate swaps, interest-rate options and futures, in combination with our issuance of debt securities, to better match the duration of our assets with the duration of our liabilities. We are generally an end-user of derivatives; our principal purpose in using derivatives is to manage our aggregate interest-rate risk profile within prescribed risk parameters. We generally only use derivatives that are relatively liquid and straightforward to value. We use derivatives for four primary purposes:

- as a substitute for notes and bonds that we issue in the debt markets;
- to achieve risk management objectives not obtainable with debt market securities;
- to quickly and efficiently rebalance our portfolio; and
- to hedge foreign currency exposure.

Decisions regarding the repositioning of our derivatives portfolio are based upon current assessments of our interest-rate risk profile and economic conditions, including the composition of our retained mortgage portfolio, our investments in non-mortgage securities and relative mix of our debt and derivative positions, the interest-rate environment and expected trends.

Expected Impact of Hedge Accounting

We implemented fair value hedge accounting in January 2021 to reduce the impact of interest-rate volatility on our financial results. Under this hedge program, fair value gains and losses attributable to changes in certain benchmark interest rates, such as LIBOR or SOFR, for derivatives that are in a designated hedge relationship may be reduced by offsetting gains and losses in the fair value of designated hedged mortgage loans or debt. Therefore, we expect the volatility of our financial results associated with changes in fair value due to interest rates will be reduced substantially going forward.

Measurement of Interest-Rate Risk

Below we present two quantitative metrics that provide estimates of our interest-rate risk exposure: (1) fair value sensitivity of our net portfolio to changes in interest-rate levels and slope of yield curve; and (2) duration gap. The metrics presented are calculated using internal models that require standard assumptions regarding interest rates and future prepayments of principal over the remaining life of our securities. These assumptions are derived based on the characteristics of the underlying structure of the securities and historical prepayment rates experienced at specified interest-rate levels, taking into account current market conditions, the current mortgage rates of our existing outstanding loans, loan age and other factors. On a continuous basis, management makes judgments about the appropriateness of the risk assessments and will make adjustments as necessary to properly assess our interest-rate exposure and manage our interest-rate risk. The methodologies used to calculate risk estimates are periodically changed on a prospective basis to reflect improvements in the underlying estimation process.

Interest-Rate Sensitivity to Changes in Interest-Rate Level and Slope of Yield Curve

Pursuant to a disclosure commitment with FHFA, we disclose on a monthly basis the estimated adverse impact on the fair value of our net portfolio that would result from the following hypothetical situations:

- a 50 basis point shift in interest rates; and
- a 25 basis point change in the slope of the yield curve.

In measuring the estimated impact of changes in the level of interest rates, we assume a parallel shift in all maturities of the U.S. LIBOR interest-rate swap curve.

In measuring the estimated impact of changes in the slope of the yield curve, we assume a constant 7-year rate and a shift of 16.7 basis points for the 1-year rate and shorter tenors and an opposite shift of 8.3 basis points for the 30-year rate. Rate shocks for remaining maturity points are interpolated. Our practice is to allow interest rates to go below zero in the downward shock models unless otherwise prevented through contractual floors. We believe the aforementioned interest-rate shocks for our monthly disclosures represent moderate movements in interest rates over a one-month period.

Duration Gap

Duration gap measures the price sensitivity of our assets and liabilities in our net portfolio to changes in interest rates by quantifying the difference between the estimated durations of our assets and liabilities. Our duration gap analysis reflects the extent to which the estimated maturity and repricing cash flows for our assets are matched, on average, over time and across interest-rate scenarios to those of our liabilities. A positive duration gap indicates that the duration of our assets exceeds the duration of our liabilities. We disclose duration gap on a monthly basis under the caption "Interest-Rate Risk Disclosures" in our Monthly Summary, which is available on our website and announced in a press release.

While our goal is to reduce the price sensitivity of our net portfolio to movements in interest rates, various factors can contribute to a duration gap that is either positive or negative. For example, changes in the market environment can increase or decrease the price sensitivity of our mortgage assets relative to the price sensitivity of our liabilities because of prepayment uncertainty associated with our assets. In a declining interest-rate environment, prepayment rates tend to accelerate, thereby shortening the duration and average life of the fixed-rate mortgage assets we hold in our net portfolio. Conversely, when interest rates increase, prepayment rates generally slow, which extends the duration and average life of our mortgage assets. Our debt and derivative instrument positions are used to manage the interest-rate sensitivity of our retained mortgage portfolio and our investments in non-mortgage securities. As a result, the degree to which the interest-rate sensitivity of our retained mortgage portfolio and our investments in non-mortgage securities is offset will be dependent upon, among other factors, the mix of funding and other risk management derivative instruments we use at any given point in time.

The market value sensitivities of our net portfolio are a function of both the duration and the convexity of our net portfolio. Duration provides a measure of the price sensitivity of a financial instrument to changes in interest rates while convexity reflects the degree to which the duration of the assets and liabilities in our net portfolio changes in response to a given change in interest rates. We use convexity measures to provide us with information about how quickly and by how much our net portfolio's duration may change in different interest-rate environments. The market value sensitivity of our net portfolio will depend on a number of factors, including the interest-rate environment, modeling assumptions and the composition of assets and liabilities in our net portfolio, which vary over time.

Results of Interest-Rate Sensitivity Measures

The interest-rate risk measures discussed below exclude the impact of changes in the fair value of our guaranty assets and liabilities resulting from changes in interest rates. We exclude our guaranty business from these sensitivity measures based on our current assumption that the guaranty fee income generated from future business activity will largely replace guaranty fee income lost due to mortgage prepayments.

The table below displays the pre-tax market value sensitivity of our net portfolio to changes in the level of interest rates and the slope of the yield curve as measured on the last day of each period presented. The table below also provides the daily average, minimum, maximum and standard deviation values for duration gap and for the most adverse market value impact on the net portfolio to changes in the level of interest rates and the slope of the yield curve for the three months ended December 31, 2020 and 2019.

The sensitivity measures displayed in the table below, which we disclose on a quarterly basis pursuant to a disclosure commitment with FHFA, are an extension of our monthly sensitivity measures. There are three primary differences between our monthly sensitivity disclosure and the quarterly sensitivity disclosure presented below:

- the quarterly disclosure is expanded to include the sensitivity results for larger rate level shocks of positive or negative 100 basis points;
- the monthly disclosure reflects the estimated pre-tax impact on the market value of our net portfolio calculated based on a daily average, while the quarterly disclosure reflects the estimated pre-tax impact calculated based on the estimated financial position of our net portfolio and the market environment as of the last business day of the quarter; and
- the monthly disclosure shows the most adverse pre-tax impact on the market value of our net portfolio from the hypothetical interest-rate shocks, while the quarterly disclosure includes the estimated pre-tax impact of both up and down interest-rate shocks.

Interest-Rate Sensitivity of Net Portfolio to Changes in Interest-Rate Level and Slope of Yield Curve

	As of December 31,[1][2]	
	2020	**2019**
	(Dollars in millions)	
Rate level shock:		
-100 basis points	**$ (179)**	$ 57
-50 basis points	**8**	11
+50 basis points	**(111)**	51
+100 basis points	**(154)**	160
Rate slope shock:		
-25 basis points (flattening)	**(9)**	(20)
+25 basis points (steepening)	**4**	22

	For the Three Months Ended December 31,[1][3]					
	2020			**2019**		
	Duration Gap	**Rate Slope Shock 25 bps**	**Rate Level Shock 50 bps**	**Duration Gap**	**Rate Slope Shock 25 bps**	**Rate Level Shock 50 bps**
		Market Value Sensitivity			**Market Value Sensitivity**	
	(In years)	(Dollars in millions)		(In years)	(Dollars in millions)	
Average	**0.02**	**$ (32)**	**$ (46)**	(0.02)	$ (19)	$ 5
Minimum	**(0.03)**	**(51)**	**(129)**	(0.05)	(27)	(20)
Maximum	**0.08**	**(9)**	**27**	0.04	(12)	34
Standard deviation	**0.03**	**14**	**49**	0.02	4	13

(1) Computed based on changes in U.S. LIBOR interest-rate swap curves.

(2) Measured on the last business day of each period presented.

(3) Computed based on daily values during the period presented.

The market value sensitivity of our net portfolio varies across a range of interest-rate shocks depending upon the duration and convexity profile of our net portfolio. Because the effective duration gap of our net portfolio was close to zero years in the periods presented, the convexity exposure was the primary driver of the market value sensitivity of our net portfolio as of December 31, 2020. In addition, the convexity exposure may result in similar market value sensitivities for positive and negative interest-rate shocks of the same magnitude.

We use derivatives to help manage the residual interest-rate risk exposure between our assets and liabilities. Derivatives have enabled us to keep our interest-rate risk exposure at consistently low levels in a wide range of interest-rate environments. The table below displays an example of how derivatives impacted the net market value exposure for a 50 basis point parallel interest-rate shock.

Derivative Impact on Interest-Rate Risk (50 Basis Points)

	As of December 31,[(1)]	
	2020	2019
	(Dollars in millions)	
Before derivatives	**$ (613)**	$ (197)
After derivatives	**8**	51
Effect of derivatives	**621**	248

(1) Measured on the last business day of each period presented.

Liquidity and Funding Risk Management

See "Liquidity and Capital Management" for a discussion of how we manage liquidity and funding risk.

Operational Risk Management

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people or systems, or from external events. Our corporate operational risk framework aligns with our Enterprise Risk policy, as well as the COSO Enterprise Risk Management framework, and has evolved based on the changing needs of our businesses and FHFA regulatory guidance. The Operational Risk Management group is responsible for overseeing and monitoring compliance with our operational risk program's requirements. Operational Risk Management works in conjunction with other second line of defense teams, such as Compliance and Ethics, to oversee and aggregate the full range of operational risks, including fraud, resiliency, business interruptions, processing errors, damage to physical assets, workplace safety and employment practices. To quantify our operational risk exposure, we rely on the Basel Standardized Approach, which is based on a percentage of gross income. In addition, where appropriate, we purchase insurance policies to mitigate the impact of operational losses.

See "Risk Factors—Operational Risk" for more information regarding our operational risk and "Risk Management" for more information regarding our governance of operational risk management.

Cybersecurity Risk Management

Our operations rely on the secure receipt, processing, storage and transmission of confidential and other information in our computer systems and networks and with our business partners, including proprietary, confidential or personal information that is subject to privacy laws, regulations or contractual obligations. Information security risks for large institutions like us have significantly increased in recent years and from time to time we have been, and likely will continue to be, the target of attempted cyber attacks and other information security threats. These risks are an unavoidable result of being in business, and managing these risks is part of our business activities.

We have developed and continue to enhance our cybersecurity risk management program to protect the security of our computer systems, software, networks and other technology assets against unauthorized attempts to access confidential information or to disrupt or degrade business operations. Our cybersecurity risk management program aligns to the COSO Enterprise Risk Management framework and the National Institute of Standards and Technology Framework for Improving Critical Infrastructure Cybersecurity, and has evolved based on the changing needs of our business, the evolving threat environment and FHFA regulatory guidance. Our cybersecurity risk management program extends to oversight of third parties that could be a source of cybersecurity risk, including customers that use our systems and third-party service providers. We examine the effectiveness and maturity of our cyber defenses through various means, including internal audits, targeted testing, incident response exercises, maturity assessments and industry benchmarking. We continue to strengthen our partnerships with the appropriate government and law enforcement agencies and with other businesses and cybersecurity services in order to understand the full spectrum of cybersecurity risks in the environment, enhance our defenses and improve our resiliency against cybersecurity threats. We also have obtained insurance coverage relating to cybersecurity risks. To date, we have not experienced any material losses relating to cyber attacks. For a discussion of our Board of Directors' role in overseeing the company's cybersecurity risk management, see "Directors, Executive Officers and Corporate Governance—Corporate Governance—Risk Management Oversight—Board's Role in Cybersecurity Risk Oversight."

Despite our efforts to ensure the integrity of our software, computers, systems and information, we may not be able to anticipate, detect or recognize threats to our systems and assets, or to implement effective preventive measures against all cyber threats, especially because the techniques used are increasingly sophisticated, change frequently, are complex and are often not recognized until launched. In addition, we have discussed and worked with customers, vendors, service providers, counterparties and other third parties to develop secure transmission capabilities and protect against cyber attacks, but we do not have, and may be unable to put in place, secure capabilities with all of our clients, vendors, service providers, counterparties and other third parties, and we may not be able to ensure that these third parties have appropriate controls in place to prevent cyber attacks. See "Risk Factors—Operational Risk" for additional discussion of cybersecurity risks to our business.

Model Risk Management

Our internal models require numerous assumptions and there are inherent limitations in any methodology used to estimate macroeconomic factors such as home prices, unemployment and interest rates, and their impact on borrower behavior. When market conditions change rapidly and dramatically, the assumptions of our models may no longer accurately capture or reflect the changing conditions. Management periodically makes judgments about the appropriateness of the risk assessments indicated by the models. See "Risk Factors—Operational Risk" for a discussion of the risks associated with our use of models.

Critical Accounting Policies and Estimates

The preparation of financial statements in accordance with GAAP requires management to make a number of judgments, estimates and assumptions that affect the reported amount of assets, liabilities, income and expenses in our consolidated financial statements. Understanding our accounting policies and the extent to which we use management judgment and estimates in applying these policies is integral to understanding our financial statements. We describe our most significant accounting policies in "Note 1, Summary of Significant Accounting Policies."

We evaluate our critical accounting estimates and judgments required by our policies on an ongoing basis and update them as necessary based on changing conditions. Management has discussed any significant changes in judgments and assumptions in applying our critical accounting policies with the Audit Committee of our Board of Directors. See "Risk Factors" for a discussion of the risks associated with the need for management to make judgments and estimates in applying our accounting policies and methods. We have identified one of our accounting policies, allowance for loan losses, as critical because it involves significant judgments and assumptions about highly complex and inherently uncertain matters, and the use of reasonably different estimates and assumptions could have a material impact on our reported results of operations or financial condition.

Allowance for Loan Losses

Our allowance for loan losses is a valuation account that is deducted from the amortized cost basis of HFI loans to present the net amount expected to be collected on the loans. The allowance for loan losses reflects an estimate of expected credit losses on single-family and multifamily HFI loans held by Fannie Mae and by consolidated Fannie Mae MBS trusts. We used a discounted cash flow method to measure expected credit losses on our single-family mortgage loans and an undiscounted loss method to measure expected credit losses on our multifamily mortgage loans. The models use reasonable and supportable forecasts for key economic drivers, such as home prices (single-family), rental income (multifamily) and capitalization rates (multifamily). Our modeled loan performance is based on our historical experience of loans with similar risk characteristics adjusted to reflect current conditions and reasonable and supportable forecasts. Our historical loss experience and our credit loss estimates capture the possibility of remote events that could result in credit losses on loans that are considered low risk. Our credit loss models, including the forecast data used as key inputs, are subject to our model oversight and review processes as well as other established governance and controls.

Changes to our estimate of expected credit losses, including changes due to the passage of time, are recorded through the benefit (provision) for credit losses. When calculating our allowance for loan losses, we consider only our amortized cost in the loans at the balance sheet date. We record write-offs as a reduction to the allowance for loan losses when losses are confirmed through the receipt of assets in satisfaction of a loan, such as the underlying collateral upon foreclosure or cash upon completion of a short sale. Additionally, we record write-offs as a reduction to our allowance for loan losses when a loan is determined to be uncollectible and upon the redesignation of a nonperforming and reperforming loan from HFI to HFS. We include expected recoveries of amounts previously written off and expected to be written off in determining our allowance for loan losses.

Our process for determining the measurement of expected credit losses for the period under the expected credit loss model is complex and involves significant management judgment, including a reliance on historical loss information and current economic forecasts that may not be representative of credit losses we ultimately realize. For example, uncertainty regarding the expected impacts of the COVID-19 pandemic required significant management judgment in assessing our allowance for loan losses as of December 31, 2020.

We provide more detailed information on our accounting for the allowance for loan losses in “Note 1, Summary of Significant Accounting Policies.” See “Note 4, Allowance for Loan Losses” for additional information about our current-period provision for loan losses, including a discussion of the estimates used in measuring the impact of the COVID-19 pandemic on our allowance. See “Risk Factors” for a discussion of the risks associated with the need for management to make judgments and estimates in applying our accounting policies and methods.

Impact of Future Adoption of New Accounting Guidance

We identify and discuss the expected impact on our consolidated financial statements of recently issued accounting guidance in “Note 1, Summary of Significant Accounting Policies.”

Glossary of Terms Used in This Report

Terms used in this report have the following meanings, unless the context indicates otherwise.

“Acquired credit-impaired loans” refers to loans we have acquired for which there is evidence of credit deterioration since origination and for which it is probable we will not be able to collect all of the contractually due cash flows. We record our net investment in such loans at the lower of the acquisition cost of the loan or the estimated fair value of the loan at the date of acquisition. Typically, loans we acquire from our unconsolidated MBS trusts pursuant to our option to purchase upon default meet these criteria. Because we acquire these loans from our MBS trusts at par value plus accrued interest, to the extent the par value of a loan exceeds the estimated fair value at the time we acquire the loan, we record the related fair value loss as a charge against the “Reserve for guaranty losses.”

“Advisory Bulletin” refers to FHFA’s Advisory Bulletin AB 2012-02, “Framework for Adversely Classifying Loans, Other Real Estate Owned, and Other Assets and Listing Assets for Special Mention.”

“Agency mortgage-related securities” refers to mortgage-related securities issued by Fannie Mae, Freddie Mac and Ginnie Mae.

“Alt-A mortgage loan” or *“Alt-A loan”* generally refers to a mortgage loan originated under a lender’s program offering reduced or alternative documentation than that required for a full documentation mortgage loan but may also include other alternative product features. As a result, Alt-A mortgage loans have a higher risk of default than non-Alt-A mortgage loans. We classify certain loans as Alt-A so that we can discuss our exposure to Alt-A loans in this report and elsewhere. However, there is no universally accepted definition of Alt-A loans. In reporting our Alt-A exposure, we have classified mortgage loans as Alt-A if and only if the lenders that delivered the mortgage loans to us classified the loans as Alt-A, based on documentation or other product features. We have loans with some features that are similar to Alt-A mortgage loans that we have not classified as Alt-A because they do not meet our classification criteria. We do not rely solely on our classifications of loans as Alt-A to evaluate the credit risk exposure relating to these loans in our single-family conventional guaranty book of business. For more information about the credit risk characteristics of loans in our single-family guaranty book of business, see “Single-Family Business—Single-Family Mortgage Credit Risk Management,” “Note 3, Mortgage Loans.” We have classified private-label mortgage-related securities held in our retained mortgage portfolio as Alt-A if the securities were labeled as such when issued.

“Amortization income” refers to income resulting from the amortization of cost basis adjustments, including premiums and discounts on mortgage loans and securities, as a yield adjustment over the contractual life of the loan or security. These basis adjustments often result from upfront fees that we receive at the time of loan acquisition primarily related to single-family loan-level pricing adjustments or other fees we receive from lenders, which are amortized over the contractual life of the loan.

“Business volume” refers to the sum in any given period of the unpaid principal balance of: (1) the mortgage loans and mortgage-related securities we purchase for our retained mortgage portfolio; (2) the mortgage loans we securitize into Fannie Mae MBS that are acquired by third parties; and (3) credit enhancements that we provide on our mortgage assets. It excludes mortgage loans we securitize from our portfolio and the purchase of Fannie Mae MBS for our retained mortgage portfolio.

“CECL standard” refers to Accounting Standards Update 2016-13, Financial Instruments—Credit Losses, Measurement of Credit Losses on Financial Instruments and related amendments.

“Connecticut Avenue Securities” or *“CAS”* refers to a type of security that allows Fannie Mae to transfer a portion of the credit risk from loan reference pools, consisting of certain mortgage loans in our guaranty book of business, to third-party investors.

"Connecticut Avenue Securities Credit-Linked Notes" or *"CAS CLNs"* refers to Connecticut Avenue Securities that are structured as securities issued by trusts that do not qualify as REMICs.

"Connecticut Avenue Securities REMICs" or *"CAS REMICs"* refers to Connecticut Avenue Securities that are structured as notes issued by trusts that qualify as REMICs.

"Conventional mortgage" refers to a mortgage loan that is not guaranteed or insured by the U.S. government or its agencies, such as the VA, the FHA or the Rural Development Housing and Community Facilities Program of the Department of Agriculture.

"Credit enhancement" refers to an agreement used to reduce credit risk by requiring collateral, letters of credit, mortgage insurance, corporate guarantees, inclusion in a credit risk transfer transaction reference pool, or other agreements to provide an entity with some assurance that it will be compensated to some degree in the event of a financial loss.

"FHFA" refers to the Federal Housing Finance Agency. FHFA is an independent agency of the federal government with general supervisory and regulatory authority over Fannie Mae, Freddie Mac and the Federal Home Loan Banks. FHFA is our safety and soundness regulator and our mission regulator. FHFA also has been acting as our conservator since September 6, 2008. For more information on FHFA's authority as our conservator and as our regulator, see "Business—Conservatorship, Treasury Agreements and Housing Finance Reform" and "Business—Legislation and Regulation—GSE Act and Other Legislative and Regulatory Matters."

"GSE Act" refers to the Federal Housing Enterprises Financial Safety and Soundness Act of 1992, as amended, including by the Federal Housing Finance Regulatory Reform Act of 2008. We are subject to regulation applicable to us pursuant to the GSE Act, as described in "Business—Legislation and Regulation."

"Guaranty book of business" refers to the sum of the unpaid principal balance of: (1) Fannie Mae MBS outstanding (excluding the portions of any structured securities Fannie Mae issues that are backed by Freddie Mac securities); (2) mortgage loans of Fannie Mae held in our retained mortgage portfolio; and (3) other credit enhancements that we provide on mortgage assets. It also excludes non-Fannie Mae mortgage-related securities held in our retained mortgage portfolio for which we do not provide a guaranty.

"HFI loans" or *"held-for-investment loans"* refer to mortgage loans we acquire for which we have the ability and intent to hold for the foreseeable future or until maturity.

"HFS loans" or *"held-for-sale loans"* refer to mortgage loans we acquire that we intend to sell or securitize via trusts that will not be consolidated.

"Loans," "mortgage loans" and *"mortgages"* refer to both whole loans and loan participations, secured by residential real estate, cooperative shares or by manufactured housing units.

"Loss reserves" consists of our allowance for loan losses and our reserve for guaranty losses. Through December 31, 2019, loss reserves reflect our estimate of the probable losses we have incurred in our guaranty book of business, including concessions we granted borrowers upon modification of their loans. Since our adoption of the CECL standard on January 1, 2020, our loss reserves reflect our estimate of lifetime expected credit losses rather than solely incurred losses.

"Mortgage assets," when referring to our assets, refers to both mortgage loans and mortgage-related securities we hold in our retained mortgage portfolio. For purposes of the senior preferred stock purchase agreement, the definition of mortgage assets is based on the unpaid principal balance of such assets and does not reflect market valuation adjustments, allowance for loan losses, impairments, unamortized premiums and discounts and the impact of our consolidation of variable interest entities. Our mortgage asset calculation also includes 10% of the notional value of interest-only securities we hold. We disclose the amount of our mortgage assets for purposes of the senior preferred stock purchase agreement on a monthly basis in the "Endnotes" to our Monthly Summaries, which are available on our website and announced in a press release.

"Mortgage-backed securities" or "MBS" refers generally to securities that represent beneficial interests in pools of mortgage loans or other mortgage-related securities. These securities may be issued by Fannie Mae or by others.

"Multifamily Connecticut Avenue Securities" or *"MCAS"* refers to Connecticut Avenue Securities that are structured as notes issued by trusts to transfer credit risk on our multifamily guaranty book of business to third-party investors.

"Multifamily mortgage loan" refers to a mortgage loan secured by a property containing five or more residential dwelling units.

"New business purchases" refers to single-family and multifamily whole mortgage loans purchased during the period and single-family and multifamily mortgage loans underlying Fannie Mae MBS issued during the period pursuant to lender swaps.

"Notional amount" refers to the hypothetical dollar amount in an interest rate swap transaction on which exchanged payments are based. The notional amount in an interest rate swap transaction generally is not paid or received by either party to the transaction, or generally perceived as being at risk. The notional amount is typically significantly greater than the potential market or credit loss that could result from such transaction.

"Outstanding Fannie Mae MBS" refers to the total unpaid principal balance of any type of mortgage-backed security that we issue, including UMBS, Supers, REMICs and other types of single-family or multifamily mortgage-backed securities that are held by third-party investors or in our retained mortgage portfolio. For securities held by third-party investors, it excludes the portions of any structured securities Fannie Mae issues that are backed by Freddie Mac-issued securities.

"Private-label securities" refers to mortgage-related securities issued by entities other than agency issuers Fannie Mae, Freddie Mac or Ginnie Mae.

"Refi Plus loans" refers to loans we acquired under our Refi Plus initiative, which offered refinancing flexibility to eligible Fannie Mae borrowers who were current on their loans and who applied prior to the initiative's December 31, 2018 sunset date. Refi Plus had no limits on maximum LTV ratio and provided mortgage insurance flexibilities for loans with LTV ratios greater than 80%.

"REMIC" or *"Real Estate Mortgage Investment Conduit"* refers to a type of mortgage-related security in which interest and principal payments from mortgages or mortgage-related securities are structured into separately traded securities.

"REO" refers to real-estate owned by Fannie Mae because we have foreclosed on the property or obtained the property through a deed-in-lieu of foreclosure.

"Representations and warranties" refers to a lender's assurance that a mortgage loan sold to us complies with the standards outlined in our Mortgage Selling and Servicing Contract, which incorporates the Selling and Servicing Guides, including underwriting and documentation. Violation of any representation or warranty is a breach of the lender contract, including the warranty that the loan complies with all applicable requirements of the contract, which provides us with certain rights and remedies.

"Retained mortgage portfolio" refers to the mortgage-related assets we own (excluding the portion of assets that back mortgage-related securities owned by third parties).

"Single-family mortgage loan" refers to a mortgage loan secured by a property containing four or fewer residential dwelling units.

"Structured Fannie Mae MBS" refers to Fannie Mae securitizations that are resecuritizations of UMBS or previously-issued structured securities. As described in "Business—Mortgage Securitizations—Uniform Mortgage-Backed Securities, or UMBS," structured securities can be commingled—that is, they can include both Fannie Mae securities and Freddie Mac securities as the underlying collateral for the security.

"Subprime private-label securities" generally refers to private-label mortgage-related securities held in our retained mortgage portfolio that were labeled as subprime when issued.

"TCCA fees" refers to the expense recognized as a result of the 10 basis point increase in guaranty fees on all single-family residential mortgages delivered to us on or after April 1, 2012 pursuant to the Temporary Payroll Tax Cut Continuation Act of 2011, which we remit to Treasury on a quarterly basis.

"TDR" or "troubled debt restructuring" refers to a modification to the contractual terms of a loan that results in granting a concession to a borrower experiencing financial difficulties.

"*Uniform Mortgage-Backed Securities*" or "*UMBS*" refers to the securities each of Fannie Mae and Freddie Mac issues and guarantees that are directly backed by mortgage loans it has acquired as described in "Business—Mortgage Securitizations—Uniform Mortgage-Backed Securities, or UMBS."

"Write-off" refers to loan amounts written off as uncollectible bad debts. These loan amounts are removed from our consolidated balance sheet and charged against our loss reserves when the balance is deemed uncollectible, which is generally at foreclosure or other liquidation events (such as a deed-in-lieu of foreclosure or a short-sale). Also includes write-offs related to the redesignation of loans from held for investment ("HFI") to held for sale ("HFS") and write-offs related to the Advisory Bulletin.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

Information about market risk is set forth in “MD&A—Risk Management—Market Risk Management, Including Interest-Rate Risk Management.”

Item 8. Financial Statements and Supplementary Data

Our consolidated financial statements and notes thereto are included elsewhere in this annual report on Form 10-K as described below in “Exhibits, Financial Statement Schedules.”

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Overview

We are required under applicable laws and regulations to maintain controls and procedures, which include disclosure controls and procedures as well as internal control over financial reporting, as further described below.

Evaluation of Disclosure Controls and Procedures

Disclosure Controls and Procedures

Disclosure controls and procedures refer to controls and other procedures designed to provide reasonable assurance that information required to be disclosed in the reports we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC. Disclosure controls and procedures include, without limitation, controls and procedures designed 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 accumulated and communicated to management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding our required disclosure. In designing and evaluating our disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management was required to apply its judgment in evaluating and implementing possible controls and procedures.

Evaluation of Disclosure Controls and Procedures

As required by Rule 13a-15 under the Exchange Act, management has evaluated, with the participation of our Chief Executive Officer and Chief Financial Officer, the effectiveness of our disclosure controls and procedures in effect as of December 31, 2020, the end of the period covered by this report. As a result of management’s evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were not effective at a reasonable assurance level as of December 31, 2020 or as of the date of filing this report.

Our disclosure controls and procedures were not effective as of December 31, 2020 or as of the date of filing this report because they did not adequately ensure the accumulation and communication to management of information known to FHFA that is needed to meet our disclosure obligations under the federal securities laws. As a result, we were not able to rely upon the disclosure controls and procedures that were in place as of December 31, 2020 or as of the date of this filing, and we continue to have a material weakness in our internal control over financial reporting. This material weakness is described in more detail below under “Management’s Report on Internal Control Over Financial Reporting—Description of Material Weakness.” Based on discussions with FHFA and the structural nature of this material weakness, we do not expect to remediate this material weakness while we are under conservatorship.

Management’s Report on Internal Control Over Financial Reporting

Overview

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting, as defined in rules promulgated under the Exchange Act, is a process designed by, or under the supervision of, our Chief Executive Officer and Chief Financial Officer and effected by our Board of Directors, management and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP. Internal control over financial reporting includes those policies and procedures that:

- pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of our assets;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that our receipts and expenditures are being made only in accordance with authorizations of our management and our Board of Directors; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on our financial statements.

Internal control over financial reporting cannot provide absolute assurance of achieving financial reporting objectives because of its inherent limitations. Internal control over financial reporting is a process that involves human diligence and compliance and is subject to lapses in judgment and breakdowns resulting from human failures. Internal control over financial reporting also can be circumvented by collusion or improper override. Because of such limitations, there is a risk that material misstatements may not be prevented or detected on a timely basis by internal control over financial reporting. However, these inherent limitations are known features of the financial reporting process, and it is possible to design into the process safeguards to reduce, though not eliminate, this risk.

Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2020. In making its assessment, management used the criteria established in the Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”) in May 2013. Management’s assessment of our internal control over financial reporting as of December 31, 2020 identified a material weakness, which is described below. Because of this material weakness, management has concluded that our internal control over financial reporting was not effective as of December 31, 2020 or as of the date of filing this report.

Our independent registered public accounting firm, Deloitte & Touche LLP, has issued an audit report on our internal control over financial reporting, expressing an adverse opinion on the effectiveness of our internal control over financial reporting as of December 31, 2020. This report is included below under the heading “Report of Independent Registered Public Accounting Firm.”

Description of Material Weakness

The Public Company Accounting Oversight Board’s Auditing Standard 2201 defines a material weakness as a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of the company’s annual or interim financial statements will not be prevented or detected on a timely basis.

Management has determined that we continued to have the following material weakness as of December 31, 2020 and as of the date of filing this report:

- *Disclosure Controls and Procedures.* We have been under the conservatorship of FHFA since September 6, 2008. Under the GSE Act, FHFA is an independent agency that currently functions as both our conservator and our regulator with respect to our safety, soundness and mission. Because of the nature of the conservatorship under the GSE Act, which places us under the “control” of FHFA (as that term is defined by securities laws), some of the information that we may need to meet our disclosure obligations may be solely within the knowledge of FHFA. As our conservator, FHFA has the power to take actions without our knowledge that could be material to our shareholders and other stakeholders, and could significantly affect our financial performance or our continued existence as an ongoing business. Although we and FHFA attempted to design and implement disclosure policies and procedures that would account for the conservatorship and accomplish the same objectives as a disclosure controls and procedures policy of a typical reporting company, there are inherent structural limitations on our ability to design, implement, test or operate effective disclosure controls and procedures. As both our regulator and our conservator under the GSE Act, FHFA is limited in its ability to design and implement a complete set of disclosure controls and procedures relating to Fannie Mae, particularly with respect to current reporting pursuant to Form 8-K. Similarly, as a regulated entity, we are limited in our ability to design, implement, operate and test the controls and procedures for which FHFA is responsible.

  Due to these circumstances, we have not been able to update our disclosure controls and procedures in a manner that adequately ensures the accumulation and communication to management of information known to FHFA that is needed to meet our disclosure obligations under the federal securities laws, including disclosures affecting our consolidated financial statements. As a result, we did not maintain effective controls and procedures designed to ensure complete and accurate disclosure as required by GAAP as of December 31, 2020 or as of the date of filing this report. Based on discussions with FHFA and the structural nature of this weakness, we do not expect to remediate this material weakness while we are under conservatorship.

Mitigating Actions Related to Material Weakness

As described above under "Management's Report on Internal Control Over Financial Reporting—Description of Material Weakness," we continue to have a material weakness in our internal control over financial reporting relating to our disclosure controls and procedures. However, we and FHFA have engaged in the following practices intended to permit accumulation and communication to management of information needed to meet our disclosure obligations under the federal securities laws:

- FHFA has established the Division of Resolutions, which is intended to facilitate operation of the company with the oversight of the conservator.
- We have provided drafts of our SEC filings to FHFA personnel for their review and comment prior to filing. We also have provided drafts of external press releases, statements and speeches to FHFA personnel for their review and comment prior to release.
- FHFA personnel, including senior officials, have reviewed our SEC filings prior to filing, including this annual report on Form 10-K for the year ended December 31, 2020 ("2020 Form 10-K"), and engaged in discussions regarding issues associated with the information contained in those filings. Prior to filing our 2020 Form 10-K, FHFA provided Fannie Mae management with written acknowledgment that it had reviewed the 2020 Form 10-K, and it was not aware of any material misstatements or omissions in the 2020 Form 10-K and had no objection to our filing the 2020 Form 10-K.
- Our senior management meets regularly with senior leadership at FHFA, including, but not limited to, the Director.
- FHFA representatives attend meetings frequently with various groups within the company to enhance the flow of information and to provide oversight on a variety of matters, including accounting, credit and market risk management, external communications and legal matters.
- Senior officials within FHFA's Office of the Chief Accountant have met frequently with our senior finance executives regarding our accounting policies, practices and procedures.

In view of these activities, we believe that our consolidated financial statements for the year ended December 31, 2020 have been prepared in conformity with GAAP.

Changes in Internal Control Over Financial Reporting

Overview

Management has evaluated, with the participation of our Chief Executive Officer and Chief Financial Officer, whether any changes in our internal control over financial reporting that occurred during our last fiscal quarter have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. There were no changes in our internal control over financial reporting from October 1, 2020 through December 31, 2020 that management believes have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

In the ordinary course of business, we review our system of internal control over financial reporting and make changes that we believe will improve these controls and increase efficiency, while continuing to ensure that we maintain effective internal controls. Changes may include implementing new, more efficient systems, automating manual processes and updating existing systems. For example, we are currently implementing changes to various financial system applications in stages across the company. As we continue to implement these changes, each implementation may become a significant component of our internal control over financial reporting.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To Fannie Mae:

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Fannie Mae and consolidated entities (in conservatorship) (the "Company") as of December 31, 2020, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, because of the effect of the material weakness identified below on the achievement of the objectives of the control criteria, the Company has not maintained effective internal control over financial reporting as of December 31, 2020, based on the criteria established in *Internal Control – Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2020, of the Company and our report dated February 12, 2021, expressed an unqualified opinion on those financial statements and included explanatory paragraphs regarding the Company's adoption of a new accounting standard and the Company's dependence upon the continued support from various agencies of the United States Government, including the United States Department of Treasury and the Company's conservator and regulator, the Federal Housing Finance Agency.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Material Weakness

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis. The following material weakness has been identified and included in management's assessment:

- Disclosure Controls and Procedures - The Company's disclosure controls and procedures did not adequately ensure the accumulation and communication to management of information known to the Federal Housing Finance Agency (as conservator) that is needed to meet their disclosure obligations under the federal securities laws as they relate to financial reporting.

This material weakness was considered in determining the nature, timing, and extent of audit tests applied in our audit of the consolidated financial statements as of and for the year ended December 31, 2020, of the Company and this report does not affect our report on such financial statements.

/s/ Deloitte & Touche LLP

McLean, Virginia

February 12, 2021

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Directors

Our current directors are listed below. They have provided the following information about their principal occupation, business experience and other matters.

Amy E. Alving

Age 58

Independent director since October 2013

Board committees:
- Nominating and Corporate Governance (Vice Chair)
- Risk Policy and Capital
- Strategic Initiatives and Technology (Chair)

Dr. Alving served as Chief Technology Officer and Senior Vice President at Science Applications International Corporation ("SAIC"), now known as Leidos Holdings, Inc., a scientific, engineering and technology applications company, from 2007 to 2013. Dr. Alving's prior positions include director of the Special Projects Office at the Defense Advanced Research Projects Agency, White House Fellow, and tenured faculty member at the University of Minnesota. Dr. Alving is currently a member of the Board of Directors of DXC Technology Company, where she serves as Chair of the Risk Committee and a member of the Nominating/Governance Committee. Dr. Alving is also a current member of the Board of Directors of Howmet Aerospace Inc. (formerly Arconic Inc.), where she serves as Chair of both the Governance and Nominating Committee and the Cybersecurity Advisory Subcommittee. Dr. Alving previously served on the Board of Directors of Howmet Aerospace from November 2016 to May 2017 and rejoined the Board of Directors of Howmet Aerospace in May 2018. From 2010 to 2015, Dr. Alving was a member of the Board of Directors of Pall Corporation, where she served as a member of the Audit Committee and the Nominating/Governance Committee. In addition, she is a member of the Defense Science Board and a Trustee of Princeton University.

Sheila C. Bair

Age 66

Independent director since August 2019; Board Chairwoman since November 2020

Board committees:
- Community Responsibility and Sustainability

Ms. Bair was President of Washington College from 2015 to June 2017. Prior to that, she was Senior Advisor to the Pew Charitable Trusts from 2011 to 2015. Ms. Bair was also Senior Advisor to DLA Piper, an international law firm, from 2014 to 2015. Ms. Bair was the Chair of the Federal Deposit Insurance Corporation from 2006 to 2011. From 2002 to 2006, she was the Dean's Professor of Financial Regulatory Policy for the Isenberg School of Management at the University of Massachusetts—Amherst. She also served as Assistant Secretary for Financial Institutions at the U.S. Department of the Treasury from 2001 to 2002, Senior Vice President for Government Relations of the New York Stock Exchange from 1995 to 2000, Commissioner of the Commodity Futures Trading Commission from 1991 to 1995, counsel to the New York Stock Exchange from 1988 to 1990, and counsel to Senator Bob Dole from 1981 to 1988. Ms. Bair is currently a member of the Board of Directors of Host Hotels & Resorts, Inc., where she serves as a member of the Audit Committee and the Nominating and Corporate Governance Committee. Ms. Bair is also currently a member of the Board of

Directors of Bunge Limited, where she serves as a member of the Audit Committee, the Corporate Governance and Nominations Committee, and the Enterprise Risk Management Committee. From 2014 to June 2020, Ms. Bair served as a member of the Board of Directors of the Thomson Reuters Corporation, where she served on the Risk Committee and Audit Committee. From March 2017 to March 2020, Ms. Bair served as a member of the Board of Directors of the Industrial and Commercial Bank of China Ltd. ("ICBC"), where she served on the Compensation Committee, the Nomination Committee, the Risk Management Committee, the Strategy Committee and the US Risk Committee. Ms. Bair also serves as Chair Emerita of the Systemic Risk Council, a public interest group that monitors progress on the implementation of financial reforms, and on the boards of Paxos Trust Company, LLC and its parent Kabompo Holdings, Ltd., and the Volcker Alliance.

Hugh R. Frater

Age 65

Director since January 2016

Chief Executive Officer since March 2019

Board committees:
- Community Responsibility and Sustainability

Mr. Frater was appointed Chief Executive Officer of Fannie Mae in March 2019, and prior to that time, he served as Fannie Mae's Interim Chief Executive Officer beginning in October 2018. Prior to becoming Fannie Mae's Interim Chief Executive Officer, Mr. Frater had been an independent director of Fannie Mae beginning in January 2016. Mr. Frater also serves as Non-Executive Chairman of the Board of VEREIT, Inc. Mr. Frater previously worked at Berkadia Commercial Mortgage LLC ("Berkadia"), a commercial real estate company providing comprehensive capital solutions and investment sales advisory and research services for multifamily and commercial properties. He served as Chairman of Berkadia from 2014 to 2015 and he served as Chief Executive Officer of Berkadia from 2010 to 2014. From 2007 to 2010, Mr. Frater was the Chief Operating Officer of Good Energies, Inc., and from 2004 to 2007, Mr. Frater was an Executive Vice President at The PNC Financial Services Group, Inc., where he led the real estate division. Mr. Frater was a Founding Partner and Managing Director of BlackRock, Inc. from 1988 to 2004, where he led the real estate practice. Mr. Frater serves on the MBA Real Estate Program Advisory Board at the Columbia University Graduate School of Business and is also a member of its Board of Overseers.

Renee Lewis Glover

Age 71

Independent director since January 2016

Board committees:
- Community Responsibility and Sustainability
- Nominating and Corporate Governance (Chair)
- Strategic Initiatives and Technology

Ms. Glover is the Founder and Managing Member of The Catalyst Group, LLC, a national consulting firm focused on urban revitalization, real estate development and community building, urban policy, and business transformation. Ms. Glover is currently a member of the Board of Trustees of Enterprise Community Partners, Inc., where she serves on the Executive Committee and as Chair of the Compensation and Human Resources Committee. Ms. Glover served on the Board of Directors of Habitat for Humanity International from 2006 to 2015, including serving as Chair of the Board of Directors from 2013 to 2015. Committees on which she served during her time as a member of the Board of Directors of Habitat for Humanity International included the Audit Committee, Finance Committee, Operations Committee and Executive Committee. Ms. Glover served as a member of the Board of Directors of the Federal Reserve Bank of Atlanta from 2009 to 2014, where she served on the Audit and Operational Risk Committee. She also served as a Commissioner of the Bipartisan Policy Center Housing Commission from 2011 to 2014. The Commission was responsible for developing a set of bipartisan recommendations concerning federal housing policy and housing finance. Ms. Glover served as president and chief executive officer of the Atlanta Housing Authority and its affiliates from 1994 to 2013. Prior to joining the Atlanta Housing Authority, Ms. Glover was a corporate finance attorney in Atlanta and New York. Ms. Glover served on the Board of Trustees of Starwood Waypoint Homes from February 2017 to November 2017, where she served on the Nominating and Corporate Governance Committee and the Audit Committee. Ms. Glover serves on the Advisory Board of the Penn Institute for Urban Research.

Michael J. Heid

Age 63

Independent director since May 2016

Board committees:
- Audit (Vice Chair)
- Community Responsibility and Sustainability (Chair)
- Compensation and Human Capital

Mr. Heid served as Executive Vice President (Home Lending) of Wells Fargo & Company from 1997 to his retirement in January 2016. He served in a number of positions at Wells Fargo Home Mortgage, the mortgage banking division of Wells Fargo, including as president from 2011 to 2015, as co-president from 2004 to 2011, and earlier as chief financial officer and head of Loan Servicing. Mr. Heid was employed by Wells Fargo or its predecessors since 1988. Mr. Heid is currently a member of the Board of Directors of Roosevelt Management Company LLC, where he also serves as Chair of the Risk Committee and a member of the Strategy Committee. Mr. Heid is also on the Advisory Board for Home Partners of America and Promontory Mortgage Path.

Robert H. Herz

Age 67

Independent director since June 2011

Board committees:
- Audit (Chair)
- Compensation and Human Capital (Vice Chair)
- Nominating and Corporate Governance

Mr. Herz serves as President of Robert H. Herz LLC, providing consulting services on financial reporting and other matters. He previously served as a senior advisor to and as a member of the Advisory Board of Workiva Inc. (formerly WebFilings LLC), a provider of financial reporting software, from 2011 to 2014. From 2002 to 2010, Mr. Herz was Chairman of the Financial Accounting Standards Board, or FASB. He was also a part-time member of the International Accounting Standards Board, or IASB, from 2001 to 2002. He was a partner in PricewaterhouseCoopers LLP from 1985 until his retirement in 2002. He serves on the Board of Directors of the Sustainability Accounting Standards Board Foundation, on the Advisory Board of AccountAbility, on the Advisory Board of Lukka, Inc., on the Independent Investment Committee of the United Nations Office for Project Services ("UNOPS"), and as an executive in residence at the Columbia Business School. Mr. Herz is currently a member of the Board of Directors of Morgan Stanley, where he serves as Chair of the Audit Committee and as a member of the Nominating and Governance Committee. Mr. Herz is also a current member of the Board of Directors of Workiva Inc., where he serves as a member of the Audit Committee and Nominating and Governance Committee, and a member of the Board of Directors of Paxos Trust Company, LLC and its parent Kabompo Holdings, Ltd.

Antony Jenkins

Age 59

Independent director since July 2018

Board committees:
- Audit
- Risk Policy and Capital (Vice Chair)
- Strategic Initiatives and Technology (Vice Chair)

Mr. Jenkins is the Founder and Executive Chair of 10x Future Technologies Limited, a company that is building a digital banking platform designed to redefine how banks operate and engage with customers. Mr. Jenkins was the Group Chief Executive Officer and a member of the Board of Directors of Barclays PLC from 2012 to 2015. He served as a member of the Group Executive Committee from 2009 to 2015. Prior to becoming Group Chief Executive Officer, Mr. Jenkins served in various other roles at Barclays, including as Chief Executive Officer for the Retail and Business Banking Division from 2009 to 2012, and Chief Executive Officer for Barclaycard Global Operations from 2006 to 2009. Mr. Jenkins served in various roles at Citigroup Inc. from 1989 to 2005, including as Executive Vice President for Citibrands, Executive Vice President for U.S. Hispanic, Global and Strategic Delivery SBU, Chief Executive Officer for eConsumer, and Chief Executive Officer for c2it, Citigroup's Internet payment initiative. Mr. Jenkins currently serves as Group Chairman of the Board of Directors of Currencies Direct Ltd. and as a member of the Board of Directors of Blockchain Luxembourg SA. Mr. Jenkins also serves as Chair for the Institute for Apprenticeships and Technical Education. Mr. Jenkins served as a member of Fannie Mae's Digital Advisory Council from February 2017 to June 2018.

Karin J. Kimbrough

Age 52

Independent director since March 2019

Board committees:
- Community Responsibility and Sustainability (Vice Chair)
- Compensation and Human Capital
- Nominating and Corporate Governance

Ms. Kimbrough has served as Chief Economist for LinkedIn Corporation since January 2020. Ms. Kimbrough previously served as Assistant Treasurer for Google from October 2017 to December 2019. Prior to that time, Ms. Kimbrough served as a Managing Director and Head of Macroeconomic Policy at Bank of America Merrill Lynch from 2014 to October 2017. Ms. Kimbrough worked at the Federal Reserve Bank of New York from 2005 to 2014, serving as Vice President and a director for the Financial Stability Monitoring Function in the Markets Group from 2010 to 2014 and as a manager for Analytical Development from 2005 to 2010. Ms. Kimbrough previously worked as an economist and strategist at Morgan Stanley from 2000 to 2005.

Diane C. Nordin

Age 62

Independent director since November 2013; Board Vice Chair since April 2019

Board committees:
- Audit
- Compensation and Human Capital (Chair)
- Risk Policy and Capital

Ms. Nordin served as a partner of Wellington Management Company, LLP, a private asset management company, from 1995 to 2011, and originally joined Wellington in 1991. She served in many global leadership roles at Wellington, most notably as head of Fixed Income, Vice Chair of the Compensation Committee and Audit Chair of the Wellington Management Trust Company. Ms. Nordin spent over three decades in the investment business, having previously been employed by Fidelity Investments and Putnam Investments. Ms. Nordin is a Chartered Financial Analyst. Following her retirement from the asset management industry, Ms. Nordin served as an Advanced Leadership Initiative Fellow at Harvard University from 2011 to 2012. Ms. Nordin currently serves as a member of the Board of Directors of Principal Financial Group, where she serves as a member of the Audit Committee and the Finance Committee. She also serves as a member of the Board of Directors of Antares Midco, Inc., where she serves as Chair of the Compensation Committee. Ms. Nordin also serves as a member of the Board of Governors of the CFA Institute, where she serves as Board Past Chair and Nominating Committee Chair.

Jonathan Plutzik

Age 66

Independent director since November 2009

Board committees:
- Community Responsibility and Sustainability
- Strategic Initiatives and Technology

Mr. Plutzik has served as Chairman of Betsy Ross Investors, LLC since 2005. He also has served as President of the Jonathan Plutzik and Lesley Goldwasser Family Foundation Inc. since 2003. Mr. Plutzik served as Non-Executive Chairman of the Board of Directors at Firaxis Games from 2002 to 2005. Before that, he served from 1978 to 2002 in various positions with Credit Suisse First Boston, retiring in 2002 from his role as Vice Chairman. Mr. Plutzik currently serves as a member of the Board of Directors of the Planet Word Museum, Zara's Center and Zara's Center Trust, the O, Miami Poetry Festival and the Jewish American and Holocaust Literature Association.

Manuel "Manolo" Sánchez Rodríguez

Age 55

Independent director since September 2018

Board committees:
- Nominating and Corporate Governance
- Risk Policy and Capital (Chair)
- Strategic Initiatives and Technology

Mr. Sánchez was the President and Chief Executive Officer of Compass Bank, Inc. ("Compass Bank"), a U.S. subsidiary of Banco Bilbao Vizcaya Argentaria, S.A. ("BBVA"), from 2008 to January 2017. Mr. Sánchez also served as a member of BBVA's worldwide Executive Committee and was BBVA's Country Manager for U.S. operations from 2010 to January 2017. In addition, Mr. Sánchez became Chairman of the Board of Directors of Compass Bank and its holding company, BBVA Compass Bancshares, Inc., in 2010 and served in these roles until November 2017. Mr. Sánchez joined BBVA in 1990 and served in a number of other roles at BBVA prior to becoming President and Chief Executive Officer of Compass Bank in 2008. Mr. Sánchez currently serves as a member of the Board of Directors of Stewart Information Services Corporation, where he serves as a member of the Audit Committee and the Nominating and Corporate Governance Committee. Mr. Sánchez also currently serves on the Board of Directors of BanCoppel S.A. Instutición de Banca Múltiple in Mexico City, where he is a member of the Risk Committee. From November 2018 to October 2020, Mr. Sánchez served as a member of the Board of Directors of On Deck Capital, Inc., where he was a member of the Audit Committee and the Compensation Committee. Mr. Sánchez is Founder of Adelante Ventures LLC and an advisor to several fintech companies, including Spring Labs and Topl. He is an Adjunct Professor at Rice University's Jones Graduate School of Business, where he teaches disruption in financial services with a focus on crypto currencies and blockchain. Mr. Sánchez also currently serves as a trustee or member of the Board of Directors of a number of civic, cultural and educational institutions, including the Houston Symphony, KIPP Texas Public Schools, and the Center for Houston's Future.

Corporate Governance

Conservatorship and Board Authorities

On September 6, 2008, the Director of FHFA appointed FHFA as our conservator in accordance with the GSE Act. As conservator, FHFA succeeded to all rights, titles, powers and privileges of Fannie Mae, and of any shareholder, officer or director of Fannie Mae with respect to Fannie Mae and its assets. As a result, our Board of Directors no longer had the power or duty to manage, direct or oversee our business and affairs.

As conservator, FHFA reconstituted our Board of Directors and provided the Board with specified authorities. Our directors serve on behalf of the conservator and exercise their authority as directed by and with the approval, where required, of the conservator. Our directors have no fiduciary duties to any person or entity except to the conservator. Accordingly, our directors are not obligated to consider the interests of the company, the holders of our equity or debt securities, or the holders of Fannie Mae MBS unless specifically directed to do so by the conservator.

Our Board of Directors exercises specified authorities provided to it pursuant to an order from FHFA, as our conservator. The conservator also provided instructions regarding matters for which conservator decision or notification is required. The conservator retains the authority to amend or withdraw its order and instructions at any time.

FHFA's instructions require that we obtain the conservator's decision before taking action on matters that require the consent of or consultation with Treasury under the senior preferred stock purchase agreement. See "Business—Conservatorship, Treasury Agreements and Housing Finance Reform—Treasury Agreements—Covenants under Treasury Agreements" and "Note 11, Equity" for matters that require the approval of Treasury under the senior preferred stock purchase agreement.

FHFA's instructions also require us to obtain the conservator's decision before taking action in the areas identified in the table below. For some matters, FHFA's instructions specify that our Board must review and approve the matter before we request FHFA decision, and for other matters the Board is expected to determine the appropriate level of its engagement. For some of the matters specified in the table below that require prior Board review and approval, the Board is permitted to delegate authority to a relevant Board committee.

Matters requiring prior Board review and approval:

- redemptions or repurchases of our subordinated debt, except as may be necessary to comply with the senior preferred stock purchase agreement;
- creation of any subsidiary or affiliate, or entering into a substantial transaction with a subsidiary or affiliate, except for routine ongoing transactions with CSS or the creation of, or a transaction with, a subsidiary or affiliate undertaken in the ordinary course of business;
- changes to or removal of Board risk limits that would result in an increase in the amount of risk that we may take;
- retention and termination of the external auditor;
- terminations of law firms serving as consultants to the Board;
- proposed amendments to our bylaws or to charters of our Board committees;
- setting or increasing the compensation or benefits payable to members of the Board; and
- establishing the annual operating budget.

Other matters:

- material changes in accounting policy;
- proposed changes in our business operations, activities, and transactions that in the reasonable business judgment of management are more likely than not to result in a significant increase in credit, market, reputational, operational or other key risks;
- matters that impact or question the conservator's powers, our conservatorship status, the legal effect of the conservatorship, interpretations of the senior preferred stock purchase agreement or the Financial Agency Agreement with Treasury or our performance under the Financial Agency Agreement;
- agreements relating to litigation, lawsuits, claims, demands, prosecutions, regulatory proceedings or tax matters where the amount in dispute exceeds a specified threshold, including related matters that aggregate to more than the threshold;
- mergers, acquisitions and changes in control of key counterparties where we have a direct contractual right to cease doing business with the entity or object to the merger or acquisition;
- changes to requirements, policies, frameworks, standards or products that are aligned with Freddie Mac's, pursuant to FHFA's direction;
- credit risk transfer transactions that are a new transaction type, involve a material change in terms, or involve a new type of collateral;
- transfers of mortgage servicing rights that meet minimum size thresholds and would increase the transferee's servicing of Fannie Mae seriously delinquent loans by more than a specified threshold; and
- changes in employee compensation that could significantly impact our employees, including retention awards, special incentive plans, and merit increase pool funding.

FHFA's instructions also require us to provide timely notice to FHFA of: activities that represent a significant change in current business practices, operations, policies or strategies not otherwise addressed in the instructions; exceptions and waivers to aligned requirements, policies, frameworks, standards or products if not otherwise submitted to FHFA for decision as required above; and accounting error corrections to previously-issued financial statements that are not *de minimis*. FHFA will then determine whether any such items require its decision as conservator. For more information on the conservatorship, refer to "Business—Conservatorship, Treasury Agreements and Housing Finance Reform."

Composition of Board of Directors

FHFA has directed that our Board of Directors should have a minimum of nine and not more than thirteen directors. There is a non-executive Chair of the Board, and our Chief Executive Officer is the only corporate officer serving as a director. Our Corporate Governance Guidelines, in accordance with FHFA corporate governance regulations, require a majority of Fannie Mae's directors to be independent. The Board currently has eleven members, ten of whom are independent. See "Certain Relationships and Related Transactions, and Director Independence—Director Independence" for a description of our director independence requirements and a discussion of the Board's review of the independence of all current Board members.

Our conservator appointed directors in 2008. Subsequent vacancies have been and may continue to be filled by the Board, subject to review by the conservator. FHFA's 2008 order appointing directors provided that each director serves on the Board until the earlier of (1) resignation or removal by the conservator or (2) the election of a successor director at an annual meeting of shareholders. Because FHFA as our conservator has all powers of our shareholders, we have not held shareholders' meetings since entering into conservatorship.

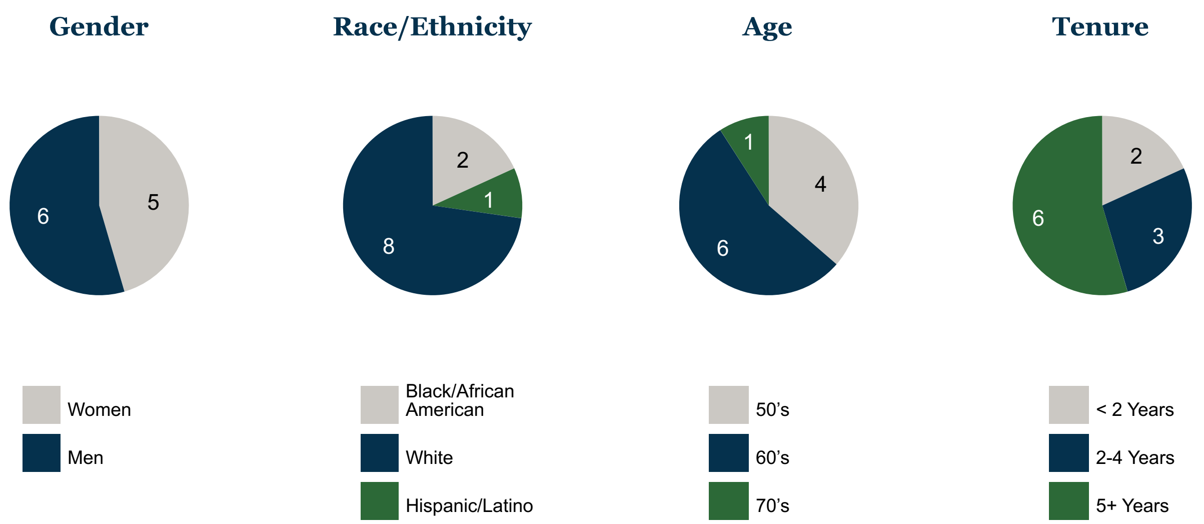
Under the Charter Act, each director is elected for a term ending on the date of our next annual shareholders' meeting. Fannie Mae's bylaws provide that each director holds office for the term for which he or she was elected or appointed and until his or her successor is chosen and qualified or until he or she dies, resigns, retires or is removed from office in accordance with applicable law or regulation, whichever occurs first. As noted above, however, the conservator appointed an initial group of directors to our Board following our entry into conservatorship, provided the Board with the authority to appoint directors to subsequent vacancies subject to conservator review, and defined the term of service of directors during conservatorship. In early 2021, we revised our Corporate Governance Guidelines to provide that, absent death, resignation or retirement, each director first appointed in 2021 or thereafter will serve until the earliest of: (1) the third anniversary of the effective date of such director's appointment while the company is in conservatorship; (2) the date on which the director is removed by the conservator while the company is in conservatorship; or (3) the date on which the director's successor is elected at an annual meeting of shareholders. The three-year Board service limitation while the company is in conservatorship is not applicable to any of the company's current directors, all of whom were appointed prior to 2021. In addition, absent a waiver from FHFA, FHFA corporate governance regulations limit service on our Board to ten years or age 72, whichever comes first. In 2019, FHFA approved a waiver of the ten-year Board term limit applicable to Mr. Plutzik, allowing him to serve on the Board through December 31, 2022.

Under the Charter Act, our Board shall at all times have as members at least one person from each of the homebuilding, mortgage lending and real estate industries, and at least one person from an organization that has represented consumer or community interests for not less than two years or one person who has demonstrated a career commitment to the provision of housing for low-income households. In addition, our Corporate Governance Guidelines provide that the Board, as a group, must be knowledgeable in business, finance, capital markets, accounting, risk management, public policy, mortgage lending, real estate, low-income housing, homebuilding, regulation of financial institutions, technology, environmental, social and governance ("ESG"), and any other areas as may be relevant to the safe and sound operation of Fannie Mae. In addition to expertise in the areas noted above, our Corporate Governance Guidelines specify that the Nominating and Corporate Governance Committee also seeks Board members who possess the highest personal values, judgment and integrity, and who understand the regulatory and policy environment in which Fannie Mae does business. The Nominating and Corporate Governance Committee also considers whether a prospective Board candidate has the ability to attend meetings and fully participate in the activities of the Board.

The Nominating and Corporate Governance Committee also considers diversity when evaluating the composition of the Board. Our Corporate Governance Guidelines specify that the Nominating and Corporate Governance Committee is committed to considering minorities, women and individuals with disabilities in the identification and evaluation process for prospective Board candidates, and that the Committee seeks Board members who represent diversity in ideas and perspectives. These provisions of our Corporate Governance Guidelines implement FHFA regulations that require the company to implement and maintain policies and procedures that, among other things, encourage the consideration of diversity in nominating or soliciting nominees for positions on our Board.

Our directors have a variety of backgrounds and overall experience. Over half of Fannie Mae's Board are women and/or racial or ethnic minorities. Our Board also has a balance of longer-serving directors with institutional knowledge and newer directors with fresh perspectives. The charts below provide information on the composition of our Board by demographic background and Board tenure.

Board Diversity



The Nominating and Corporate Governance Committee evaluates the qualifications and performance of current directors on an annual basis, taking into consideration factors related to a Board member's contribution to the effective functioning of the Board. In its assessment of current directors and evaluation of potential candidates for director, the Nominating and Corporate Governance Committee considers these factors, as well as each individual's particular experience, qualifications, attributes and skills in the areas identified in our Corporate Governance Guidelines. In concluding our current directors should continue to serve as directors, the Nominating and Corporate Governance Committee took into account their knowledge in these areas as indicated in the table below, which they gained from their experience described in "Directors."

Director Experience, Qualifications, Attributes and Skills

	Alving	Bair	Frater	Glover	Heid	Herz	Jenkins	Kimbrough	Nordin	Plutzik	Sánchez
Business	•	•	•	•	•	•	•	•	•	•	•
Finance	•	•	•	•	•	•	•	•	•	•	•
Capital Markets		•	•		•	•	•	•	•	•	•
Accounting	•	•	•	•	•	•	•	•	•	•	•
Risk Management	•	•	•	•	•	•	•	•	•	•	•
Public Policy	•	•		•	•		•	•			
Mortgage Lending		•	•		•	•	•		•	•	•
Real Estate		•	•	•	•					•	
Low-Income Housing			•	•							
Home Building				•							
Regulation of Financial Institutions		•	•	•	•	•	•		•	•	•
Technology	•	•					•	•			•
ESG	•		•	•	•	•	•	•			

Board Leadership Structure

FHFA corporate governance regulations and our Corporate Governance Guidelines require separate Chair of the Board and Chief Executive Officer positions, and require that the Chair of the Board be an independent director. A non-executive Chair structure enables non-management directors to raise issues and concerns for Board consideration without immediately involving management and is consistent with the Board's emphasis on independent oversight of management, including independent risk oversight.

Our Board has six standing committees: the Audit Committee, the Community Responsibility and Sustainability Committee, the Compensation and Human Capital Committee, the Nominating and Corporate Governance Committee, the Risk Policy and Capital Committee, and the Strategic Initiatives and Technology Committee. Pursuant to FHFA direction, with such exceptions as the conservator may direct, the Board and the standing Board committees function in accordance with:

- their designated duties and authorities as set forth in the Charter Act, other applicable federal law, FHFA's corporate governance rules, FHFA's prudential management and operations standards, FHFA written supervisory guidance and direction, and, to the extent not inconsistent with the foregoing, Delaware law (insofar as Fannie Mae has adopted its provisions for corporate governance purposes);

- Fannie Mae's bylaws and the applicable charters of Fannie Mae's Board committees; and
- such other duties or authorities as the conservator may provide.

Such duties or authorities may be modified by the conservator at any time.

Committee Charters and Corporate Governance

Our Corporate Governance Guidelines and charters for each of the Board's standing committees are posted on our website, www.fanniemae.com, in the "About Us—Corporate Governance" section. Although our equity securities are no longer listed on the New York Stock Exchange ("NYSE"), we are required by FHFA corporate governance regulations to follow specified NYSE corporate governance requirements relating to, among other things, the independence of our directors and the charter, independence, composition, expertise, duties, responsibilities and other requirements of our Board committees.

Risk Management Oversight

Our Board of Directors oversees risk management primarily through the Risk Policy and Capital Committee of the Board. FHFA corporate governance regulations set forth risk management requirements for our Board and our Risk Policy and Capital Committee, as described below. These regulations require that our Board approve, have in effect at all times, and periodically review an enterprise-wide risk management program that establishes our risk appetite, aligns the risk appetite with our strategies and objectives, and addresses our exposure to credit risk, market risk, liquidity risk, business risk and operational risk. Our risk management program must align with our risk appetite and include risk limitations appropriate to each line of business, appropriate policies and procedures relating to risk management governance, risk oversight infrastructure, and processes and systems for identifying and reporting risks, including emerging risks. Our program must also include provisions for monitoring compliance with our risk limit structure and policies relating to risk management governance, risk oversight, and effective and timely implementation of corrective actions. Additional provisions must specify management's authority and independence to carry out risk management responsibilities and the integration of risk management with management's goals and compensation structure. FHFA corporate governance regulations require our Risk Policy and Capital Committee to assist the Board in carrying out its oversight of our risk management program. These regulations also require that our Risk Policy and Capital Committee must:

- be chaired by a director not serving Fannie Mae in a management capacity;
- have at least one member with risk management experience that is commensurate with our capital structure, risk appetite, complexity, activities, size and other appropriate risk-related factors;
- have committee members with a practical understanding of risk management principles and practices relevant to Fannie Mae;
- fully document and maintain records of its meetings; and
- report directly to the Board and not as part of, or combined with, another committee.

FHFA corporate governance regulations set forth specific responsibilities for our Risk Policy and Capital Committee, including that it must:

- periodically review and recommend for Board approval an appropriate enterprise-wide risk management program that is commensurate with our capital structure, risk appetite, complexity, activities, size and other appropriate risk-related factors;
- receive and review regular reports from our Chief Risk Officer; and
- periodically review the capabilities for, and adequacy of resources allocated to, enterprise-wide risk management.

Our Risk Policy and Capital Committee Charter also sets forth the Risk Policy and Capital Committee's duties and responsibilities in overseeing risk management for all of our major categories of risk and any other emerging risks. For more information on the role of our Board and management in risk oversight, see "MD&A—Risk Management—Risk Management Governance."

Board's Role in Cybersecurity Risk Oversight

Cybersecurity risk is overseen by the Board as well as the Risk Policy and Capital Committee and the Strategic Initiatives and Technology Committee of the Board. The Risk Policy and Capital Committee had responsibility for oversight of cybersecurity risk matters in 2020. Beginning in 2021, the Strategic Initiatives and Technology Committee also has oversight responsibility relating to cybersecurity risk matters. The Board has also delegated oversight authority for specified cybersecurity risk matters to certain management-level committees. The Board and the Risk Policy and Capital Committee engaged in discussions throughout the year with senior management on cybersecurity risk matters and received periodic reports from the company’s chief information security officer and other senior officers, including updates on our cybersecurity program, the external threat environment, and the steps the company is taking to address and mitigate the risks associated with the evolving cybersecurity threat environment. Senior management, including the senior officers mentioned above, also discussed cybersecurity developments with the Chair of the Risk Policy and Capital Committee and other Board members between Board and committee meetings, as appropriate. In addition, the Board and the Risk Policy and Capital Committee received updates regarding assessments by external parties about the company's cybersecurity program. The company has procedures to escalate information regarding certain cybersecurity incidents to the appropriate members of the Board in a timely fashion. The Board reviews and approves the company’s Cyber Risk Policy and Operational Risk Policy at least annually. The Board and its committees also have authority, as they deem appropriate to fulfill Board or committee responsibilities, to engage outside consultants or advisors, including technology consultants and cybersecurity experts.

Human Capital Management Oversight

In early 2021, our Board approved amendments to the Compensation Committee Charter to, among other things, change the name of the Compensation Committee to the Compensation and Human Capital Committee, and better reflect the Committee’s role in overseeing the company’s human capital management. The Compensation and Human Capital Committee of the Board has oversight of the company’s human capital management and its diversity and inclusion program and related policies and practices. As part of its oversight role, the Committee reviews the company’s primary compensation programs and benefits, succession planning for executives, as well as corporate culture and employee engagement.

Codes of Conduct

We have a Code of Conduct that is applicable to all officers and employees (our “Employee Code of Conduct”) and a Code of Conduct for the Board of Directors (our “Director Code of Conduct”). Our Employee Code of Conduct also serves as the code of ethics for our Chief Executive Officer and senior financial officers required by the Sarbanes-Oxley Act of 2002 and implementing regulations of the SEC. We have posted these codes on our website, www.fanniemae.com, under “Code of Conduct” in the “About Us—Corporate Governance” section. We intend to disclose any changes to or waivers from these codes that apply to any of our executive officers, our controller or our directors by posting this information on our website.

Audit Committee Membership

Our Board of Directors has a standing Audit Committee consisting of Mr. Herz, who is the Chair, Mr. Heid, who is the Vice Chair, Mr. Jenkins and Ms. Nordin, all of whom are financially literate and all of whom are independent under the requirements of independence set forth in FHFA corporate governance regulations (which requires the standard of independence adopted by the NYSE), Fannie Mae’s Corporate Governance Guidelines, and other SEC rules and regulations applicable to audit committees. The Board has determined that each member of the Audit Committee has the requisite experience, as discussed in “Directors,” to qualify as an “audit committee financial expert” under the rules and regulations of the SEC and has designated each of them as such.

Executive Sessions

Our non-management directors meet in executive session on a regularly scheduled basis. Our Board of Directors reserves time for an executive session at every regularly scheduled Board meeting. The non-executive Chair of the Board presides over these sessions.

Communications with Directors or Audit Committee

Interested parties wishing to communicate any concerns or questions about Fannie Mae to the non-executive Chair of the Board or to our non-management directors individually or as a group may do so by electronic mail addressed to “board@fanniemae.com,” or by U.S. mail addressed to Board of Directors, c/o Office of the Corporate Secretary, Fannie Mae, 1100 15th Street, NW, Washington, DC 20005. Communications may be addressed to a specific director or directors, including Ms. Bair, the Chairwoman of the Board, or to groups of directors, such as the independent or non-management directors.

Interested parties wishing to communicate with the Audit Committee regarding accounting, internal accounting controls or auditing matters may do so by electronic mail addressed to “auditcommittee@fanniemae.com,” or by U.S. mail addressed to Audit Committee, c/o Office of the Corporate Secretary, Fannie Mae, 1100 15th Street, NW, Washington, DC 20005.

The Office of the Corporate Secretary is responsible for processing all communications to a director or directors. Communications that are deemed by the Office of the Corporate Secretary to be commercial solicitations, ordinary course customer inquiries or complaints, incoherent or obscene are not forwarded to directors.

Director Nominations; Shareholder Proposals

Under the GSE Act, FHFA, as conservator, has all rights, titles, powers and privileges of the shareholders and Board of Directors of Fannie Mae. As a result, Fannie Mae's common shareholders no longer have the ability to recommend director nominees or elect the directors of Fannie Mae or bring business before any meeting of shareholders pursuant to the procedures in our bylaws. We currently do not plan to hold an annual meeting of shareholders in 2021. For more information on the conservatorship, refer to "Business—Conservatorship, Treasury Agreements and Housing Finance Reform."

ESG Matters

Overview

Initiated in 2019, our ESG strategy builds on our mission to provide liquidity and stability to the U.S. residential mortgage market and to promote access to mortgage credit. Our ESG strategy evaluates how we can create greater positive environmental and social impact through our corporate debt, Single-Family and Multifamily MBS products, and other corporate activities. Our strategy is informed by the issues most relevant to our business, such as energy-efficient and affordable housing, market conditions and global ESG standards. In early 2020, we demonstrated our commitment to the ESG strategy by setting it as one of the three strategic objectives in our new strategic plan. We describe below key components of our ESG strategy.

Our ESG strategy is underpinned by regular, transparent reporting. We plan to expand our reporting efforts beyond our Green Bond Impact Report to other efforts, including reporting based on the Sustainability Accounting Standards Board ("SASB") framework.

To underscore the importance of ESG to our business, many of the company's performance objectives for 2020 executive and employee compensation were related to ESG matters, as described in "Executive Compensation—Compensation Discussion and Analysis."

More information about ESG is available on our website, www.fanniemae.com, under "ESG" in the "About Us" section.

Environmental

We are committed to improving environmental sustainability in the homes we finance, the communities we serve, and the places we work.

Green Bonds to Finance Energy- and Water-Efficient Housing

Our green bonds are securities backed by mortgage loans that finance energy- and/or water-efficient homes. Since issuing our first green bond in 2012, through 2019, we have issued $75 billion in green MBS and $9 billion in green resecuritizations. Fannie Mae was recognized as the largest issuer of green bonds in the world for the third consecutive year in 2019. We continued our commitment to green financing in 2020, issuing a total of $13.0 billion in multifamily green MBS and $1.9 billion in green resecuritizations. We also expanded our green bond offerings in 2020 to include single-family MBS, issuing a total of $94 million in single-family green MBS.

Our green financing business from 2012 to 2019 is projected to prevent approximately 528,000 metric tons of greenhouse gas emissions and save 7.7 billion gallons of water and 7.8 billion kilo British thermal units of source energy. More information about the positive environmental and social impacts of Fannie Mae's multifamily green bonds can be found in our 2019 Multifamily Green Bond Impact Report, which is available on our website.

Climate Risk Mitigation

The increasing frequency and intensity of natural disasters continue to affect communities nationwide. We understand the importance of evaluating the risk to our guaranty book of business from potential loss attributable to weather-related natural catastrophes due to climate change. As a result, we established a Climate Impact team to assess that risk and identify best practices and strategies to mitigate the impacts such events can have on our guaranty book, sellers, servicers and borrowers. See "Risk Factors—Credit Risk" for a discussion of climate-related risks to our business and "MD&A—Risk Management—Mortgage Credit Risk Management—Natural Disaster and Climate Risk Management" for a discussion of our climate-related risk management.

Green Operations

We continue to seek to reduce the environmental footprint of our operations. In 2018, we relocated our Washington, DC headquarters to a LEED Gold building. The new headquarters reduced our environmental footprint by consolidating our DC-based employee population to a single building. This move followed the consolidation of our Dallas offices to a single, LEED Silver building in Plano, Texas. In 2020, our Washington, DC headquarters derived 45% of its energy from renewable sources and our Reston Crescent location in Virginia derived 100% of its energy from renewable sources.

Social

We help drive social and economic progress through valuable partnerships, innovative solutions and programs, and sustainable business practices.

Housing Affordability

Prudently enabling access to affordable housing for households of modest means and for underserved communities is a key priority for us. In November 2020, we published a Sustainable Bond Framework to guide our issuances of sustainable debt bonds and sustainable MBS that support housing affordability and green financing.

We offer a number of affordable loan products, including HomeReady®, a low down payment mortgage product that is designed for creditworthy low-income borrowers. In 2019, we financed approximately 299,000 home purchase mortgages to low- and very low-income borrowers (28% of single-family mortgages acquired) and approximately 385,000 rental units affordable to low- and very low-income families (65% of multifamily units financed). We provide more information on our affordable housing activities in our Annual Housing Activities Report and Annual Mortgage Report, which is available on our website. Also see "Business—Legislation and Regulation—GSE Act and Other Legislative and Regulatory Matters—Housing Goals" for information on our performance against our housing goals.

In addition to providing financing, we also engage in other activities to support housing affordability. For example, we estimate that we provided homeownership education through our primary homeownership education partner to more than 225,000 people in 2020. We also launched the Sustainable Communities Innovation Challenge in 2017. This nationwide competition provided $7 million to support solutions to help address the nation's affordable housing issues by advancing sustainable communities that provide residents integrated opportunities for employment, health and wellness, and education.

COVID-19 Response

The relief measures Fannie Mae has implemented to help borrowers, renters, lenders and servicers affected by the COVID-19 pandemic have helped keep the housing finance market functioning and many homeowners and renters in their homes during this crisis. For information about our actions in response to the COVID-19 pandemic, see "Business—Executive Summary—COVID-19 Impact—Fannie Mae Response," "MD&A—Single-Family Business—Single-Family Mortgage Credit Risk Management" and "MD&A—Multifamily Business—Multifamily Mortgage Credit Risk Management."

Attracting and Retaining Top, Diverse Talent

We recognize that fulfilling our mission requires us to foster a workplace that promotes diversity and inclusion. Our Office of Minority and Women Inclusion is responsible for creating our diversity and inclusion strategic plan, partnering with leaders across the company to ensure its effectiveness, and reporting on our progress against the plan. To further our commitment, our CEO, Hugh Frater, signed the CEO Action Pledge, which aims to advance diversity and inclusion within the workplace.

Our commitment to diversity and inclusion is demonstrated by our workforce and our leadership:

- *Workforce.* Our overall workforce consists of 44% women and 55% racial or ethnic minorities. (As of December 31, 2020.)
- *Officers.* Our officer-level employees consist of 37% women and 24% racial or ethnic minorities. (As of December 31, 2020.)
- *Board of Directors.* Over half of Fannie Mae's Board members are women and/or racial or ethnic minorities. In November 2020, Sheila Bair became Chairwoman of the Board of Directors. See "Corporate Governance—Composition of the Board of Directors" for more information on the diversity of our Board.

Fannie Mae has been recognized with several national awards or other recognition relating to its diversity and inclusion efforts, including Disability Equality Index's 2020 DEI Best Places to Work for Disability Inclusion and a 100% score on the Human Rights Campaign's 2020 Corporate Equality Index. Additional information on the awards and recognition we have received is available on our website, www.fanniemae.com, under “Awards and Recognition” in the “About Us—Who We Are” section.

For a discussion of the company’s human capital, including employee engagement, employee development, safety and resiliency, and diversity and inclusion, see “Business—Human Capital.”

Promoting Diversity in the Housing Industry

Programs. We are committed to advancing diversity in the housing industry. Below are some of the programs and partnerships we have established to advance this commitment.

- *ACCESS*: Established in 1992, Fannie Mae’s ACCESS® program provides opportunities for diverse-owned broker dealer firms to distribute our fixed-income securities to the capital markets. We included ACCESS dealers in every Benchmark Notes® issuance, Fannie Mae GeMS™ deal, Connecticut Avenue Securities® transaction and Multifamily Connecticut Avenue Securities™ transaction in 2020.
- *Appraiser Diversity Initiative*: We created the Appraiser Diversity Initiative in 2018 to help increase diversity in the real estate appraisal field. We have partnered with the National Urban League and the Appraisal Institute on this initiative to attract new entrants to the residential appraisal field and foster increased diversity through outreach, scholarships and mentoring.
- *Future Housing Leaders*: In 2018, we created Future Housing Leaders® to help create a pipeline of diverse talent for the housing industry. Future Housing Leaders connects college students from historically underrepresented groups to paid summer internship and early career opportunities in the housing industry.

Suppliers. We are also committed to ensuring the inclusion and utilization of diverse suppliers, vendors and business partners, as outlined in our Equal Opportunity in Employment and Contracting Statement, which is available on our website, www.fanniemae.com, under “Diversity and Inclusion” in the “About Us—Who We Are” section.

Community Engagement

In 2020, communities across the country faced evolving challenges exacerbated by the COVID-19 pandemic. Working within social distancing requirements, our company continued to encourage employees to contribute their time, talent and resources to participate in volunteer opportunities with organizations that align with their interests. At company-sponsored virtual events in 2020, over 2,500 employees volunteered nearly 8,000 hours. Additionally, through the company’s matching gifts program, employees, Board members and Fannie Mae collectively donated approximately $4 million to eligible non-profits in 2020.

Governance

We uphold our commitment to responsible business practices and ethical behavior in everything we do. For a discussion of our Board composition and other corporate governance matters, see “Corporate Governance.”

Oversight and Management of ESG Strategy and Activities

We established the Community Responsibility and Sustainability Committee of the Board in 2019 to steward our mission-oriented efforts and our commitment to becoming a leading ESG company. The Audit Committee, Compensation and Human Capital Committee, Nominating and Corporate Governance Committee, and Risk Policy and Capital Committee also oversee certain ESG activities.

We have a dedicated ESG team focused on further developing and implementing the company’s ESG strategy, including identifying opportunities to increase the company’s positive environmental and social impact and to report externally on this impact.

Employee and Board Ethical Conduct

Fannie Mae’s Employee Code of Conduct outlines employees' responsibilities for ethical and lawful conduct. Every year, employees must complete training on the Employee Code of Conduct and recommit to compliance with the Code. The Employee Code of Conduct references a number of ESG principles and covers topics such as workplace safety, conflicts of interest and reporting misconduct.

Fannie Mae also has a Director Code of Conduct that outlines duties and responsibilities of members of the Board, provides guidance to Board members to help them recognize and deal with ethical issues, provides mechanisms to report unethical conduct and helps foster a culture of honesty and accountability. Each member of the Board must annually certify his or her compliance with the Director Code of Conduct.

Report of the Audit Committee of the Board of Directors

The Audit Committee's charter sets forth the Audit Committee's duties and responsibilities, and provides that the Audit Committee's purpose is to:

- oversee (a) the accounting, reporting, and financial practices of the company and its subsidiaries, including the integrity of the company's financial statements and internal control over financial reporting, (b) the company's compliance with legal and regulatory requirements, (c) the external auditor's qualifications, independence, and performance, and (d) the qualifications, independence, and performance of the company's internal audit function and chief audit executive;
- approve, or recommend for Board approval, as appropriate, certain of the company's policies relating to the Audit Committee's oversight of the external auditor relationship, internal audit function, and the compliance department; and
- prepare the report required by the rules of the SEC to be included in the company's annual proxy statement in years in which Fannie Mae holds an Annual Meeting of Stockholders and files a proxy statement.

In accordance with this purpose, the Audit Committee has the authority to appoint, compensate, retain, oversee, evaluate and terminate the company's independent external auditor (referred to as the "independent auditor"); however, the Audit Committee is required to consult and obtain the decision of the conservator before exercising some of these authorities. The independent auditor reports directly to the Audit Committee. The Audit Committee is responsible for fee negotiations with the independent auditor and pre-approves the fees for and the terms of all audit and non-audit services to be provided by the independent auditor. Subject to the conservator's decision, the Audit Committee has the authority to retain counsel, accountants, experts and other advisors to assist the Audit Committee members in carrying out their duties.

As described in "Directors, Executive Officers and Corporate Governance—Corporate Governance—Audit Committee Membership," the Board has determined that all members of Fannie Mae's Audit Committee are financially literate and all are independent under the independence requirements set forth in FHFA corporate governance regulations (which require compliance with the independence standards adopted by the NYSE) and that all members of the Audit Committee are "audit committee financial experts" under the rules and regulations of the SEC.

The Audit Committee serves in an oversight capacity. Management is responsible for the financial reporting process, including the system of internal controls, for the preparation of consolidated financial statements in accordance with GAAP and for the report on the company's internal control over financial reporting. The company's independent auditor, Deloitte & Touche LLP ("Deloitte"), is responsible for planning and conducting an independent audit of those financial statements and expressing an opinion as to their conformity with GAAP and expressing an opinion on the effectiveness of the company's internal control over financial reporting. The Audit Committee's responsibility is to oversee the financial reporting process and to review and discuss management's report on the company's internal control over financial reporting. The Audit Committee relies, without independent verification, on the information provided to it and on the representations made by management, the internal audit function and the independent auditor, who generally attends each Audit Committee meeting.

For the year ended December 31, 2020, the Audit Committee, among other things:

- reviewed and discussed the company's quarterly earnings releases, quarterly reports on Form 10-Q and this Annual Report on Form 10-K, including the consolidated financial statements;
- together with the Board and the other Board Committees, including the Risk Policy and Capital Committee, reviewed the company's major legal and compliance risk exposures and the guidelines and policies that govern the process for risk assessment and risk management;
- reviewed and discussed reports from management on the company's policies regarding applicable legal and regulatory requirements;
- reviewed and discussed the plan and scope of the 2020 audit work for the independent auditor;
- reviewed, discussed and approved the 2020 internal audit plan and budget, and reviewed and discussed summaries of the significant reports by the internal audit function;
- reviewed the performance and compensation of the Chief Audit Executive and Chief Compliance Officer;
- reviewed the engagement, independence and quality control procedures of the independent auditor, as described in further detail below;

- met with and/or received reports from senior representatives of the following divisions or departments of the company: Finance, Legal, Compliance, Internal Audit, Chief Operating Officer and Enterprise Risk Management; and
- met regularly in executive sessions with each of Deloitte, the internal audit function and company management, including the Chief Financial Officer, the Chief Compliance Officer and the Chief Audit Executive, which provided an additional opportunity for Deloitte and the others noted to provide candid feedback to the Committee.

The Audit Committee also reviewed and discussed with management, the Chief Audit Executive and Deloitte:

- the audited consolidated financial statements for 2020;
- the critical accounting policies that are set forth in this Annual Report on Form 10-K;
- management's annual report on the company's internal control over financial reporting; and
- Deloitte's opinion on the consolidated financial statements, including the critical audit matters addressed during the audit, and the effectiveness of the company's internal control over financial reporting.

The Audit Committee has discussed with Deloitte the matters required to be discussed by the applicable requirements of the Public Company Accounting Oversight Board ("PCAOB") and the SEC. The Audit Committee has received from Deloitte the written disclosures and the letter required by applicable requirements of the PCAOB regarding Deloitte's communications with the Audit Committee concerning independence, and also has discussed with Deloitte its independence from the company.

In evaluating Deloitte's independence, the Audit Committee considered whether services it provided to the company beyond those rendered in connection with its audit of the company's consolidated financial statements, reviews of the company's interim condensed consolidated financial statements included in its quarterly reports on Form 10-Q and its opinion on the effectiveness of the company's internal control over financial reporting would impair its independence. The Committee also reviewed and pre-approved, among other things, the audit, audit-related and non-audit-related services performed by Deloitte. The Committee received regular updates on the amount of fees and scope of audit, audit-related and non-audit-related services provided. The Committee concluded that the provision of services by Deloitte did not impair its independence.

Deloitte has served as the company's independent auditor since 2005. Deloitte's lead audit partner and concurring partner rotate every five years, and the Audit Committee participates in the selection of the lead audit partner. The Audit Committee evaluates the independent auditor's qualifications, performance and independence on at least an annual basis. The factors the Audit Committee considered in evaluating and approving Deloitte's appointment as the company's independent auditor included:

- Deloitte's technical expertise and industry experience;
- its institutional knowledge of the company's business, significant accounting practices and system of internal control over financial reporting;
- audit effectiveness, including the quality of Deloitte's audit work, its quality control procedures, the expertise and performance of the lead audit partner, and the professionalism and demonstrated objectivity and skepticism of Deloitte's team;
- the frequency and quality of Deloitte's communication with the Committee, and the level of support provided to the Committee;
- external data on audit quality and performance and legal and regulatory matters involving Deloitte, including the results of PCAOB inspection reports and Deloitte's peer review reports, and actions by Deloitte to continue to enhance the quality of its audit practice; and
- Deloitte's independence and its policies and procedures regarding independence.

Based on the reviews, reports, meetings and discussions referred to above, and subject to the limitations on the Audit Committee's role and responsibilities described above and in the Audit Committee Charter, the Audit Committee recommended to the Board of Directors that the company's audited consolidated financial statements for 2020 be included in this Annual Report on Form 10-K for filing with the SEC. In addition, the Audit Committee approved the appointment of Fannie Mae's independent auditor, Deloitte & Touche LLP, for 2021. FHFA, as the company's conservator, approved Deloitte's appointment as Fannie Mae's independent auditor for 2021.

Audit Committee:

Robert H. Herz, Chair
Michael J. Heid, Vice Chair
Antony Jenkins
Diane C. Nordin

Executive Officers

Under our bylaws, each executive officer holds office until his or her successor is chosen and qualified or until he or she dies, resigns, retires or is removed from office, whichever occurs first.

Mr. Frater, our Chief Executive Officer, has served as a member of our Board of Directors since January 2016. Information about his business experience and other matters is provided in "Directors." As of February 12, 2021, we have seven other executive officers:

David C. Benson

Age 61

President

Joined Fannie Mae in 2002

Mr. Benson has been President since August 2018. Mr. Benson previously served as Executive Vice President and Chief Financial Officer from 2013 to August 2018, as Executive Vice President—Capital Markets, Securitization & Corporate Strategy from 2012 to 2013 and as Executive Vice President—Capital Markets from 2009 to 2012. He also served as Treasurer from 2010 to 2012. Mr. Benson previously served as Fannie Mae's Executive Vice President—Capital Markets and Treasury from 2008 to 2009, as Fannie Mae's Senior Vice President and Treasurer from 2006 to 2008, and as Fannie Mae's Vice President and Assistant Treasurer from 2002 to 2006. Prior to joining Fannie Mae, Mr. Benson was Managing Director in the fixed income division of Merrill Lynch & Co. From 1988 through 2002, he served in several capacities at Merrill Lynch in the areas of risk management, trading, debt syndication and e-commerce based in New York and London.

Celeste M. Brown

Age 44

Executive Vice President and Chief Financial Officer

Joined Fannie Mae in 2017

Ms. Brown has served as Executive Vice President and Chief Financial Officer since August 2018. Ms. Brown previously served as Fannie Mae's Senior Vice President and Deputy Chief Financial Officer from May 2017, when she joined Fannie Mae, to August 2018. Prior to joining Fannie Mae, Ms. Brown served in a variety of roles at Morgan Stanley from 1999 to April 2017, including as Global Treasurer from 2014 to April 2017 and as Head of Investor Relations from 2010 to 2014.

Michele M. Evans

Age 57

Executive Vice President—Multifamily

Joined Fannie Mae in 1992

Ms. Evans has served as Executive Vice President—Multifamily since August 2020. Prior to that time, Ms. Evans served as Multifamily Chief Operating Officer from 2009 to August 2020, first as Vice President from 2009 to 2012, and then as Senior Vice President from 2012 to August 2020. Ms. Evans served as Vice President for Corporate Affairs from 2006 to 2009. Prior to that time, Ms. Evans served in various director-level positions in the Multifamily business area from 1998 to 2006, and in various manager-level positions at the company from 1994 to 1998. Ms. Evans joined Fannie Mae in 1992 as an analyst.

Jeffery R. Hayward

Age 64

Executive Vice President and Chief Administrative Officer

Joined Fannie Mae in 1987

Mr. Hayward has served as Fannie Mae's Chief Administrative Officer since August 2020. Mr. Hayward has served in various roles at Fannie Mae for over 30 years. Mr. Hayward served as Head of Multifamily from 2012 to August 2020, first as Senior Vice President from 2012 to 2014 and then as Executive Vice President from 2014 to August 2020. He was Fannie Mae's Senior Vice President—National Servicing Organization from 2010 to 2012. He also served as Senior Vice President of Community Lending in Fannie Mae's Multifamily division from 2004 to 2010. Prior to that time, Mr. Hayward served as both a Senior Vice President and a Vice President in Fannie Mae's Single-Family division, including as Senior Vice President in the National Business Center from 2001 to 2004, as Vice President for Single-Family Business Strategy from 1999 to 2001, as Vice President for Asset Management Services from 1998 to 1999 and as Vice President for Quality Control and Operations from 1996 to 1998. Mr. Hayward also served as Vice President for Risk Management from 1993 to 1996. Before that, he served as Director, Loan Acquisition from 1992 to 1993, as Director, Marketing from 1989 to 1992, and as Senior Negotiator from 1988 to 1989. Mr. Hayward joined the company in 1987 as a senior MBS representative.

Kimberly H. Johnson

Age 48

Executive Vice President and Chief Operating Officer

Joined Fannie Mae in 2006

Ms. Johnson has served as Executive Vice President and Chief Operating Officer since March 2018. Ms. Johnson previously served as Executive Vice President and Chief Risk Officer from January 2017 to March 2018, and as Senior Vice President and Chief Risk Officer from November 2015 to January 2017. She served as Senior Vice President and Deputy Chief Risk Officer from 2013 to November 2015. Ms. Johnson served in Fannie Mae's Multifamily business as Senior Vice President for loans, securities, credit pricing and modeling, and as Vice President in our Capital Markets group with responsibility for trading multifamily loans and securities from 2009 to 2013. Prior to that time, Ms. Johnson was responsible for Metrics and Reporting for the Making Home Affordable Program from March 2009 to September 2009. Ms. Johnson joined Fannie Mae in 2006 as a Vice President in Capital Markets.

Stergios "Terry" Theologides

Age 54

Executive Vice President, General Counsel and Corporate Secretary

Joined Fannie Mae in 2019

Mr. Theologides has served as Executive Vice President, General Counsel and Corporate Secretary since March 2019. Mr. Theologides previously was in private legal practice at Theologides Law, P.C. from October 2017 to February 2019. He served as Senior Vice President, General Counsel and Secretary of CoreLogic, Inc. from 2010 to September 2017, and served as Senior Vice President and General Counsel, Information Solutions Group, of The First American Corporation, CoreLogic's predecessor, from 2009 to 2010. Mr. Theologides was Executive Vice President and General Counsel for Morgan Stanley's U.S. residential mortgage businesses from 2007 to 2009. He was Executive Vice President, General Counsel and Secretary for New Century Financial Corporation from 1998 to 2007. Mr. Theologides was in private legal practice at O'Melveny & Myers LLP from 1992 to 1996.

Ryan A. Zanin

Age 58

Executive Vice President and Chief Risk Officer

Joined Fannie Mae as an executive officer in 2021

Mr. Zanin has served as Fannie Mae's Executive Vice President and Chief Risk Officer since February 2021. Mr. Zanin has over 30 years of experience in financial services and over 20 years of experience in risk management. Mr. Zanin previously served as President and CEO of the Restructuring & Strategic Ventures Group at GE Capital from 2015 until his retirement from General Electric in July 2018. Previously, Mr. Zanin served as Chief Risk Officer of GE Capital from 2010 to 2015 and again served in that role from November 2016 until his retirement. Before joining GE Capital, Mr. Zanin served as Managing Director and Chief Risk Officer, International Capital Markets, at Wells Fargo & Company, from 2008 to 2010, and as Chief Risk Officer, Corporate and Investment Bank at Wachovia Corporation, from 2006 to 2008. Before that, he spent 14 years in leadership roles across Deutsche Bank AG and Bankers Trust Company. Mr. Zanin was a member of Fannie Mae's Board of Directors from September 2016 to January 2021, where he most recently served on the Risk Policy and Capital Committee and as Vice Chair of the Community Responsibility and Sustainability Committee.

Item 11. Executive Compensation

Compensation Discussion and Analysis

Named Executives for 2020

This Compensation Discussion and Analysis focuses on our compensation decisions and arrangements for 2020 relating to the following executives, whom we refer to as our "named executives":

- **Hugh R. Frater** — Chief Executive Officer
- **Celeste M. Brown** — Executive Vice President and Chief Financial Officer
- **David C. Benson** — President
- **Andrew J. Bon Salle** — Former Executive Vice President—Single-Family Mortgage Business *(through December 2020)*
- **Jeffery R. Hayward** — Executive Vice President and Chief Administrative Officer *(beginning August 2020)*
Former Executive Vice President and Head of Multifamily *(until August 2020)*
- **Kimberly H. Johnson** — Executive Vice President and Chief Operating Officer

These officers are our principal executive officer, our principal financial officer, and our next four most highly compensated executive officers during 2020. Andrew Bon Salle served as the company's Executive Vice President—Single-Family Mortgage Business through December 31, 2020, on which date he retired from the company. We refer to our 2020 compensation arrangements with our named executives, other than our Chief Executive Officer, as the "2020 executive compensation program."

Executive Summary

Due to our conservatorship status and other legal requirements, FHFA, our conservator and regulator, has significant oversight and approval rights over our executive compensation arrangements and determinations. Congress has also enacted legislation that significantly impacts the compensation we pay our named executives. We describe these requirements and legislation in "Legal and Regulatory Restrictions on Executive Compensation."

Total annual direct compensation for our Chief Executive Officer is limited by statute to base salary at an annual rate of $600,000 while we are in conservatorship or receivership. The 2020 executive compensation program applicable to our other named executives was developed by FHFA in consultation with Treasury. These named executives receive two principal elements of compensation: base salary, which is paid in regular installments throughout the year, and deferred salary, which is currently paid after a one-year deferral period. There are two components to deferred salary: (1) a fixed portion that is generally subject to reduction if an executive leaves the company within one year following the end of the performance year, unless he or she has met specified age and years of service requirements; and (2) an at-risk portion that is subject to reduction based on corporate and individual performance. Named executives do not receive bonuses or any form of equity compensation.

Despite the challenges posed by the COVID-19 pandemic, we had a successful year in 2020. Under the leadership of our executives, including our named executives, we had net income of $11.8 billion in 2020. As discussed in "Determination of 2020 Compensation," we achieved many milestones and accomplishments as we strived to be America's most valued housing partner. We completed all of the corporate performance goals for 2020 set by FHFA as our conservator, which we refer to as the 2020 scorecard. In addition, our Board of Directors determined that we substantially achieved all of the goals it established for 2020. We also continued to lay the groundwork for a potential exit from conservatorship while successfully pivoting and continuing operations in light of the COVID-19 pandemic.

While conserving taxpayer resources is an important objective of FHFA's design of our executive compensation program, we and FHFA understand that this objective must be balanced with our need to attract and retain qualified and experienced executives to prudently manage our $3.9 trillion guaranty book of business and enable the company to be an effective steward of taxpayer resources.

2020 Executive Compensation Program; Chief Executive Officer Compensation

Overview of 2020 Executive Compensation Program

FHFA has advised us that the design of our executive compensation program, which applies to our named executives other than our Chief Executive Officer, was intended to fulfill, and to balance, three primary objectives:

- *Maintain Lower Pay Levels to Conserve Taxpayer Resources.* Given our conservatorship status, our executive compensation program is designed generally to provide for lower pay levels relative to large financial services firms that are not in conservatorship. For new executive hires and compensation increase requests for executives, FHFA has requested that we target annual direct compensation to the 25th percentile of the market to the extent practicable and subject to appropriate exceptions.
- *Attract and Retain Executive Talent.* Our executive compensation program is intended to attract and retain executive talent with the specialized skills and knowledge necessary to effectively manage a large financial services company. Executives with these qualifications are needed for the company to continue to fulfill its important role in providing liquidity to the mortgage market and supporting the housing market, as well as to prudently manage its $3.9 trillion guaranty book of business and enable the company to be an effective steward of taxpayer resources. We face competition for qualified executives from other companies. The Compensation and Human Capital Committee regularly considers the level of our executives' compensation and whether changes are needed to attract and retain executives. See "Risk Factors" for a discussion of the risks associated with executive retention and succession planning.
- *Reduce Pay if Goals Are Not Achieved.* To support FHFA's goals for our conservatorship and encourage performance in furtherance of these goals, 30% of each named executive's total target direct compensation (other than the Chief Executive Officer's compensation) consists of at-risk deferred salary subject to reduction based on corporate and individual performance.

FHFA's objectives for our executive compensation program limit our ability to make changes to the program.

Legal and Regulatory Restrictions on Executive Compensation

The amount of compensation we may pay our named executives is subject to a number of legal and regulatory restrictions, particularly while we are in conservatorship. The conservatorship also significantly affects the process by which our executives' compensation is determined. We describe below legal and regulatory requirements that significantly affect our executive compensation program and policies.

Requirements Applicable During Conservatorship

While we are in conservatorship, we are subject to additional legal and regulatory requirements relating to our executive compensation, including the following:

- *Equity in Government Compensation Act.* The Equity in Government Compensation Act of 2015 limits the compensation and benefits for our Chief Executive Officer to the same level in effect as of January 1, 2015 while we are in conservatorship or receivership. This law also provides that compensation and benefits for our Chief Executive Officer may not be increased while we are in conservatorship or receivership. Accordingly, annual direct compensation for our Chief Executive Officer is limited to base salary at an annual rate of $600,000.
- *STOCK Act.* Pursuant to the STOCK Act and related FHFA regulations, our senior executives, including the named executives, are prohibited from receiving bonuses during conservatorship.
- *FHFA Instructions—Executive Compensation.* As our conservator, FHFA has retained the authority to approve the terms and amounts of our executive compensation. In its instructions to us, FHFA directed that management obtain FHFA's decision before entering into new compensation arrangements or increasing amounts or benefits payable under existing compensation arrangements of named executives or other executive officers as defined in SEC rules.
- *FHFA Instructions—Other Compensation*. Pursuant to FHFA instructions, FHFA's decision as conservator is required with regard to any changes in employee compensation that could significantly impact our employees, including but not limited to retention awards, special incentive plans and merit increase pool funding.
- *FHFA Directives*. As our conservator, FHFA has directed us to:
  - limit base salaries for all employees to no more than $600,000;
  - obtain FHFA's decision before entering into any compensation arrangement for a new hire where the proposed total target direct compensation is $600,000 or above;
  - obtain FHFA's decision before increasing the total target direct compensation of any employee where the proposed total target direct compensation is $600,000 or above; and
  - increase the mandatory deferral period for at-risk deferred salary as described under "Change to At-Risk Deferred Salary Deferral Period."
- *Shareholder Powers.* As our conservator, FHFA has all powers of our shareholders. Accordingly, we have not held shareholders' meetings since entering into conservatorship, nor have we held any shareholder advisory votes on executive compensation.
- *Golden Parachute Regulation.* A golden parachute payment generally refers to a compensatory payment that is contingent on or provided in connection with termination of employment. FHFA regulation pursuant to the GSE Act generally prohibits us from making golden parachute payments to any current or former director, officer, or employee of the company during any period in which we are in conservatorship, receivership or other troubled condition, unless either a specific exemption applies or the Director of FHFA approves the payments. Specific exemptions include qualified pension or retirement plans, nondiscriminatory employee plans or programs that meet specified requirements, and bona fide deferred compensation plans or arrangements that meet specified requirements.

Other Applicable Requirements

We are also subject to legal and regulatory requirements relating to our executive compensation that apply whether or not we are in conservatorship, including the following:

- *Senior Preferred Stock Purchase Agreement.* Under the terms of our senior preferred stock purchase agreement with Treasury, until the senior preferred stock is repaid or redeemed in full:

    - We may not enter into any new compensation arrangements with, or increase amounts or benefits payable under existing compensation arrangements of, any named executives or other executive officers as defined in SEC rules without the consent of the Director of FHFA, in consultation with the Secretary of the Treasury.
    - We may not sell or issue any equity securities without the prior written consent of Treasury except under limited circumstances, which effectively eliminates our ability to offer stock-based compensation.
- *Charter Act.* Under the Charter Act and related FHFA regulations, FHFA as our regulator must approve any termination benefits we offer to our named executives and certain other officers identified by FHFA.
- *GSE Act.* Pursuant to the GSE Act and related FHFA regulations, FHFA as our regulator has specified oversight authority over our executive compensation. The GSE Act directs FHFA to prohibit us from providing compensation to our named executives and certain other officers identified by FHFA that is not reasonable or comparable with compensation for employment in other similar businesses involving similar duties and responsibilities. FHFA may at any time review the reasonableness and comparability of an executive officer’s compensation and may require us to withhold any payment to the officer during such review. The GSE Act also provides that, if we are classified as significantly undercapitalized, FHFA’s prior written approval is required to pay any bonus to an executive officer or to provide certain increases in compensation to an executive officer.

Chief Executive Officer Compensation

Direct compensation for our Chief Executive Officer consists solely of a base salary at an annual rate of $600,000 and has been limited to this amount by statute since the enactment of the Equity in Government Compensation Act of 2015. For purposes of this disclosure, “direct compensation” includes salary and other cash compensation, but excludes certain health and welfare, retirement, relocation and other similar benefits. See “Compensation Tables and Other Information—Summary Compensation Table” for information about our Chief Executive Officer’s total 2020 compensation.

Our current level of Chief Executive Officer compensation puts pressure on our ability to attract and retain executive talent. Total direct compensation for our Chief Executive Officer in 2020 was more than 90% below the market median for 2019 chief executive officer compensation at comparable firms. Our inability to offer market-based compensation to our Chief Executive Officer hinders our succession planning for our chief executive officer role. See “Risk Factors” for a discussion of the risks associated with executive retention and succession planning.

Elements of 2020 Executive Compensation Program

Direct Compensation

The table below summarizes the principal elements, objectives and key features of our 2020 executive compensation program for our named executives. Our Chief Executive Officer received only base salary and no deferred salary. All elements of our named executives' direct compensation are paid in cash.

<table>
<tr><th>Compensation Element</th><th>Form</th><th>Primary Compensation Objectives</th><th>Key Features</th></tr>
<tr><td>Base Salary</td><td>Fixed cash payments, which are paid during the year on a biweekly basis.</td><td>Attract and retain named executives by providing a fixed level of current cash compensation.</td><td>Base salary reflects each named executive's level of responsibility and experience, as well as individual performance over time.

Base salary rate may not exceed $600,000 for any employee, including the named executives, while we are in conservatorship.</td></tr>
<tr><td rowspan="4">Deferred Salary

(Not applicable to our Chief Executive Officer)</td><td rowspan="4">Deferred salary is earned in biweekly increments over the course of the performance year, and is paid in quarterly installments in March, June, September and December of the following year.[1]

There are two elements of deferred salary:
• a fixed portion that is generally subject to reduction if an executive leaves the company within one year following the end of the performance year, unless he or she has met specified age and years of service requirements; and
• an at-risk portion that is subject to reduction based on assessments of corporate and individual performance following the end of the performance year.

Interest accrues on deferred salary at one-half of the one-year Treasury Bill rate in effect on the last business day immediately preceding the year in which the deferred salary is earned.</td><td colspan="2">Fixed Deferred Salary</td></tr>
<tr><td>Retain named executives.</td><td>Earned but unpaid fixed deferred salary is generally subject to reduction if a named executive leaves the company within one year following the end of the performance year, unless he or she has met the age and years of service requirements specified below. The amount of earned but unpaid fixed deferred salary received by the named executive will be reduced by 2% for each full or partial month by which the executive's separation date precedes January 31 of the second year following the performance year (or, if later, the end of the twenty-fourth month following the month in which the named executive first earned deferred salary).

The reduction provisions applicable to payments of earned but unpaid fixed deferred salary do not apply if an officer's employment terminates other than for cause at or after age 62, or age 55 with 10 years of service with Fannie Mae, or as a result of death or long-term disability.</td></tr>
<tr><td colspan="2">At-Risk Deferred Salary</td></tr>
<tr><td>Retain named executives and encourage them to achieve corporate and individual performance objectives.</td><td>Equal to 30% of each named executive's total target direct compensation. Half of at-risk deferred salary was subject to reduction based on corporate performance against the 2020 scorecard as determined by FHFA in its discretion. The remaining half of at-risk deferred salary was subject to reduction based on individual performance as determined by the Board of Directors, with FHFA's review, taking into account corporate performance against the 2020 Board of Directors' goals.

There is no potential for at-risk deferred salary to be paid out at greater than 100% of target; at-risk deferred salary is subject only to reduction.

If the executive's employment terminates due to death or long-term disability prior to the Board of Directors' and FHFA's determinations of performance, the reduction provisions applicable to payments of earned but unpaid at-risk deferred salary do not apply.</td></tr>
</table>

(1) As described in "Change to At-Risk Deferred Salary Deferral Period" below, for our current named executives, at-risk deferred salary earned beginning January 1, 2022 will be paid in March, June, September and December of the second year following the performance year.

Employee Benefits

Our employee benefits serve as an important tool in attracting and retaining senior executives. We describe the employee benefits available in 2020 to our named executives in the table below. We provide more detail on our retirement plans in "Compensation Tables and Other Information."

Benefit	Form	Primary Objective
401(k) Plan ("Retirement Savings Plan")	A tax-qualified defined contribution plan ("401(k) plan") available to our employee population as a whole.	Attract and retain named executives by providing retirement savings in a tax-efficient manner.
Non-qualified Deferred Compensation ("Supplemental Retirement Savings Plan")	The Supplemental Retirement Savings Plan is an unfunded, non-tax-qualified defined contribution plan. The plan supplements our Retirement Savings Plan by providing benefits to participants whose annual eligible earnings exceed the IRS limit on eligible compensation for 401(k) plans.	Attract and retain named executives by providing additional retirement savings.
Health, Welfare and Other Benefits	In general, the named executives are eligible for the same benefits available to our employee population as a whole, including our medical insurance plans, life insurance program and matching charitable gifts program. The named executives are also eligible to participate in our voluntary supplemental long-term disability plan, which is available to many of our employees.	Provide for the well-being of the named executive and his or her family.

Sign-on Awards and Relocation Benefits

In addition to the direct compensation and employee benefits described in the tables above, from time to time we may offer a sign-on award to a new executive to attract the executive to join Fannie Mae and/or to compensate him or her for compensation forfeited upon leaving a prior employer. We also from time to time may offer relocation benefits to a new executive to attract the executive by reimbursing him or her for costs associated with moving to the Washington, DC area.

Severance Benefits

We have not entered into agreements with any of our named executives that entitle the executive to severance benefits. Under the 2020 executive compensation program, a named executive is entitled to receive a specified portion of his or her earned but unpaid deferred salary if his or her employment is terminated for any reason other than for cause. See "Compensation Tables and Other Information—Potential Payments Upon Termination or Change-in-Control" for information on compensation that we may pay to a named executive in certain circumstances in the event the executive's employment is terminated.

Change to At-Risk Deferred Salary Deferral Period

In 2019, FHFA directed us to increase the mandatory deferral period for at-risk deferred salary received by senior vice presidents and above from one year to two years. For executives hired before January 1, 2020, this change will be effective for at-risk deferred salary earned beginning January 1, 2022. For executives hired or promoted to senior vice president on or after January 1, 2020, this change was effective for at-risk deferred salary earned beginning January 1, 2020. Accordingly, for our current named executives, at-risk deferred salary earned beginning January 1, 2022 will be paid in quarterly installments in the second year following the performance year. For example, at-risk deferred salary earned in 2022 will be paid in quarterly installments in 2024. Because our Chief Executive Officer does not receive deferred salary, his compensation is not affected by this change. This change to our executive compensation program applies for so long as we are in conservatorship.

Determination of 2020 Compensation

2020 Compensation Actions

The table below displays the 2020 direct compensation targets for each of our named executives compared to the actual amounts that will be paid to the named executives based on the assessments and determinations by FHFA, the Compensation and Human Capital Committee, and the Board of Directors. This table is presented on a different basis from, and is not intended to replace, the Summary Compensation Table required under applicable SEC rules, which is included in "Compensation Tables and Other Information—Summary Compensation Table" and includes additional forms of compensation not included in the table below.

Summary of 2020 Compensation Actions

			2020 Corporate Performance-Based At-Risk Deferred Salary		2020 Individual Performance-Based At-Risk Deferred Salary		Total	
Name and Principal Position	**2020 Base Salary Rate(1)**	**2020 Fixed Deferred Salary**	**Target**	**Actual % of Target**	**Target**	**Actual % of Target**	**Target**	**Actual(2)**
Hugh Frater Chief Executive Officer	$ 600,000	$ —	$ —	— %	$ —	— %	$ 600,000	600,000
Celeste Brown Executive Vice President and Chief Financial Officer	600,000	1,500,000	450,000	85	450,000	95	3,000,000	2,933,077
David Benson President	600,000	1,920,000	540,000	85	540,000	95	3,600,000	3,515,077
Andrew Bon Salle Former Executive Vice President—Single-Family Mortgage Business	500,000	1,775,000	487,500	85	487,500	95	3,250,000	3,190,962
Jeffery Hayward Executive Vice President and Chief Administrative Officer	500,000	1,460,000	420,000	85	420,000	95	2,800,000	2,735,231
Kimberly Johnson(3) Executive Vice President and Chief Operating Officer	500,000	1,460,000	420,000	85	420,000	95	2,800,000	2,735,231

(1) Amounts shown in this column consist of the executive's annual base salary rate, not the actual amount of base salary the executive received during 2020. Calendar year 2020 contained 27 biweekly pay periods, rather than the usual 26 biweekly pay periods. This additional pay period occurs approximately once every 11 years because we pay on a biweekly basis. As a result, except for Mr. Frater, salary amounts actually paid in 2020 are slightly higher than the named executive's annual base salary rate to reflect the additional biweekly pay period and, in the case of Mr. Bon Salle, unused vacation paid upon his retirement. These additional amounts are reflected in the "Total—Actual" sub-column in this table and in the "Salary—Base Salary" sub-column in the "Summary Compensation Table for 2020, 2019 and 2018" in "Compensation Tables and Other Information—Summary Compensation Table." In February 2021, FHFA requested that Mr. Frater repay the $23,077 payment he received for the 27th pay period net of applicable taxes. Mr. Frater voluntarily agreed to FHFA's request and will repay this amount to the company.

(2) Includes the following amounts of base salary paid to the executives in the 27th pay period in 2020: Ms. Brown: $23,077; Mr. Benson: $23,077; Mr. Hayward: $19,231; Ms. Johnson: $19,231. For Mr. Bon Salle, base salary includes $38,462 consisting of base salary paid for the 27th pay period and unused vacation paid upon his retirement. Excludes the $23,077 payment Mr. Frater received for the 27th pay period, as he will make the repayment noted above.

(3) Effective January 17, 2021, Ms. Johnson's annual target direct compensation increased to $3,000,000, consisting of $500,000 in base salary, $1,600,000 in fixed deferred salary and $900,000 in at-risk deferred salary.

Assessment of Corporate Performance against 2020 Scorecard

Overview

In October 2019, FHFA issued the 2020 scorecard, a set of corporate performance objectives and related targets for 2020. The elements of the 2020 scorecard are shown below under "FHFA Assessment." FHFA developed these objectives and related targets with input from management. Half of 2020 at-risk deferred salary, or 15% of overall 2020 total target direct compensation for each named executive other than Mr. Frater, was subject to reduction based on FHFA's assessment in its discretion of our performance against the 2020 scorecard and related objectives, including the assessment criteria identified below.

As part of the 2020 scorecard, FHFA established that, for all scorecard items, our performance would be assessed based on the extent to which:

- Our activities foster competitive, liquid, efficient, and resilient ("CLEAR") national housing finance markets that support homeowners and renters with responsible and sustainable products and programs;
- We conduct business in a safe and sound manner, anticipate and mitigate emerging risk issues and remediate identified risk concerns on a timely basis;
- We meet expectations under all of FHFA's requirements, including the conservatorship capital framework;
- We conduct initiatives with consideration for diversity and inclusion under statutory requirements consistent with FHFA's expectations;
- We cooperate and collaborate with Freddie Mac, CSS, the industry, and other stakeholders, in consultation with FHFA; and
- We deliver work products that are high quality, thorough, creative, effective, and timely.

FHFA Assessment

We provided updates to and maintained a dialogue with FHFA throughout 2020 on our performance against the 2020 scorecard, including our performance against FHFA's expectations for diversity and inclusion. In January 2021, FHFA reviewed and assessed our performance against the 2020 scorecard, with input from management and the Compensation and Human Capital Committee. FHFA determined that our overall performance against the 2020 scorecard was strong and that the portion of 2020 at-risk deferred salary for senior executives that is based on corporate performance would be paid at 85% of target. In assessing our performance against the 2020 scorecard, the factors considered by FHFA included our completion of all of the 2020 scorecard objectives and our performance against the qualitative assessment criteria referenced above. FHFA also noted our collaborative work in response to the COVID-19 national emergency.

The table below sets forth the 2020 scorecard and a summary of FHFA's assessment of our achievement against the scorecard objectives and targets. For purposes of the 2020 scorecard, "Enterprise" refers to each of Fannie Mae and Freddie Mac.

Objectives	Performance Assessment
Foster Competitive, Liquid, Efficient, And Resilient (CLEAR) National Housing Finance Markets	
The Enterprises should conduct business and undertake initiatives that support statutory mandates and ensure competitive national housing finance markets that protect taxpayers, promote liquidity through the cycle, and support sustainable homeownership and affordable rental housing.	
Housing Goals/Duty-to-Serve: Fulfill the Enterprises' Housing Goals and Duty-to-Serve plans by offering sustainable mortgage programs and conducting effective outreach.	**The objective was completed.**
Uniform Mortgage-Backed Security (UMBS): Carefully monitor and maintain UMBS cash flow alignment and take such further steps as necessary to ensure a well-functioning To-Be-Announced (TBA) securitization market.	**The objective was completed.**
Credit Score Final Rule Implementation: Implement the final Credit Score Rule with adherence to the regulation's requirements in a timely and effective manner.	**The objective was completed.**

Objectives	Performance Assessment
Key On-going Initiatives: Successfully continue to implement key on-going initiatives. • **Multifamily Caps** – manage to new multifamily cap requirements announced September 13, 2019. • **LIBOR Transition** – prepare for an effective transition from LIBOR to approved alternative reference rates. • **Limited English Proficiency (LEP)** – continue to support the needs of lenders and other market participants serving borrowers with limited English proficiency through continued progress on multi-year language access plans. • **Uniform Residential Loan Application (URLA) –** fully implement new URLA.	**The objective was completed.** FHFA acknowledged the quality, thoroughness, creativity, effectiveness and timeliness of our work on the single-family LIBOR transition and limited English proficiency initiatives, as well as our cooperation, collaboration and engagement on the URLA initiative.
Level Playing Field Standards and Increased Transparency: • Support strategies that enhance a level playing field for a wide range of mortgage market participants. ◦ Provide any requested assistance toward the development of a new Qualified Mortgage (QM) standard by the Consumer Financial Protection Bureau. • Assess additional data that could be made publicly available to enhance risk transfer markets and foster a competitive mortgage market that does not crowd out private capital.	**The objective was completed.**
Efficient Operation of State and Local Housing Markets: Assess opportunities to support and encourage state and local policies that enable the housing market to function more efficiently by (1) reducing the cost of housing production and/or (2) lowering the cost or risk of providing mortgage financing.	**The objective was completed.**
Ensure Safety and Soundness	
In order to provide mortgage liquidity through the cycle, the Enterprises should focus on operating all aspects of the business in a safe and sound manner given limited capital cushions, with a prudent risk profile and heightened risk management appropriate for conservatorship. These efforts include:	
Risk Profile: Review Enterprise risk profiles across all business activities and reduce risk and complexity to levels more appropriate for conservatorship status and limited capital cushions.	**The objective was completed.** FHFA acknowledged our cooperation, collaboration and engagement in support of FHFA's liquidity directive.
Risk Transfer: Continue to transfer a significant amount of credit risk to private markets in a commercially reasonable and safe and sound manner. • Undertake actions to meet single-family and multifamily credit risk transfer objectives established by FHFA. • Actively pursue legacy asset risk transfer activities, including sales of non-performing loans (NPL) and re-performing loans (RPL). • Under FHFA direction, undertake a comprehensive review of the credit risk transfer (CRT) program, including a cost-benefit analysis.	**The objective was completed.**
Conservatorship Capital Framework (CCF): Develop and implement business management and capital planning capabilities to fully operationalize the CCF requirements.	**The objective was completed.**

Objectives	Performance Assessment
Mortgage Servicing: Continue mortgage servicing and asset management efforts that promote stability and readiness for more challenging market conditions. • Implement Servicer Eligibility Requirements 2.0. • Assess readiness of servicers and servicing policies and processes for an economically-stressed environment.	**The objective was completed.** FHFA acknowledged the quality, thoroughness, creativity, effectiveness and timeliness of our work on this objective.
Core Operations and Technology: Increase focus on core Enterprise operational and technology management to ensure stability, resiliency, efficiency, and risk reduction. • Continue efforts to enhance business resiliency and recovery management capabilities to minimize the impact of disruptions and maintain business operations at pre-defined levels. • Continue efforts to protect the availability, integrity, and confidentiality of information. • Continue efforts to improve the efficiency and effectiveness of operations, including legacy system modernization where necessary. • Prudently oversee CSS and the Common Securitization Platform (CSP) to ensure that they support the securitization needs of the Enterprises and operate in an efficient and safe and sound manner.	**The objective was completed.** FHFA acknowledged the quality, thoroughness, creativity, effectiveness and timeliness of our work on business resiliency, protecting information, and legacy system modernization.
Prepare for a Transition Out of Conservatorship	
The Enterprises should support the development and implementation of a responsible transition plan to exit conservatorship, with appropriate readiness by the Enterprises	
Roadmap Toward End of Conservatorships: Provide support to FHFA as needed to develop a roadmap with milestones for exiting conservatorship.	**The objective was completed.**
Treasury and HUD Reform Plan Coordination and Alignment: Conduct such activities as directed by FHFA arising from recommendations in the Treasury and HUD Reform Plans.	**The objective was completed.**
Efficient Utilization of Capital: Develop and implement FHFA-approved strategies that ensure the efficient utilization of capital targeted to support the core guaranty business with adequate returns to attract the private capital necessary to enable an exit from the conservatorships.	**The objective was completed.**
Common Securitization Platform Strategy: Develop a post-conservatorship strategy and governance framework for CSS/CSP, including an assessment of any additional capabilities beneficial for the CSS/CSP to perform, to support a competitive mortgage market.	**The objective was completed.**
Address Identified Areas in Need of Improvement: Maintain an effective process to ensure that internal audit and supervisory findings are remediated by management in a timely fashion with appropriate board oversight.	**The objective was completed.**
Fair Lending: Maintain a sustainable, effective process for fair lending risk assessment, monitoring, and mitigation, and work with the FHFA's Office of Fair Lending Oversight to prepare for transition to post-conservatorship fair lending supervision and oversight.	**The objective was completed.**

Assessment of Corporate Performance against 2020 Board of Directors' Goals

In January 2020, the Board of Directors established the 2020 Board of Directors' goals, which are presented in the table below. Performance against these goals was a factor the Board of Directors considered in determining the individual performance of the named executives, other than our Chief Executive Officer, for purposes of the individual performance-based component of the named executives' 2020 at-risk deferred salary.

In December 2020 and January 2021, the Compensation and Human Capital Committee reviewed our performance against the 2020 Board of Directors' goals. In connection with the Compensation and Human Capital Committee's review, management provided the Compensation and Human Capital Committee with a report assessing management's performance against the goals, which was reviewed for accuracy by our Internal Audit group. The Compensation and Human Capital Committee also discussed performance against the goals with the Chair of the Audit Committee and the Chair of the Risk Policy and Capital Committee. The Compensation and Human Capital Committee considered management's assessment of its performance against the goals and also discussed the company's performance with our Chief Executive Officer and President. The Compensation and Human Capital Committee also discussed the performance of each named executive (other than the Chief Executive Officer) with our Chief Executive Officer.

The Compensation and Human Capital Committee concluded that management performed well against both the 2020 Board of Directors' goals and the 2020 scorecard. Despite the unprecedented challenges in 2020, Fannie Mae substantially met or exceeded all of the objectives that comprise the Board of Directors' goals and all of the objectives that comprise the 2020 scorecard. In assessing management's performance, the Compensation and Human Capital Committee recognized that the company demonstrated a commendable level of resilience in 2020, responding decisively to the challenges posed by the COVID-19 pandemic while remaining steadfast to the company's mission. Management's accomplishments during 2020 included:

- prioritizing the safety of our employees by transitioning nearly 100% of our workforce to remote operations within 48 hours;
- working with FHFA to design and implement a range of mortgage forbearance, modification and repayment plan options to help borrowers affected by the COVID-19 pandemic;
- helping servicers initiate approximately 1.3 million single-family forbearances in 2020;
- providing a record $1.4 trillion in liquidity in 2020; and
- achieving $11.8 billion in net income in 2020 in the face of volatile market and economic conditions.

The Compensation and Human Capital Committee acknowledged that, while the company faced many external challenges in 2020, historically low interest rates during the year facilitated the company's ability to meet or exceed a number of objectives. The Committee also acknowledged opportunities for improvement in management's performance in 2020, including with respect to corporate culture. Taking into account the challenges and accomplishments of 2020, the Compensation and Human Capital Committee concluded that management should be meaningfully credited for its achievements in 2020.

The Board of Directors did not assign any relative weight to the Board of Directors' goals and the Compensation and Human Capital Committee used its judgment in determining the overall level of performance. In January 2021, following its review of management's and the company's performance in 2020, and after discussions among the independent members of the Board of Directors, the Compensation and Human Capital Committee recommended and the Board of Directors determined that corporate performance against the 2020 Board of Directors' goals was 95% overall.

The Compensation and Human Capital Committee and the Board of Directors also assessed the 2020 individual performance of each named executive in January 2021. Based on their assessment that each individual named executive's 2020 performance was strong (as described in "Assessment of 2020 Individual Performance") and taking into account their assessment of corporate performance against the 2020 Board of Directors' goals, the Compensation and Human Capital Committee recommended and the Board of Directors determined that each eligible named executive would receive 95% of his or her individual performance-based at-risk deferred salary target for 2020.

The Compensation and Human Capital Committee provided FHFA with its assessments of corporate performance against the 2020 Board of Directors' goals and management's performance against the 2020 scorecard objectives. In January 2021, FHFA approved the performance-based at-risk deferred salary payments for the eligible named executives.

The table below sets forth our 2020 Board of Directors' goals and a summary of the Compensation and Human Capital Committee's assessment of our achievement against these goals.

Board of Directors' Goals	Assessment of Performance
Goals Relating to Strategic Objectives	
Ensure that Fannie Mae is a return-oriented company that is able to attract private capital while managing risk to the firm and housing finance system.	**The goal was achieved.** We met or exceeded all of our objectives relating to this strategic goal, including our objectives for return on conservator capital for single-family and multifamily acquisitions, single-family and multifamily credit risk transfers, managing our business within Board-approved risk limits, limiting administrative expenses, improving our capital and resource management capabilities, improving our cost transparency, and other planning activities designed to establish greater commercial discipline as we work toward exiting conservatorship.
Increase operational agility and accelerate the digital transformation of the firm to solidify our existing market standing while positioning us to deliver more value to our customers and the broader housing finance system.	**The goal was achieved.** We met or exceeded all of our objectives relating to this strategic goal, including our objectives for cloud adoption, competitive intelligence, and increasing our digital, technological and innovation competencies.
Build on our mission-oriented activities to become a globally-recognized, top-performing environmental, social and governance (ESG) financial services company by delivering positive mission and community outcomes with our stakeholders.	**The goal was achieved.** We believe we met all of our objectives relating to this strategic goal, including our single-family and multifamily housing goals, our duty to serve obligations, our diversity and inclusion objectives, and our objectives relating to constructing and integrating the ESG framework into our processes and business operations to align existing activities and identify new ESG activities. FHFA will make the final determination on whether we have met our 2020 housing goals and duty to serve obligations.
Goal Relating to Regulatory Requirements	
Regulatory exam engagement and responsiveness.	**The goal was substantially achieved.** We submitted requested documents to FHFA for all new FHFA examinations within mutually agreed timeframes and submitted remediation plans to FHFA for all FHFA-identified risk and control matters within established timeframes or mutually acceptable extensions. While we met the requirements of the goal, the Compensation and Human Capital Committee determined that we should continue to improve our processes for meeting FHFA's expectations with respect to risk and control matters.

Assessment of 2020 Individual Performance

Half of each of eligible named executive's 2020 at-risk deferred salary was subject to reduction based on individual performance in 2020, as determined by the Board of Directors with FHFA's approval. The Board of Directors assessed the performance of our Chief Executive Officer, who does not receive at-risk deferred salary, against goals prepared for the Chief Executive Officer, with input from the Compensation and Human Capital Committee. The Board of Directors assessed the performance and approved compensation for our other named executives with input from both the Compensation and Human Capital Committee and the Chief Executive Officer.

The Board's determinations regarding each eligible named executive's individual performance-based at-risk deferred salary for 2020 and highlights of each named executive's performance in 2020 are discussed below. As noted in "Assessment of Corporate Performance against 2020 Board of Directors' Goals" above, FHFA approved the performance-based at-risk deferred salary payments for the eligible named executives in January 2021.

Hugh Frater *Chief Executive Officer*	Mr. Frater provided outstanding leadership to the company in an extraordinarily challenging year. His 2020 accomplishments included: • provided leadership and direction to the company in a time of extraordinary challenges, including the economic and market dislocations caused by the COVID-19 pandemic and remote work for substantially all of the company. Under his leadership, the company continued to operate profitably and delivered record liquidity to the housing market, despite these challenges; • oversaw management's work to achieve all of the objectives set forth in the 2020 scorecard and substantially all of the objectives set forth in the 2020 Board of Directors' goals; • worked with and provided direction to the Management Committee to make significant progress on implementing the company's strategic plan for 2020-2022, including initiatives relating to ESG matters and preparing the company for a potential exit from conservatorship; • improved the organization's culture and employee morale through continuous, ongoing engagement with key functional and business leaders and the broader employee base; • made operational changes to increase the company's commitment to diversity and inclusion and ESG, including creating a new Executive Vice President and Chief Administrative Officer position with responsibility for those matters; • increased the company's focus on identifying and developing human capital, including through talent assessments, increasing and improving the training available to employees, and enhancing our succession planning process; and • developed a strong working relationship with the FHFA Director and his senior team, and oversaw a significant improvement in management's responsiveness to risk and control matters raised by FHFA.
David Benson *President*	The Board determined that Mr. Benson's individual performance-based at-risk deferred salary for 2020 would be paid at 95% of his target. Mr. Benson's continued strong leadership in 2020 was critical to the company's success in achieving the 2020 scorecard and Board of Directors' goals during a period of unprecedented challenges. His 2020 accomplishments included: • helped the company provide record levels of liquidity to the housing market, providing stability to the market during this critical time; • under his leadership, the company implemented relief measures to help borrowers and renters affected by the COVID-19 pandemic, including new forbearance, modification and repayment plan options, foreclosure and eviction moratoria, and the company's Here-to-Help marketing campaign; • assisted the Single-Family and Multifamily businesses to meet or exceed the company's 2020 scorecard and Board of Directors' goals, including the objectives relating to return on conservatorship capital for acquisitions, managing within Board risk limits, administrative expenses, housing goals and duty-to-serve obligations; • successfully transitioned nearly all of our workforce to remote operations within 48 hours; • played a key role in the company's initiatives to prepare for a potential exit from conservatorship, including hiring financial advisors, actively engaging with FHFA and working on underlying business changes; and • oversaw successful organizational realignment and succession activities, including the creation of the Chief Administrative Office, the transition to a new head of the Multifamily business and working with the departing head of the Single-Family business to transition his responsibilities. Mr. Benson took on the role of interim head of the Single-Family business in January 2021 following Mr. Bon Salle's retirement.

Celeste Brown

Executive Vice President and Chief Financial Officer

The Board determined that Ms. Brown's individual performance-based at-risk deferred salary for 2020 would be paid at 95% of her target. Ms. Brown's many accomplishments in 2020 provided critical support to Fannie Mae's achievement of the company's 2020 goals. Her 2020 accomplishments included:

- led the company's initiatives to prepare for a potential exit from conservatorship;
- continued focus on reducing expenses, improving our capital and resource management capabilities, improving our cost transparency and other planning activities designed to establish greater commercial discipline as we work toward exiting conservatorship;
- successfully positioned the company to respond to the COVID-19 pandemic by providing housing and economic forecasting and analysis, funding, accounting policy changes and investor engagement;
- implemented interest rate risk management frameworks, including finalizing the company's hedge accounting program launched in January 2021;
- worked with the business to analyze and respond to FHFA's new capital rule, and effectively engaged with FHFA on capital, liquidity and strategic topics; and
- met or exceeded all 2020 Board goal and 2020 scorecard objectives assigned to the Finance division, including those related to return on conservatorship capital for acquisitions, managing within Board risk limits, administrative expenses, competitive intelligence, LIBOR transition, capital markets risk profile, credit risk transfer, the conservatorship capital framework and efficient utilization of capital.

Andrew Bon Salle

Former Executive Vice President—Single-Family Mortgage Business

The Board determined that Mr. Bon Salle's individual performance-based at-risk deferred salary for 2020 would be paid at 95% of his target. Mr. Bon Salle's strong leadership of the Single-Family business in 2020 contributed to the company's achievement of its 2020 goals in a number of significant ways. His 2020 accomplishments included:

- successfully led the Single-Family business during the COVID-19 pandemic. Key role in helping the company provide stability to the single-family housing market in a time of market disruption and uncertainty, including by providing flexibilities to allow the market to function, working with FHFA to design and implement a range of mortgage forbearance, modification and repayment plan options to help borrowers affected by the pandemic, and providing forbearance to approximately 1.3 million single-family borrowers;
- met or exceeded all 2020 Board goal objectives assigned to the Single-Family business, including those relating to return on conservatorship capital for single-family acquisitions, single-family credit risk transfers, managing within Board risk limits, administrative expenses, single-family housing goals and duty-to-serve obligations;
- met or exceeded all 2020 scorecard objectives assigned to the Single-Family business, including those relating to limited English proficiency support, the uniform residential loan application, single-family risk profile, single-family credit risk transfer and mortgage servicing;
- helped the Single-Family organization quickly and effectively adapt to working remotely;
- continued to work on the company's initiatives to improve operations and enhance technology in the Single-Family business, which enabled the organization to successfully transition to remote work and assisted in our response to the COVID-19 pandemic; and
- after announcing his retirement, worked with the President to ensure a successful transition of responsibilities.

Jeffery Hayward *Executive Vice President and Chief Administrative Officer* *Former Executive Vice President and Head of Multifamily*	Mr. Hayward was promoted to Executive Vice President and Chief Administrative Officer in August 2020, and prior to that time served as Executive Vice President and Head of Multifamily. The Board determined that Mr. Hayward's individual performance-based at-risk deferred salary for 2020 would be paid at 95% of his target. Mr. Hayward's strong leadership in 2020 contributed to the company's achievement of its 2020 goals in a number of significant ways. His 2020 accomplishments included: • led the company's ESG, affordable housing, and diversity and inclusion initiatives in 2020, including meeting or exceeding all related Board goals; • in his new Chief Administrative Officer role, took actions to understand the impact of the COVID-19 pandemic on employees and enhanced resources available to employees; • assisted with a number of the company's activities relating to establishing greater commercial discipline, including closing two regional offices, building enterprise-wide metrics to track progress, and reducing costs associated with benefits offerings; • during his time as head of the Multifamily business in the first eight months of the year, led the company's efforts to meet the objectives relating to the 2020 Board goals assigned to the Multifamily business, including those relating to return on conservatorship capital for multifamily acquisitions, multifamily credit risk transfers, managing within Board risk limits, administrative expenses, multifamily housing goals and duty-to-serve obligations; • during his time as head of the Multifamily business in the first eight months of the year, led the company's efforts to meet the objectives relating to the 2020 scorecard objectives assigned to the Multifamily business, including those relating to managing to FHFA's multifamily cap requirement, multifamily risk profile, multifamily credit risk transfer and mortgage servicing; and • continued to work on initiatives to improve operations and enhance technology in the Multifamily business, which enabled the organization to successfully transition to remote work and assisted in our response to the COVID-19 pandemic.
Kimberly Johnson *Executive Vice President and Chief Operating Officer*	The Board determined that Ms. Johnson's individual performance-based at-risk deferred salary for 2020 would be paid at 95% of her target. Ms. Johnson's successful leadership of the Chief Operating Office ("COO") organization provided critical support to Fannie Mae's achievement of the company's 2020 goals. Her 2020 accomplishments included: • created a fully digital environment for our technology infrastructure, including establishing a new cloud environment, a new microservices engine, a new Application Programming Interface ("API") platform and streaming data capabilities; • modernized the company's underwriting technology infrastructure; • enabled the company to successfully and quickly transition to remote work through established resiliency practices and new technologies, which enabled the company to support the housing market and provide a record level of liquidity during the COVID-19 pandemic; also led the company's initiative to partially re-open its offices; • met or exceeded all 2020 Board goal objectives assigned to the COO organization, including those relating to cloud adoption, reducing expenses, and increasing our digital, technological and innovation competencies; • met or exceeded all 2020 scorecard objectives assigned to the COO organization, including those relating to business resiliency, recovery management capabilities, protecting the availability, integrity and confidentiality of information, improving the efficiency and effectiveness of our operations, and developing a post-conservatorship strategy and governance framework for CSS/CSP; and • developing and recruiting key talent in the COO organization.

Other Executive Compensation Considerations

Role of Compensation Consultants

The Compensation and Human Capital Committee's independent compensation consultant is Frederic W. Cook & Co., Inc. ("FW Cook"). Management's outside compensation consultant is McLagan.

For 2020, consultants from FW Cook attended meetings and advised the Compensation and Human Capital Committee and the Board of Directors on various executive compensation matters, including:

- preparing an analysis of compensation for our Chief Executive Officer and our Chief Financial Officer in comparison to comparable positions at companies in our primary comparator group, based on information in proxy statements and other reports filed by those companies with the SEC;
- reviewing McLagan's analysis of market compensation data for select senior management positions;
- reviewing various management proposals relating to compensation structures and levels, and for new hires and promotions;
- reviewing our risk assessment of our 2020 compensation program;
- assisting the Compensation and Human Capital Committee in its evaluation of our performance against the 2020 scorecard and communicating its views to FHFA;
- assisting the Compensation and Human Capital Committee in its evaluation of our performance against the 2020 Board of Directors' goals;
- facilitating the Compensation and Human Capital Committee's evaluation of our Chief Executive Officer's performance;
- informing the Compensation and Human Capital Committee of regulatory updates and market trends in compensation and benefits;
- assessing potential post-conservatorship compensation structures on behalf of the Compensation and Human Capital Committee; and
- assisting with the preparation of executive compensation disclosure in our Annual Report on Form 10-K.

For 2020, consultants from McLagan attended meetings as needed and advised management and the Compensation and Human Capital Committee on various compensation and human resources matters, including:

- providing guidance and feedback on our 2020 executive compensation program;
- defining the protocol regarding benchmarking for executives;
- advising on market trends, competitive pay levels and various compensation proposals for new hires and promotions;
- providing market compensation data for senior management positions, including the named executives' positions (other than the Chief Executive Officer and Chief Financial Officer);
- advising management on potential post-conservatorship compensation structures; and
- reviewing market data and trends, and providing Compensation and Human Capital Committee members with an opportunity to ask questions and discuss implications of trends on Fannie Mae.

Compensation Consultant Independence Assessment

Pursuant to SEC and NYSE rules, the Compensation and Human Capital Committee assessed the independence of FW Cook and McLagan most recently in December 2020. Based on its assessments, the Compensation and Human Capital Committee determined that FW Cook is independent from Fannie Mae management and has no conflicts of interest.

Because McLagan was retained by and provides services to management, it is not an independent advisor. McLagan's work raises no material conflicts of interest, and we believe any conflict of interest raised by McLagan's retention and provision of services to management as well as to the Compensation and Human Capital Committee is addressed by the Compensation and Human Capital Committee's receipt of advice from and access to FW Cook as its independent compensation consultant.

Comparator Group and Role of Benchmark Data

Our Compensation and Human Capital Committee typically requests benchmark compensation data for our senior executives on an annual basis to assess the compensation of the company's senior executives relative to our comparator group or other appropriate benchmarks described below. In 2020, the Compensation and Human Capital Committee used benchmark compensation data as one of a number of factors that informed its compensation decisions.

Finding comparable firms for purposes of benchmarking executive compensation is challenging due to our unique business, structure and mission, and the large size of our book of business compared to other financial services firms. We believe the only directly comparable firm to us is Freddie Mac. At FHFA's request, we and Freddie Mac use the same comparator group of companies for benchmarking executive compensation to provide consistency in the market data used for compensation decisions. Factors relevant to the selection of companies for our comparator group included their status as U.S. public companies, the industry in which they operate (each is a commercial bank, insurance company, finance lessor, government-sponsored enterprise or financial technology firm) and their size (in terms of assets and number of employees) relative to the size of Fannie Mae. Our primary comparator group for 2020 compensation benchmarking consisted of the following 24 companies:

- The Allstate Corporation
- Ally Financial Inc.
- American International Group, Inc.
- American Express Company
- The Bank of New York Mellon Corporation
- Capital One Financial Corporation
- Citizens Financial Group, Inc.
- Discover Financial Services
- Fifth Third Bancorp
- Freddie Mac
- The Hartford Financial Services Group, Inc.
- KeyCorp
- Mastercard Incorporated
- MetLife, Inc.
- Northern Trust Corporation
- The PNC Financial Services Group, Inc.
- Prudential Financial, Inc.
- Regions Financial Corporation
- State Street Corporation
- Synchrony Financial
- Truist Financial Corporation
- U.S. Bancorp
- Visa Inc.
- Voya Financial, Inc.

This primary comparator group was developed and approved by FHFA and the Compensation and Human Capital Committee in 2017, except for Truist Financial Corporation, a new company that was created by the December 2019 merger of two companies in the comparator group—BB&T Corporation and SunTrust Banks, Inc.

The Compensation and Human Capital Committee follows a bifurcated approach to benchmarking the compensation of senior executive positions. Under this approach, while the comparator group noted above is the primary group of companies used for benchmarking senior management pay levels, for certain senior management roles that are more comparable in function and/or scope to roles at firms outside this comparator group, the Compensation and Human Capital Committee considers pay levels against a broader or different group of companies. The company believes this more comprehensive approach results in more reliable market data.

As described in "Role of Compensation Consultants" above, in 2020, FW Cook and McLagan prepared compensation benchmarking data for the named executives and other senior management positions. The named executives' 2020 total target direct compensation was compared with 2019 compensation for the comparable position at other companies as follows:

- The compensation of our Chief Executive Officer (Mr. Frater) and Chief Financial Officer (Ms. Brown) was benchmarked against our primary comparator group identified above;
- The compensation of our President (Mr. Benson) was benchmarked against our primary comparator group to the extent those companies had a President position (12 of the 24 companies);
- The compensation of our Executive Vice President and Chief Administrative Officer (Mr. Hayward) and our Executive Vice President and Chief Operating Officer (Ms. Johnson) was benchmarked against our primary comparator group and a group of large banks (Bank of America Corporation, Citigroup Inc., JPMorgan Chase & Co. and Wells Fargo & Company), to the extent those firms have executives in comparable positions; and
- The compensation of our former Executive Vice President—Single-Family Mortgage Business (Mr. Bon Salle) was benchmarked against five of the companies in our primary comparator group (Ally Financial Inc., Freddie Mac, The PNC Financial Services Group, Inc., Truist Financial Corporation and U.S. Bancorp), the group of large banks identified above, and certain other U.S.-based financial services firms and specialty mortgage lending organizations, to the extent those firms have an executive in a comparable position.

Members of the Compensation and Human Capital Committee reviewed and discussed this data in late 2020.

Compensation Recoupment Policy

A portion of our executive officers' compensation is subject to forfeiture or repayment upon the occurrence of specified events. We provide a summary of these repayment provisions, also known as "clawback" provisions, in the table below. The full text of the company's repayment provisions is provided in Exhibit 10.1 to this report. These provisions do not apply to executive officers serving on an interim basis.

Forfeiture Event	Compensation Subject to Forfeiture/Repayment
Materially Inaccurate Information	
The executive officer has been granted deferred salary or incentive payments based on materially inaccurate financial statements or any other materially inaccurate performance metric criteria.	Amounts of deferred salary and incentive payments granted in excess of the amounts the Board of Directors determines would likely have been granted using accurate metrics.
Termination for Cause	
The executive officer's employment is terminated for cause. For a description of what constitutes termination for cause, see "Potential Payments Upon Termination or Change-in-Control—Potential Payments to Named Executives."	All deferred salary and incentive payments that have not yet become payable.
Subsequent Determination of Cause	
The Board of Directors later determines (within a specified period of time) that the executive officer could have been terminated for cause and that the officer's actions materially harmed the business or reputation of the company.	Deferred salary and incentive payments to the extent the Board of Directors deems appropriate.
Willful Misconduct	
The executive officer's employment: • is terminated for cause (or the Board of Directors later determines that cause for termination existed within a specified period of time) due to willful misconduct in connection with the performance of his or her duties for the company; and • the Board of Directors determines this has materially harmed the business or reputation of the company.	All deferred salary and incentive payments that have not yet become payable, and, to the extent the Board of Directors deems appropriate, deferred salary and annual incentives or long-term awards paid in the two-year period prior to the officer's employment termination date.

In addition, under Section 304 of the Sarbanes-Oxley Act of 2002, certain of the incentive-based compensation for individuals serving as our chief executive officer or chief financial officer, including compensation received for prior years, could become subject to reimbursement.

Stock Ownership Policy

We ceased paying new stock-based compensation to our executives after entering into conservatorship in September 2008. In 2009, our Board of Directors eliminated our stock ownership requirements.

Hedging Policy

All Fannie Mae employees, officers and directors are prohibited from transacting in options, puts, calls or other derivative securities relating to Fannie Mae's securities, on an exchange or in any other organized market. All Fannie Mae employees, officers and directors are also prohibited from engaging in hedging transactions relating to Fannie Mae's securities, such as prepaid variable forwards, equity swaps, collars and exchange funds, and other derivatives.

Tax Deductibility of our Compensation Expenses

Subject to a limited exception for binding contracts in effect on November 2, 2017 that remain unchanged, Section 162(m) of the Internal Revenue Code imposes a $1 million limit on the amount of total compensation a company may annually deduct for the chief executive officer, chief financial officer and the three most highly compensated employees who were acting as executive officers at any time during the year, as well as any other person who was covered under Section 162(m) as an employee of the company for a taxable year beginning after December 31, 2016. We have not adopted a policy requiring all compensation to be deductible under Section 162(m).

Compensation Committee Report

The Compensation and Human Capital Committee of the Board of Directors of Fannie Mae has reviewed and discussed the Compensation Discussion and Analysis included in this Annual Report on Form 10-K with management. Based on such review and discussions, the Compensation and Human Capital Committee has recommended to the Board of Directors that the Compensation Discussion and Analysis be included in this Annual Report on Form 10-K.

Compensation and Human Capital Committee:

Diane C. Nordin, Chair
Robert H. Herz, Vice Chair
Michael J. Heid
Karin J. Kimbrough

Compensation Risk Assessment

Our Enterprise Risk Management division conducted a risk assessment of our 2020 employee compensation policies and practices. In conducting this risk assessment, the division reviewed the following, among other things:

- our performance goals and performance appraisal process;
- our compensation structure (including incentives and pay mix);
- our severance arrangements and compensation clawback provisions;
- the restrictions on compensation applicable during conservatorship, particularly the limit on annual direct compensation for our Chief Executive Officer; and
- the oversight of aspects of our compensation by the Compensation and Human Capital Committee, the Board of Directors and FHFA.

The division also assessed whether mitigating factors existed that would reduce the opportunity for inappropriate risk-taking within our compensation policies and practices. Our Chief Risk Officer shared the risk assessment of the company's 2020 compensation policies and practices with the Compensation and Human Capital Committee.

Based on the risk assessment, management concluded that our 2020 employee compensation policies and practices do not create risks that are reasonably likely to have a material adverse effect on the company. A number of factors contributed to this conclusion, including:

- the 2020 scorecard objectives and Board of Directors' goals are not designed or intended to incentivize employees to engage in activities outside our Employee Code of Conduct, risk appetite or any other activity that would involve taking inappropriate risks or result in a material adverse effect on the company;
- our Board risk limits inhibit excessive risk taking; the Board limits define the maximum amount of risk the company is willing to take in pursuit of its objectives, and the company regularly monitors and reports on these limits;
- the overall design of our compensation structure does not create material risks;
- deferred salary for our executive officers is subject to clawback provisions; and
- our control environment for compensation includes: a defined and consistently applied annual performance appraisal process; compensation adjustment guidelines and criteria; succession planning; and retention planning and monitoring.

Management stated in its risk assessment that the cap on our Chief Executive Officer's compensation under the Equity in Government Compensation Act of 2015 continues to be a risk factor for the company. As discussed in "Risk Factors," the cap on our Chief Executive Officer compensation continues to make retention and succession planning for this position difficult, and it may make it difficult to attract qualified candidates for this critical role in the future.

Compensation Tables and Other Information

Summary Compensation Table

The following table shows summary compensation information for the named executives.

Summary Compensation Table for 2020, 2019 and 2018

Name and Principal Position[1]	Year	Salary: Base Salary[2]	Salary: Fixed Deferred Salary (Service-Based)[3]	Bonus[4]	Non-Equity Incentive Plan Compensation[5]	All Other Compensation[6]	Total
Hugh Frater	**2020**	**$600,000**	**$ —**	**$ —**	**$ —**	**$ 48,000**	**$ 648,000**
Chief Executive	2019	600,000	—	—	—	71,104	671,104
Officer	2018	113,077	—	—	—	139,615	252,692
Celeste Brown	**2020**	**623,077**	**1,500,000**	**—**	**816,440**	**112,310**	**3,051,827**
Executive Vice President	2019	569,231	1,229,231	700,000	722,336	107,164	3,327,962
and Chief Financial Officer	2018	505,769	794,615	700,000	562,212	549,475	3,112,071
David Benson	**2020**	**623,077**	**1,920,000**	**—**	**979,727**	**113,710**	**3,636,514**
President	2019	600,000	1,920,000	—	984,782	121,948	3,626,730
	2018	600,000	1,669,615	—	981,252	135,535	3,386,402
Andrew Bon Salle	**2020**	**538,462**	**1,775,000**	**—**	**884,476**	**100,342**	**3,298,280**
Former Executive Vice	2019	500,000	1,775,000	—	889,039	108,341	3,272,380
President—Single-Family	2018	500,000	1,741,346	—	969,030	97,824	3,308,200
Mortgage Business							
Jeffery Hayward	**2020**	**519,231**	**1,460,000**	**—**	**762,010**	**93,145**	**2,834,386**
Executive Vice President	2019	500,000	1,460,000	—	765,941	99,291	2,825,232
and Chief Administrative	2018	500,000	1,209,615	—	739,140	112,991	2,561,746
Officer							
Kimberly Johnson	**2020**	**519,231**	**1,460,000**	**—**	**762,010**	**93,145**	**2,834,386**
Executive Vice President	2019	500,000	1,373,846	—	752,614	93,369	2,719,829
and Chief Operating	2018	500,000	1,093,846	—	689,088	90,318	2,373,252
Officer							

(1) The principal position for each named executive is the position he or she held on December 31, 2020. Mr. Bon Salle retired on December 31, 2020.

(2) Amounts shown in this sub-column consist of base salary paid during the year on a biweekly basis. Calendar year 2020 contained 27 biweekly pay periods, rather than the usual 26 biweekly pay periods. This additional pay period occurs approximately once every 11 years because we pay on a biweekly basis. As a result, except for Mr. Frater, salary amounts for 2020 are slightly higher than the named executive's annual base salary rate to reflect the additional biweekly pay period. In February 2021, FHFA requested that Mr. Frater repay the $23,077 payment he received for the 27th pay period net of applicable taxes. Mr. Frater voluntarily agreed to FHFA's request and will repay this amount to the company; therefore, the $23,077 payment has been excluded from Mr. Frater's base salary

amount shown in this sub-column and from the "Total" column. The 2020 base salary rates for each executive were as follows: Frater: $600,000; Brown: $600,000; Benson: $600,000; Bon Salle: $500,000; Hayward: $500,000; Johnson: $500,000. The amount shown in this sub-column for Mr. Bon Salle also includes unused vacation paid upon his retirement.

(3) Amounts shown in this sub-column consist of the fixed, service-based portion of deferred salary. Deferred salary shown for 2020 generally will be paid in four equal installments in March, June, September and December 2021. Deferred salary accrues interest at one-half of the one-year Treasury Bill rate in effect on the last business day preceding the year in which the deferred salary is earned. For deferred salary earned in 2020, this rate is 0.795% per year. For deferred salary earned in 2019 and 2018, this rate was 1.315% and 0.88% per year, respectively. Interest on the named executives' fixed deferred salary is shown in the "All Other Compensation" column. Deferred salary shown for 2019 was paid to our named executives during 2020, and deferred salary shown for 2018 was paid to our named executives during 2019.

(4) The amounts shown in this column consist of the second and third installments of a sign-on award Ms. Brown received when she joined the company. See "Executive Compensation—Compensation Discussion and Analysis—Determination of 2019 Compensation—Certain Named Executive Compensation Arrangements—Chief Financial Officer" in our annual report on Form 10-K for the year ended December 31, 2019 for information regarding Ms. Brown's sign-on award.

(5) Amounts shown in this column consist of the performance-based at-risk portion of deferred salary earned during the year and interest payable on that deferred salary. The table below provides more detail on the 2020 at-risk deferred salary awarded to our named executives.

Performance-Based At-Risk Deferred Salary

Name	2020 Corporate Performance-Based At-Risk Deferred Salary	2020 Individual Performance-Based At-Risk Deferred Salary	Interest Payable on 2020 At-Risk Deferred Salary	Total
Hugh Frater	$ —	$ —	$ —	$ —
Celeste Brown	382,500	427,500	6,440	816,440
David Benson	459,000	513,000	7,727	979,727
Andrew Bon Salle	414,375	463,125	6,976	884,476
Jeffery Hayward	357,000	399,000	6,010	762,010
Kimberly Johnson	357,000	399,000	6,010	762,010

(6) The table below provides more detail on the amounts reported for 2020 in the "All Other Compensation" column.

All Other Compensation

Name	Company Contributions to Retirement Savings (401(k)) Plan	Company Credits to Supplemental Retirement Savings Plan	Matching Charitable Award Program	Interest Payable on 2020 Fixed Deferred Salary	Total
Hugh Frater	$ 22,800	$ 25,200	$ —	$ —	$ 48,000
Celeste Brown	22,800	72,585	5,000	11,925	112,310
David Benson	22,800	75,046	600	15,264	113,710
Andrew Bon Salle	22,800	58,431	5,000	14,111	100,342
Jeffery Hayward	22,800	58,738	—	11,607	93,145
Kimberly Johnson	22,800	58,738	—	11,607	93,145

All 2020 company contributions to the Retirement Savings Plan and Supplemental Retirement Savings Plan are fully vested.

Amounts shown in the "Matching Charitable Award Program" column consist of gifts we made on behalf of our named executives under our matching charitable gifts program, under which gifts made by our employees and directors to Internal Revenue Code Section 501(c)(3) charities were matched, up to an aggregate total of $5,000 for the 2020 calendar year.

Plan-Based Awards

The following table shows the at-risk deferred salary for each of the named executives during 2020. The terms of 2020 at-risk deferred salary are described in "Compensation Discussion and Analysis—2020 Executive Compensation Program; Chief Executive Officer Compensation—Elements of 2020 Executive Compensation Program—Direct Compensation." Deferred salary amounts shown represent only the performance-based at-risk portion of the named executives' 2020 deferred salary.

Grants of Plan-Based Awards in 2020

		Estimated Future Payouts Under Non-Equity Incentive Plan Awards[1]		
Name	**Award Type**	**Threshold**	**Target**	**Maximum**
Hugh Frater	At-risk deferred salary—Corporate	$ —	$ —	$ —
	At-risk deferred salary—Individual	—	—	—
	Total at-risk deferred salary	**—**	**—**	**—**
Celeste Brown	At-risk deferred salary—Corporate	—	450,000	450,000
	At-risk deferred salary—Individual	—	450,000	450,000
	Total at-risk deferred salary	**—**	**900,000**	**900,000**
David Benson	At-risk deferred salary—Corporate	—	540,000	540,000
	At-risk deferred salary—Individual	—	540,000	540,000
	Total at-risk deferred salary	**—**	**1,080,000**	**1,080,000**
Andrew Bon Salle	At-risk deferred salary—Corporate	—	487,500	487,500
	At-risk deferred salary—Individual	—	487,500	487,500
	Total at-risk deferred salary	**—**	**975,000**	**975,000**
Jeffery Hayward	At-risk deferred salary—Corporate	—	420,000	420,000
	At-risk deferred salary—Individual	—	420,000	420,000
	Total at-risk deferred salary	**—**	**840,000**	**840,000**
Kimberly Johnson	At-risk deferred salary—Corporate	—	420,000	420,000
	At-risk deferred salary—Individual	—	420,000	420,000
	Total at-risk deferred salary	**—**	**840,000**	**840,000**

(1) Amounts shown are the target amounts of the performance-based at-risk portion of the named executives' 2020 deferred salary. Half of 2020 at-risk deferred salary was subject to reduction based on corporate performance against the 2020 scorecard, as determined by FHFA, and half was subject to reduction based on individual performance in 2020, taking into account corporate performance against the 2020 Board of Directors' goals, as determined by the Board of Directors with FHFA's review. No amounts are shown in the "Threshold" column because deferred salary does not specify a minimum amount payable. The amounts shown in the "Maximum" column are the same as the amounts shown in the "Target" column because 2020 at-risk deferred salary was only subject to reduction; amounts higher than the target amount could not be awarded. The actual amounts of the at-risk portion of 2020 deferred salary that will be paid to the named executives for 2020 performance are included in the "Non-Equity Incentive Plan Compensation" column of the "Summary Compensation Table for 2020, 2019 and 2018."

Pension Benefits

Retirement Savings Plan

The Retirement Savings Plan is a tax-qualified defined contribution plan for which all of our employees are generally eligible that includes a 401(k) before-tax feature, a regular after-tax feature and a Roth after-tax feature. Under the plan, eligible employees may allocate investment balances to a variety of investment options. We match in cash employee contributions up to 6% of base salary and eligible incentive compensation. Employees are 100% vested in our matching contributions. In addition, for 2020, subject to IRS limits for 401(k) plans, we made contributions to the Retirement

Savings Plan for our employees equal to 2% of salary and eligible incentive compensation, which includes the deferred salary element of our executive compensation program. In November 2020, we amended the Retirement Savings Plan to eliminate the 2% contribution effective January 1, 2021. In addition, effective December 31, 2020, current employees were fully vested in any unvested 2% contributions in the Retirement Savings Plan. Previously, participants were not fully vested in this 2% contribution until after three years of service.

Nonqualified Deferred Compensation

We provide nonqualified deferred compensation to the named executives pursuant to our Supplemental Retirement Savings Plan. Our Supplemental Retirement Savings Plan is an unfunded, non-tax-qualified defined contribution plan. The Supplemental Retirement Savings Plan is intended to supplement our Retirement Savings Plan, or 401(k) plan, by providing benefits to participants whose eligible earnings exceed the IRS annual limit on eligible compensation for 401(k) plans (for 2020, the annual limit was $285,000).

For 2020, we credited 8% of the eligible compensation for our named executives that exceeded the applicable IRS annual limit. Eligible compensation in any year consists of base salary plus any eligible incentive compensation (which includes deferred salary) earned for that year, up to a combined maximum of two times base salary. The 8% credit consisted of two parts: (1) a 6% credit that was immediately vested; and (2) a 2% credit that would vest after the participant had completed three years of service with us. In November 2020, we amended the Supplemental Retirement Savings Plan to eliminate the 2% credit beginning with compensation earned for the 2021 plan year. In addition, effective December 31, 2020, current employees were fully vested in any unvested 2% credits in the Supplemental Retirement Savings Plan.

While the Supplemental Retirement Savings Plan is not funded, amounts credited on behalf of a participant under the Supplemental Retirement Savings Plan are deemed to be invested in mutual fund investments selected by the participant that are similar to the investments offered under our Retirement Savings Plan.

Amounts deferred under the Supplemental Retirement Savings Plan are payable to participants in the January or July following separation from service with us, subject to a six month delay in payment for our 50 most highly-compensated officers. Participants generally may not withdraw amounts from the Supplemental Retirement Savings Plan while they are employees.

The table below provides information on the nonqualified deferred compensation of the named executives in 2020, all of which was provided pursuant to our Supplemental Retirement Savings Plan.

Non-Qualified Deferred Compensation for 2020

Name	Company Contributions in 2020[1]	Aggregate Earnings in 2020[2]	Aggregate Balance at December 31, 2020[3]
Hugh Frater	$ 25,200	$ 4,943	$ 56,802
Celeste Brown	72,585	38,041	228,309
David Benson	75,046	59,711	874,895
Andrew Bon Salle	58,431	80,804	600,257
Jeffery Hayward	58,738	78,299	686,637
Kimberly Johnson	58,738	113,563	780,637

(1) All amounts reported in this column are also reported as 2020 compensation in the “All Other Compensation” column of the “Summary Compensation Table for 2020, 2019 and 2018.”

(2) None of the earnings reported in this column are reported as 2020 compensation in the “Summary Compensation Table for 2020, 2019 and 2018” because the earnings are neither above-market nor preferential.

(3) Amounts reported in this column reflect company contributions to the Supplemental Retirement Savings Plan that are also reported in the “All Other Compensation” column of the “Summary Compensation Table for 2020, 2019 and 2018” as follows:

Balance Amounts Reported in "All Other Compensation" in the Summary Compensation Table

Name	Amounts in Aggregate Balance Column that Represent Company Contributions Reported as Compensation for 2019 in the Summary Compensation Table	Amounts in Aggregate Balance Column that Represent Company Contributions Reported as Compensation for 2018 in the Summary Compensation Table
Hugh Frater	$ 25,600	$ —
Celeste Brown	63,600	41,385
David Benson	73,600	92,500
Andrew Bon Salle	57,600	58,000
Jeffery Hayward	57,600	72,346
Kimberly Johnson	57,600	57,692

Potential Payments Upon Termination or Change-in-Control

The information below describes and quantifies certain compensation and benefits that would have become payable to each of our named executives under our existing plans and arrangements if the named executive's employment had terminated on December 31, 2020 under each of the circumstances described below, taking into account the named executive's compensation and service levels as of that date. The discussion below does not reflect retirement or deferred compensation plan benefits to which our named executives may be entitled, as these benefits are described above under "Pension Benefits" and "Nonqualified Deferred Compensation." The information below also does not generally reflect compensation and benefits available to all salaried employees upon termination of employment with us under similar circumstances. We are not obligated to provide any additional compensation to our named executives in connection with a change-in-control.

Potential Payments to Named Executives

We have not entered into agreements with any of our named executives that would entitle the executive to severance benefits. Under the 2020 executive compensation program, a named executive would be entitled to receive a specified portion of his or her earned but unpaid 2020 deferred salary if his or her employment was terminated for any reason, other than for cause.

Below we discuss various elements of the named executives' compensation that would become payable in the event a named executive dies, resigns, retires, terminates employment due to long-term disability, or the company terminates his or her employment. We then quantify the amounts that would be paid to our named executives in these circumstances, in each case assuming the triggering event occurred on December 31, 2020.

- *Deferred salary.* If a named executive is separated from employment with the company for any reason other than termination for cause, he or she would receive the following:
    - *Fixed deferred salary.* The earned but unpaid portion of his or her fixed deferred salary, reduced by 2% for each full or partial month by which the named executive's termination precedes January 31 of the second year following the performance year (or, if later, the end of the twenty-fourth month following the month in which the named executive first earned deferred salary), except that the reduction will not apply if: (1) at the time of separation the named executive has reached age 62, or age 55 with 10 years of service with Fannie Mae, or (2) the named executive's employment terminates as a result of death or long-term disability.
    - *At-risk deferred salary.* The earned but unpaid portion of his or her at-risk deferred salary, subject to reduction from the target level for corporate and individual performance for the applicable performance year, except that the reduction will not apply if an officer's employment terminates as a result of death or long-term disability prior to the Board of Directors' and FHFA's determinations of performance for at-risk deferred salary.
    - *Interest on deferred salary.* Interest on deferred salary payments. Deferred salary accrues interest at one-half of the one-year Treasury Bill rate in effect on the last business day preceding the year in which the deferred salary is earned.

  Payment dates. Installment payments of deferred salary and related interest would be made on the original payment schedule, except that payments will be made within 90 days in case of the named executive's death.

  Termination for cause. If a named executive's employment is terminated by the company for cause, he or she would not receive any of the earned but unpaid portion of his or her deferred salary. The company may terminate an executive for cause if it determines that the executive has: (a) materially harmed the company by, in connection with the performance of his or her duties for the company, engaging in gross misconduct or performing his or her duties in a grossly negligent manner; or (b) been convicted of, or pleaded *nolo contendere* with respect to, a felony.

- *Retiree medical benefits.* We currently make certain retiree medical benefits available to our full-time employees who meet certain age and service requirements at the time of retirement.

The table below shows the amounts that would have become payable to each of our named executives if his or her employment had terminated on December 31, 2020 for the reasons specified. Mr. Bon Salle retired from the company on December 31, 2020. No amounts are shown for Mr. Frater, as he does not receive deferred salary.

Potential Payments Upon Termination as of December 31, 2020

Name	2020 Fixed Deferred Salary(1)	2020 At-Risk Deferred Salary(2)	Interest on 2020 Deferred Salary(3)	Total
Hugh Frater				
Resignation, retirement, or termination without cause	$ —	$ —	$ —	$ —
Long-term disability	—	—	—	—
Death	—	—	—	—
Termination for cause	—	—	—	—
Celeste Brown				
Resignation, retirement, or termination without cause	1,110,000	810,000	15,264	1,935,264
Long-term disability	1,500,000	900,000	19,080	2,419,080
Death	1,500,000	900,000	12,109	2,412,109
Termination for cause	—	—	—	—
David Benson				
Resignation, retirement, or termination without cause	1,920,000	972,000	22,991	2,914,991
Long-term disability	1,920,000	1,080,000	23,850	3,023,850
Death	1,920,000	1,080,000	15,136	3,015,136
Termination for cause	—	—	—	—
Andrew Bon Salle				
Resignation, retirement, or termination without cause	1,775,000	877,500	21,087	2,673,587
Long-term disability	1,775,000	975,000	21,863	2,771,863
Death	1,775,000	975,000	13,874	2,763,874
Termination for cause	—	—	—	—
Jeffery Hayward				
Resignation, retirement, or termination without cause	1,460,000	756,000	17,617	2,233,617
Long-term disability	1,460,000	840,000	18,285	2,318,285
Death	1,460,000	840,000	11,604	2,311,604
Termination for cause	—	—	—	—
Kimberly Johnson				
Resignation, retirement, or termination without cause	1,080,400	756,000	14,599	1,850,999
Long-term disability	1,460,000	840,000	18,285	2,318,285
Death	1,460,000	840,000	11,604	2,311,604
Termination for cause	—	—	—	—

(1) In the case of resignation, retirement or termination without cause, Ms. Brown and Ms. Johnson each would have received 74% of her 2020 fixed deferred salary, which is the earned but unpaid portion of her 2020 fixed deferred salary as of December 31, 2020, reduced by 2% for each full or partial month by which her separation from employment preceded January 31, 2022. Mr. Benson, Mr. Bon Salle and Mr. Hayward each would have received

100% of his 2020 fixed deferred salary, with no reduction, because Mr. Benson and Mr. Bon Salle had reached age 55 with 10 years of service with Fannie Mae and Mr. Hayward had reached age 62.

(2) The amounts in this column in the event of resignation, retirement, or termination without cause reflect FHFA's and the Board's determinations of 2020 corporate performance-based at-risk deferred salary and 2020 individual performance-based at-risk deferred salary, as described in "Compensation Discussion and Analysis—Determination of 2020 Compensation." The amounts in this column in the event of a termination due to death or long-term disability do not reflect any performance-based reduction, because the hypothetical December 31, 2020 termination date occurred prior to FHFA's and the Board's performance determinations for at-risk deferred salary in January 2021.

(3) Interest payable on the deferred salary payments, which reflects that: (a) in the event of resignation, retirement, termination without cause, or long-term disability, installment payments of deferred salary would be paid on the original payment schedule; and (b) in the event of death, payments of deferred salary would be made within 90 days of the executive's death. The amount of interest payable in the event of death in this table assumes the payment of deferred salary would occur on the 90th day following the hypothetical December 31, 2020 date of death. Interest on 2020 deferred salary payments accrues at an annual rate of 0.795%.

Chief Executive Officer to Median Employee Pay Ratio

The following table shows the compensation paid to our Chief Executive Officer for 2020, the total 2020 compensation of our median employee (which was calculated based on the methodology described below the table), and the estimated ratio of the Chief Executive Officer's pay to the median employee's pay for 2020.

2020 Chief Executive Officer to Median Employee Pay Ratio

Individual	Compensation	Ratio
Chief Executive Officer	$ 648,000	4.1 to 1
Median Employee	158,209	

We took the following steps to identify our median employee and determine this employee's compensation:

- We identified our employee population as of December 31, 2020, which consisted of approximately 7,700 full-time and part-time employees. We did not include independent contractors in this population.
- For each employee (other than our Chief Executive Officer), we determined the sum of his or her base salary for 2020, performance awards for 2020 and the value of company contributions made in 2020 on his or her behalf to retirement plans. We did not annualize the compensation of employees who were employed for less than the full year, nor did we make any full-time equivalent adjustments to part-time employees.
- Comparing the sums, we identified an employee whose compensation best reflected Fannie Mae employees' median 2020 compensation (that is, the midpoint of employees ranked in order of compensation amount).
- We then determined that median employee's total 2020 compensation using the approach required by the SEC when calculating our named executives' compensation, as reported in the Summary Compensation Table.

In general, we offer employees base salary, the opportunity to receive awards for performance, company retirement plan contributions and other benefits. In accordance with SEC rules, the median employee compensation amount for 2020 provided in the table above consists of base salary, an award for 2020 performance, company retirement plan contributions and a matching gift the company made on behalf of the employee under our matching charitable gifts program, but does not reflect benefits relating to group life or health plans generally available to all salaried employees, parking or transit benefits that are generally available to all salaried employees, or personal benefits with an aggregate value of less than $10,000. The Chief Executive Officer compensation amount for 2020 provided in the table above consists of base salary and company retirement plan contributions, and is the same amount reported in the "Summary Compensation Table for 2020, 2019 and 2018."

Given the different methodologies that companies may use to determine their CEO pay ratios, the estimated ratio we report above may not be comparable to that reported by other companies.

Director Compensation

Overview

Our Corporate Governance Guidelines provide that compensation for members of the Board of Directors will be reasonable, appropriate, and commensurate with the duties and responsibilities of their Board service. Our non-management directors receive cash compensation pursuant to a program authorized by FHFA in 2008. The compensation we provide to directors has not increased since this program was implemented in 2008.

Mr. Frater, our Chief Executive Officer and a member of the Board of Directors, did not receive any additional compensation for his service as a director in 2020.

Board Compensation Levels

Board compensation levels under the program authorized by FHFA are shown in the table below. Our directors receive no equity compensation and no meeting fees.

Board Compensation Levels

Board Service		Cash Compensation
Annual retainer for non-executive Chair	$	290,000
Annual retainer for non-management directors (other than the non-executive Chair)		160,000
Committee Service		**Cash Compensation**
Annual retainer for Audit Committee Chair	$	25,000
Annual retainer for Risk Policy and Capital Committee Chair		15,000
Annual retainer for all other Committee Chairs		10,000
Annual retainer for Audit Committee members (other than the Audit Committee Chair)		10,000

Additional Arrangements with our Non-Management Directors

Expenses. We pay for or reimburse directors for out-of-pocket expenses incurred in connection with their service on the Board of Directors, including travel to and from our meetings, accommodations, meals and education.

Matching Charitable Gifts Program. To further our support for charitable giving, non-employee directors are able to participate in our corporate matching gifts program on the same terms as our employees.

Stock Ownership Guidelines for Directors. In 2009, our Board of Directors eliminated our stock ownership requirements for directors.

2020 Non-Management Director Compensation

The total 2020 compensation for our non-management directors is shown in the table below.

2020 Non-Management Director Compensation Table

Name		Fees Earned or Paid in Cash		All Other Compensation[(1)]		Total
Amy Alving	$	170,000	$	—	$	170,000
Sheila Bair[(2)]		174,806		—		174,806
Renee Glover		170,000		—		170,000
Michael Heid		180,000		5,000		185,000
Robert Herz		185,000		3,000		188,000
Antony Jenkins		170,000		—		170,000
Karin Kimbrough		170,000		—		170,000
Diane Nordin		180,000		—		180,000
Jonathan Plutzik[(3)]		275,194		—		275,194
Manolo Sánchez		161,708		5,000		166,708
Directors who resigned from the Board during 2020 or 2021						
Brian Brooks[(4)]		40,000		—		40,000
Ryan Zanin[(5)]		173,292		—		173,292

(1) Amounts shown in the "All Other Compensation" column consist of gifts we made on behalf of the directors under our matching charitable gifts program, under which gifts made by our employees and directors to Internal Revenue Code Section 501(c)(3) charities were matched, up to an aggregate total of $5,000 for the 2020 calendar year.

(2) Ms. Bair became Chairwoman of the Board in November 2020.

(3) Mr. Plutzik was Board Chair until November 2020.

(4) Mr. Brooks resigned effective March 2020.

(5) Mr. Zanin resigned effective January 2021.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Beneficial Ownership

Stock Ownership of Directors and Executive Officers

The following table shows the beneficial ownership of our stock by each of our directors, each of our named executives, and all directors and executive officers as a group, as of February 1, 2021. As of that date, no director or named executive, nor all directors and executive officers as a group, owned as much as 1% of our outstanding common stock or any series of our preferred stock.

Beneficial Ownership of Stock by Directors and Executive Officers

		Number of Shares Beneficially Owned[1]	
Directors and Named Executives	**Position**	**8.25% Non-Cumulative Series T Preferred Stock**	**Common Stock**
Amy Alving	Director	0	0
Sheila Bair	Director (Chairwoman of the Board)	0	0
Renee Glover	Director	0	0
Michael Heid	Director	0	0
Robert Herz	Director	0	0
Antony Jenkins	Director	0	0
Karin Kimbrough	Director	0	0
Diane Nordin	Director	0	0
Jonathan Plutzik	Director	0	0
Manolo Sánchez	Director	0	0
Hugh Frater	Chief Executive Officer and Director	0	0
Celeste Brown	EVP—Chief Financial Officer	0	0
David Benson	President	0	0
Andrew Bon Salle	Former EVP—Single-Family Mortgage Business	1,000	0
Jeffery Hayward	EVP and Chief Administrative Officer	0	14,868
Kimberly Johnson	EVP and Chief Operating Officer	0	6,669
All directors and executive officers as a group (19 persons)[2]		**1,000**	**50,683**

(1) Beneficial ownership is determined in accordance with the rules of the SEC for computing the number of shares of common stock beneficially owned by each person and the percentage owned. Each holder has sole investment and voting power over the shares referenced in this table, except for 9,146 shares for which one executive officer shares investment and voting power with her spouse.

(2) Group includes Mr. Bon Salle, who retired from the company on December 31, 2020.

Stock Ownership of Greater-Than 5% Holders

The following table shows the beneficial ownership of our common stock by the only persons or entities we know of that hold more than 5% of our common stock as of February 1, 2021.

Beneficial Ownership of Stock by 5%+ Holders

5% Holders	Common Stock Beneficially Owned	Percent of Class
U.S. Department of the Treasury	Variable[(1)]	79.9 %
1500 Pennsylvania Avenue, NW, Washington, DC 20220		
Pershing Square Capital Management, L.P. **PS Management GP, LLC** **William A. Ackman**	115,569,796[(2)]	9.98 %
787 Eleventh Avenue, 9th Floor, New York, New York 10019		

(1) In September 2008, we issued to Treasury a warrant to purchase, for one one-thousandth of a cent ($0.00001) per share, shares of our common stock equal to 79.9% of the total number of shares of our common stock outstanding on a fully diluted basis at the time the warrant is exercised. The warrant may be exercised in whole or in part at any time until September 7, 2028. As of February 12, 2021, Treasury has not exercised the warrant. The information above assumes Treasury beneficially owns no other shares of our common stock.

(2) Information regarding these shares and their holders is based solely on information contained in a Schedule 13D filed with the SEC on November 15, 2013, as amended by an amendment to the Schedule 13D filed on March 31, 2014. The Schedule 13D and its amendment were filed by these holders as well as by Pershing Square GP, LLC. According to the original Schedule 13D, Pershing Square Capital Management, L.P., as investment adviser for a number of funds for which it purchased the shares reported in the table above, and PS Management GP, LLC, its general partner, may be deemed to share voting and dispositive power for the shares. Pershing Square GP, LLC, as general partner of two of the funds, may be deemed to share voting and dispositive power for 40,114,044 of the shares reported in the table above, which are held by the two funds. As the Chief Executive Officer of Pershing Square Capital Management, L.P. and managing member of each of PS Management GP, LLC and Pershing Square GP, LLC, William A. Ackman may be deemed to share voting and dispositive power for all of the shares reported in the table above. In the amendment, the parties further reported that certain of them had entered into swap transactions resulting in their having additional economic exposure to approximately 15,434,715 notional shares of common stock under certain cash-settled total return swaps, bringing their total aggregate economic exposure to 131,004,511 shares of common stock (approximately 11.31% of the outstanding common stock). In the amendment to the Schedule 13D, these parties indicated that they would forgo future reporting on Schedule 13D based on their determination that shares of the common stock are not voting securities as such term is used in Rule 13d-1(i) under the Securities Exchange Act. As a result, the information in the table above does not reflect any acquisitions or dispositions by these holders of Fannie Mae common stock that occurred after March 31, 2014.

Item 13. Certain Relationships and Related Transactions, and Director Independence

Policies and Procedures Relating to Transactions with Related Persons

Overview. We review transactions in which Fannie Mae is a participant and in which any of our directors or executive officers or their immediate family members may have a material interest to determine whether any of those persons has a material interest in the transaction. Our current written policies and procedures for the review, approval or ratification of transactions with related persons that are required to be reported under Item 404(a) of Regulation S-K are set forth in our:

- Director Code of Conduct;
- Corporate Governance Guidelines;
- Nominating and Corporate Governance Committee Charter;
- Board of Directors' delegation of authorities and reservation of powers;

- Employee Code of Conduct; and
- Conflict of Interest Policy, Conflict of Interest Standard and Conflict of Interest Procedure for employees.

In addition, depending on the circumstances, relationships and transactions with related persons may require conservator decision pursuant to the instructions issued to the Board of Directors by the conservator or may require the consent of Treasury pursuant to the senior preferred stock purchase agreement.

Director Code of Conduct. Our Director Code of Conduct prohibits our directors from engaging in any conduct or activity that is inconsistent with our best interests, as defined by the conservator's express directions, its policies and applicable federal law. Our Director Code of Conduct requires each of our directors to excuse himself or herself from voting on any issue before the Board that could result in a conflict, self-dealing or other circumstance where the director's position as a director would be detrimental to us or result in a noncompetitive, favored or unfair advantage to either the director or the director's associates. In addition, our directors must disclose to the Chair of the Nominating and Corporate Governance Committee, or another member of the Committee, any situation that involves or appears to involve a conflict of interest. This includes, for example, any financial interest of a director, an immediate family member of a director or a business associate of a director in any transaction being considered by the Board, as well as any financial interest a director has in an organization doing business with us. Each of our directors also must annually certify compliance with our Director Code of Conduct.

Corporate Governance Guidelines; Board Delegation of Authorities and Reservation of Powers. Our Corporate Governance Guidelines provide that our Board of Directors, directly or through its committees, reviews and approves any action that in the reasonable business judgment of management at the time the action is taken is likely to cause significant reputational risk to Fannie Mae or result in substantial negative publicity. Our Board's delegation of authorities and reservation of powers similarly requires Board or Board committee approval for these actions. Depending on management's business judgment, this requirement might include a related party transaction.

Nominating and Corporate Governance Committee Charter; Board Delegation of Authorities and Reservation of Powers. The Nominating and Corporate Governance Committee Charter and our Board's delegation of authorities and reservation of powers require the Nominating and Corporate Governance Committee to approve transactions with any director, nominee for director or executive officer, or any immediate family member of a director, nominee for director or executive officer, that are required to be disclosed pursuant to Item 404 of Regulation S-K.

Employee Code of Conduct. Our Employee Code of Conduct requires that our employees seek to avoid any actual or apparent conflicts between our business interests and the personal interests, activities and relationships of our employees, or that could expose the company to reputational risk. Our Employee Code of Conduct requires our employees to raise compliance or ethics concerns, including concerns relating to suspected or known violations of our Employee Code of Conduct, with the employee's manager, another appropriate member of management, a member of our Human Resources division or our Compliance and Ethics division.

Conflict of Interest Policy, Standard and Procedure. Our Conflict of Interest Policy, Conflict of Interest Standard and Conflict of Interest Procedure for employees require that our executive officers report to the Compliance and Ethics division any existing or currently proposed transaction with us, whether or not in the ordinary course of business, in which the executive officer or any immediate family member of the executive officer has a direct or indirect interest. If the Compliance and Ethics division determines the reported transaction presents a conflict concern, our Conflict of Interest Procedure for employees provides that the division will submit its assessment and recommended mitigation activities regarding such transaction to the Nominating and Corporate Governance Committee for approval. Our Conflict of Interest Procedure for employees also provides that the Compliance and Ethics division will refer any such report to the Legal department for review so that they might evaluate it for reporting purposes.

Conservator Instructions. We are required by the conservator to obtain its decision for various matters, some of which may involve relationships or transactions with related persons. These matters include: actions requiring the consent of or consultation with Treasury under the senior preferred stock purchase agreement; the creation of any subsidiary or affiliate, or entering into a substantial transaction with a subsidiary or affiliate, except for routine ongoing transactions with CSS or the creation of, or a transaction with, a subsidiary or affiliate undertaken in the ordinary course of business; changes in employee compensation that could significantly impact our employees; new compensation arrangements with or increases in compensation or benefits for our executive officers; setting or increasing the compensation or benefits payable to members of the Board; and changes in our business operations, activities, and transactions that in the reasonable business judgment of management are more likely than not to result in a significant increase in credit, market, reputational, operational or other key risks.

Senior Preferred Stock Purchase Agreement. The senior preferred stock purchase agreement requires us to obtain written Treasury approval of transactions with affiliates unless, among other things, the transaction is upon terms no less favorable to us than would be obtained in a comparable arm's-length transaction with a non-affiliate or the transaction is undertaken in the ordinary course or pursuant to a contractual obligation or customary employment arrangement in existence at the time the senior preferred stock purchase agreement was entered into.

Director and Officer Disclosures. We require our directors and executive officers, not less than annually, to describe to us any transaction with us in which a director or executive officer could potentially have an interest that would require disclosure under Item 404 of Regulation S-K.

Transactions with Related Persons

Transactions with Treasury

Treasury beneficially owns more than 5% of the outstanding shares of our common stock by virtue of the warrant we issued to Treasury on September 7, 2008. The warrant entitles Treasury to purchase shares of our common stock equal to 79.9% of our outstanding common stock on a fully diluted basis on the date of exercise, for an exercise price of $0.00001 per share, and is exercisable in whole or in part at any time on or before September 7, 2028. We describe below our current agreements with Treasury, as well as payments we are making to Treasury pursuant to the Temporary Payroll Tax Cut Continuation Act of 2011 and the GSE Act.

FHFA, as conservator, approved the senior preferred stock purchase agreement, the amendments to the agreement and the letter agreements modifying the terms of the agreement and the senior preferred stock. FHFA, as conservator, also approved our role as program administrator for the Home Affordable Modification Program and other initiatives under the Making Home Affordable Program.

Treasury Senior Preferred Stock Purchase Agreement and Senior Preferred Stock

We issued the warrant to Treasury pursuant to the terms of the senior preferred stock purchase agreement we entered into with Treasury on September 7, 2008. Under the senior preferred stock purchase agreement, we also issued to Treasury one million shares of senior preferred stock. We issued the warrant and the senior preferred stock as an initial commitment fee in consideration of Treasury's commitment to provide funds to us under the terms and conditions set forth in the senior preferred stock purchase agreement. The senior preferred stock purchase agreement was subsequently amended on September 26, 2008, May 6, 2009, December 24, 2009 and August 17, 2012. In addition, we, through FHFA, in its capacity as conservator, and Treasury entered into letter agreements modifying the terms of the senior preferred stock purchase agreement and the senior preferred stock on December 21, 2017, September 27, 2019 and January 14, 2021. See "Business—Conservatorship, Treasury Agreements and Housing Finance Reform—Treasury Agreements" for a description of the terms of the senior preferred stock purchase agreement, the senior preferred stock and the warrant.

As of December 31, 2020, we had received an aggregate of $119.8 billion from Treasury under the senior preferred stock purchase agreement, none of which was received in 2020, and the remaining amount of funding available to us under the agreement was $113.9 billion. Through December 31, 2020, we had paid an aggregate of $181.4 billion to Treasury in dividends on the senior preferred stock, none of which was paid in 2020.

Treasury Making Home Affordable Program

In 2009, Treasury launched the Making Home Affordable Program to help struggling homeowners avoid foreclosure and engaged us as program administrator for loans modified under the Home Affordable Modification Program, or HAMP, and other initiatives under the Making Home Affordable Program. HAMP was aimed at helping borrowers by modifying their mortgage loan to make their payments more affordable. In 2020, our principal activities as program administrator included:

- supporting servicers and managing the process for servicers to report modification activity and program performance;
- calculating incentive compensation consistent with program guidelines;
- acting as record-keeper for executed loan modifications and program administration; and
- performing other tasks as directed by Treasury from time to time.

Although borrowers could apply for modifications under HAMP only through 2016, our role as program administrator continues in order to administer remaining incentives payable under the program and to continue record-keeping for completed modification activity and performance.

Under our arrangement, Treasury has compensated us for a significant portion of the work we have performed in our role as program administrator for HAMP and other initiatives under the Making Home Affordable Program. We expect we will have received an aggregate of approximately $536 million from Treasury for our work as program administrator from 2009 through 2020, as well as an additional amount of approximately $149 million for this period to be passed through to third-party vendors engaged by us for HAMP and other initiatives under the Making Home Affordable Program. We expect to continue to receive reimbursements from Treasury for our work through the completion of our role as program administrator.

Temporary Payroll Tax Cut Continuation Act of 2011

In December 2011, Congress enacted the Temporary Payroll Tax Cut Continuation Act of 2011 which, among other provisions, required that we increase our single-family guaranty fees by at least 10 basis points and remit this increase to Treasury. To meet our obligations under the TCCA and at the direction of FHFA, we increased the guaranty fee on all single-family residential mortgages delivered to us by 10 basis points effective April 1, 2012. In 2012, FHFA and Treasury advised us to remit this fee increase to Treasury with respect to all loans acquired by us on or after April 1, 2012 and before January 1, 2022, and to continue to remit these amounts to Treasury on and after January 1, 2022 with respect to loans we acquired before this date until those loans are paid off or otherwise liquidated. In 2020, FHFA provided guidance that we are not required to accrue or remit TCCA fees to Treasury with respect to loans backing MBS trusts that have been delinquent for four months or longer. Once payments on such loans resume, we will resume accrual and remittance to Treasury of the associated TCCA fees on the loans. In 2020, we recognized $2.7 billion for our obligations to Treasury under the TCCA.

Treasury Interest in Affordable Housing Allocations

The GSE Act requires us to set aside in each fiscal year an amount equal to 4.2 basis points for each dollar of the unpaid principal balance of our total new business purchases and to pay this amount to specified HUD and Treasury funds. In December 2014, FHFA directed us to set aside amounts for these contributions during each fiscal year, except for any fiscal year for which a draw from Treasury was made under the terms of the senior preferred stock purchase agreement, or in which such allocation or transfer would cause such a draw. We paid $280 million to the funds in 2020 based on our new business purchases in 2019. Pursuant to the GSE Act and directions from FHFA, we paid $98 million of this amount to Treasury’s Capital Magnet Fund and $182 million of this amount to HUD’s Housing Trust Fund.

Our new business purchases were $1.4 trillion for the year ended December 31, 2020. Accordingly, we recognized an expense of $603 million related to this obligation for the year ended December 31, 2020. Of this amount, $211 million is payable to Treasury’s Capital Magnet Fund and $392 million is payable to HUD’s Housing Trust Fund. See “Business—Legislation and Regulation—GSE Act and Other Legislative and Regulatory Matters—Affordable Housing Allocations” for more information regarding the GSE Act’s affordable housing allocation requirements.

Director Independence

Independence Requirements

Our Corporate Governance Guidelines, in accordance with FHFA corporate governance regulations, require a majority of Fannie Mae’s directors to be independent as defined under the rules set forth by the NYSE, as amended from time to time. Where the NYSE rules do not address a particular relationship, the Board, based upon the recommendation of the Nominating and Corporate Governance Committee, determines whether a relationship is material, and whether a Board member is independent. Our Corporate Governance Guidelines also provide that an “independent board member” must be determined to have no material relationship with us, either directly or through an organization that has a material relationship with us. A relationship is “material” if, in the judgment of the Board, it would interfere with the Board member’s independent judgment. Our Corporate Governance Guidelines are posted on our website, www.fanniemae.com, under “Corporate Governance Guidelines” in the “About Us—Corporate Governance” section.

In addition, under FHFA corporate governance regulations, Board committees are required to comply with the independence requirements set forth under NYSE rules. The NYSE’s listing standards include additional independence criteria for members of the Audit Committee and Compensation and Human Capital Committee.

Our Board of Directors

Our Board of Directors, with the assistance of the Nominating and Corporate Governance Committee of the Board, has reviewed the independence of all current Board members pursuant to the requirements described in "Independence Requirements" above. Based on its review, the Board has determined that all of our current directors are independent under these director independence requirements other than Mr. Frater (who is our Chief Executive Officer).

In determining the independence of our current Board members other than Mr. Frater, the Board of Directors considered the following relationships, transactions or arrangements and determined they were not material to the independence of these Board members and would not interfere with the director's independent judgment:

- *Board Memberships with Business Partners.* Ms. Alving, Ms. Bair, Ms. Glover, Mr. Heid, Mr. Herz, Mr. Jenkins and Mr. Sánchez are or will be directors, advisory Board members or equivalent positions of companies that engage in business with Fannie Mae or that have an interest in one or more entities that engage in business with Fannie Mae. The Board considered that each of these directors was solely a director, advisory board member or the equivalent of such company, and none of these directors served in a management role or had ownership interests other than as incidental to their board service. The Board also considered other relevant information, including to the extent available information regarding payments between these companies and Fannie Mae during the past three years.
- *Board Memberships with Non-Profits to Which We Have Made Payments.* Mr. Herz and Ms. Nordin serve as Board members of non-profit organizations that have received payments from Fannie Mae. The amount of these payments fell substantially below the NYSE independence standards' thresholds of materiality for a director who is a current employee of a company to which Fannie Mae made, or from which Fannie Mae received, payments.
- *Board Memberships with Companies that Invest in Our Securities.* Ms. Bair, Mr. Herz and Ms. Nordin serve as directors or advisory Board members of companies that invest in Fannie Mae fixed-income securities. It is generally not possible for Fannie Mae to determine the extent of the holdings of these companies in Fannie Mae fixed-income securities as payments to holders are made through the Federal Reserve, and most of these securities are held in turn by financial intermediaries. We understand that the investments by these companies in Fannie Mae fixed-income securities are entered into at arm's length in the ordinary course of business, upon market terms and conditions, and are not entered into at the direction of, or upon approval by, the director in his or her capacity as a director or advisory Board member of these companies.
- *Prior Recent Employment with Business Partners.* Mr. Heid and Ms. Kimbrough were each recently employed at companies that engage in business with Fannie Mae.
    - Mr. Heid is a former employee of Wells Fargo. He retired from Wells Fargo in January 2016. We regularly enter into a variety of transactions with Wells Fargo in the ordinary course of business. For example, Wells Fargo Bank, N.A., together with its affiliates, was our largest single-family servicer in 2020. Mr. Heid owns substantially less than 1% of the outstanding equity interests in Wells Fargo.
    - Ms. Kimbrough is a former employee of Google. She was employed by Google until December 2019. We engage in business transactions with Google. The payments we made to Google during the past three years fall below the NYSE independence standards' thresholds of materiality for a director who is a current employee of a company to which Fannie Mae made, or from which Fannie Mae received, payments. Ms. Kimbrough owns substantially less than 1% of the outstanding equity interests in Alphabet Inc., Google's parent company.
- *Current Employment with Business Partner.* Ms. Kimbrough is currently an employee of LinkedIn Corporation, a subsidiary of Microsoft Corporation. Fannie Mae engages in business transactions with LinkedIn and Microsoft. The payments made by Fannie Mae to Microsoft during the past three years fall below the NYSE independence standards' thresholds of materiality for a director who is a current employee of a company to which Fannie Mae made, or from which Fannie Mae received, payments.
- *Prior Relationship with Company Engaged in Litigation with Fannie Mae.* Mr. Jenkins is a former Group Chief Executive Officer of Barclays PLC. Barclays Bank PLC is a defendant in a lawsuit the company filed in 2013 alleging that several banking institutions, including Barclays, manipulated LIBOR. Mr. Jenkins is not a defendant in the lawsuit and the alleged wrongdoing at Barclays precedes Mr. Jenkins's appointment as Group Chief Executive Officer.
- *Prior Service on Fannie Mae's Digital Advisory Council*. Mr. Jenkins served as a member of Fannie Mae's Digital Advisory Council from February 2017 to June 2018 and received the standard advisory fee for this service of $60,000 per year. The amount of payments to Mr. Jenkins for his service on the Digital Advisory Council was below the $120,000 annual compensation threshold set forth in the NYSE's independence standards.

The Board also determined that each member of the Audit Committee, Compensation and Human Capital Committee, and Nominating and Corporate Governance Committee met the NYSE's independence criteria for members of such committees.

The Board did not consider the Board's duties to the conservator, together with the federal government's controlling beneficial ownership of Fannie Mae, in determining independence of the Board members.

Mr. Frater is not considered an independent director under NYSE independence standards because of his position as Chief Executive Officer.

Brian P. Brooks, a former director who served as a member of our Board during 2020, was not considered an independent director under NYSE independence standards because he was an employee of the company within the last three years.

The Board of Directors determined that Ryan A. Zanin, a former director who served as a member of our Board until January 2021, met our director independence standards when it assessed his independence in January 2020. Mr. Zanin was no longer considered an independent director following the Board's approval to appoint him as the company's Chief Risk Officer in November 2020, which was subject to FHFA decision in consultation with Treasury and his acceptance of the appointment. Mr. Zanin accepted the appointment as the company's Chief Risk Officer and resigned from the Board in January 2021.

Item 14. Principal Accounting Fees and Services

The Audit Committee of our Board of Directors is directly responsible for the appointment, oversight and evaluation of our independent registered public accounting firm, subject to conservator approval of matters relating to retention and termination. Deloitte & Touche LLP was our independent registered public accounting firm for the years ended 2020 and 2019. Deloitte & Touche LLP has advised the Audit Committee that they are independent accountants with respect to the company, within the meaning of standards established by the Public Company Accounting Oversight Board and federal securities laws administered by the SEC.

The following table displays the aggregate estimated or actual fees for professional services provided by Deloitte & Touche LLP, including audit fees.

	For the Year Ended December 31,	
	2020	**2019**
Description of fees:		
Audit fees	**$ 39,546,300**	$ 37,630,000
Audit-related fees[1]	**315,000**	315,000
All other fees[2]	**105,000**	1,000
Total fees	**$ 39,966,300**	$ 37,946,000

(1) Consists of fees billed for attest-related services on debt offerings and compliance with the covenants in the senior preferred stock purchase agreement with Treasury.

(2) Consists of fees billed for non-audit engagements and trainings.

Pre-Approval Policy

In accordance with its charter, the Audit Committee must approve, in advance of the service, all audit and permissible non-audit services to be provided by our independent registered public accounting firm and establish policies and procedures for the engagement of the external auditor to provide audit and permissible non-audit services. The independent registered public accounting firm and management are required to present reports on the nature of the services provided by the independent registered public accounting firm for the past year and the fees for such services, categorized into audit services, audit-related services, tax services and other services. The firm may not be retained to perform non-audit services specified in Section 10A(g) of the Exchange Act.

In connection with its approval of Deloitte & Touche LLP as Fannie Mae's independent registered public accounting firm for Fannie Mae's 2020 integrated audit, the Audit Committee delegated the authority to pre-approve any additional audit and audit-related services to its Chair, who was required to report any such pre-approvals at the next scheduled meeting of the Audit Committee. Additionally, any services provided by Deloitte & Touche LLP outside of the scope of the integrated audit must be approved by the conservator.

In 2020, we paid no fees to the independent registered public accounting firm pursuant to the *de minimis* exception established by the SEC, and all services were pre-approved.

PART IV

Item 15. Exhibits, Financial Statement Schedules

Documents filed as part of this report

Consolidated Financial Statements

An index to our consolidated financial statements has been filed as part of this report beginning on page F-1 and is incorporated herein by reference.

Financial Statement Schedules

None.

Exhibits

The table below lists exhibits that are filed with or incorporated by reference into this report.

Item	Description
3.1	Fannie Mae Charter Act (12 U.S.C. § 1716 et seq.) as amended through July 25, 2019 (Incorporated by reference to Exhibit 3.1 to Fannie Mae's Quarterly Report on Form 10-Q for the quarter ended September 30, 2019, filed October 31, 2019)
3.2	Fannie Mae Bylaws, as amended through January 29, 2019 (Incorporated by reference to Exhibit 3.2 to Fannie Mae's Annual Report on Form 10-K for the year ended December 31, 2018, filed February 14, 2019)
4.1	Description of Securities of the Registrant (Incorporated by reference to Exhibit 4.1 to Fannie Mae's Annual Report on Form 10-K for the year ended December 31, 2019, filed February 13, 2020)
4.2	Certificate of Designation of Terms of Fannie Mae Preferred Stock, Series D (Incorporated by reference to Exhibit 4.1 to Fannie Mae's registration statement on Form 10, filed March 31, 2003)
4.3	Certificate of Designation of Terms of Fannie Mae Preferred Stock, Series E (Incorporated by reference to Exhibit 4.2 to Fannie Mae's registration statement on Form 10, filed March 31, 2003)
4.4	Certificate of Designation of Terms of Fannie Mae Preferred Stock, Series F (Incorporated by reference to Exhibit 4.3 to Fannie Mae's registration statement on Form 10, filed March 31, 2003)
4.5	Certificate of Designation of Terms of Fannie Mae Preferred Stock, Series G (Incorporated by reference to Exhibit 4.4 to Fannie Mae's registration statement on Form 10, filed March 31, 2003)
4.6	Certificate of Designation of Terms of Fannie Mae Preferred Stock, Series H (Incorporated by reference to Exhibit 4.5 to Fannie Mae's registration statement on Form 10, filed March 31, 2003)
4.7	Certificate of Designation of Terms of Fannie Mae Preferred Stock, Series I (Incorporated by reference to Exhibit 4.6 to Fannie Mae's registration statement on Form 10, filed March 31, 2003)
4.8	Certificate of Designation of Terms of Fannie Mae Preferred Stock, Series L (Incorporated by reference to Exhibit 4.7 to Fannie Mae's Quarterly Report on Form 10-Q, filed August 8, 2008)
4.9	Certificate of Designation of Terms of Fannie Mae Preferred Stock, Series M (Incorporated by reference to Exhibit 4.8 to Fannie Mae's Quarterly Report on Form 10-Q, filed August 8, 2008)
4.10	Certificate of Designation of Terms of Fannie Mae Preferred Stock, Series N (Incorporated by reference to Exhibit 4.9 to Fannie Mae's Quarterly Report on Form 10-Q, filed August 8, 2008)
4.11	Certificate of Designation of Terms of Fannie Mae Non-Cumulative Convertible Preferred Stock, Series 2004-1 (Incorporated by reference to Exhibit 4.10 to Fannie Mae's Annual Report on Form 10-K for the year ended December 31, 2009, filed February 26, 2010)
4.12	Certificate of Designation of Terms of Fannie Mae Preferred Stock, Series O (Incorporated by reference to Exhibit 4.11 to Fannie Mae's Annual Report on Form 10-K for the year ended December 31, 2009, filed February 26, 2010)
4.13	Certificate of Designation of Terms of Fannie Mae Preferred Stock, Series P (Incorporated by reference to Exhibit 4.12 to Fannie Mae's Annual Report on Form 10-K for the year ended December 31, 2012, filed April 2, 2013)
4.14	Certificate of Designation of Terms of Fannie Mae Preferred Stock, Series Q (Incorporated by reference to Exhibit 4.13 to Fannie Mae's Annual Report on Form 10-K for the year ended December 31, 2012, filed April 2, 2013)
4.15	Certificate of Designation of Terms of Fannie Mae Preferred Stock, Series R (Incorporated by reference to Exhibit 4.14 to Fannie Mae's Annual Report on Form 10-K for the year ended December 31, 2012, filed April 2, 2013)
4.16	Certificate of Designation of Terms of Fannie Mae Preferred Stock, Series S (Incorporated by reference to Exhibit 4.15 to Fannie Mae's Annual Report on Form 10-K for the year ended December 31, 2012, filed April 2, 2013)
4.17	Certificate of Designation of Terms of Fannie Mae Preferred Stock, Series T (Incorporated by reference to Exhibit 4.1 to Fannie Mae's Current Report on Form 8-K, filed May 19, 2008)

4.18	Amended and Restated Certificate of Designation of Terms of Variable Liquidation Preference Senior Preferred Stock, Series 2008-2, amended and restated as of September 30, 2019 (Incorporated by reference to Exhibit 4.1 to Fannie Mae's Quarterly Report on Form 10-Q for the quarter ended September 30, 2019, filed October 31, 2019)
4.19	Warrant to Purchase Common Stock, dated September 7, 2008 (Incorporated by reference to Exhibit 4.3 to Fannie Mae's Current Report on Form 8-K, filed September 11, 2008)
4.20	Amended and Restated Senior Preferred Stock Purchase Agreement, dated as of September 26, 2008, between the United States Department of the Treasury and Federal National Mortgage Association, acting through the Federal Housing Finance Agency as its duly appointed conservator (Incorporated by reference to Exhibit 4.1 to Fannie Mae's Current Report on Form 8-K, filed October 2, 2008)
4.21	Amendment to Amended and Restated Senior Preferred Stock Purchase Agreement, dated as of May 6, 2009, between the United States Department of the Treasury and Federal National Mortgage Association, acting through the Federal Housing Finance Agency as its duly appointed conservator (Incorporated by reference to Exhibit 4.21 to Fannie Mae's Quarterly Report on Form 10-Q for the quarter ended March 31, 2009, filed May 8, 2009)
4.22	Second Amendment to Amended and Restated Senior Preferred Stock Purchase Agreement, dated as of December 24, 2009, between the United States Department of the Treasury and Federal National Mortgage Association, acting through the Federal Housing Finance Agency as its duly appointed conservator (Incorporated by reference to Exhibit 4.1 to Fannie Mae's Current Report on Form 8-K, filed December 30, 2009)
4.23	Third Amendment to Amended and Restated Senior Preferred Stock Purchase Agreement, dated as of August 17, 2012, between the United States Department of the Treasury and Federal National Mortgage Association, acting through the Federal Housing Finance Agency as its duly appointed conservator (Incorporated by reference to Exhibit 4.1 to Fannie Mae's Current Report on Form 8-K, filed August 17, 2012)
4.24	Letter Agreement between the United States Department of the Treasury and the Federal National Mortgage Association, acting through the Federal Housing Finance Agency as its duly appointed conservator, dated December 21, 2017 (Incorporated by reference to Exhibit 10.1 to Fannie Mae's Current Report on Form 8-K, filed December 21, 2017)
4.25	Letter Agreement between the United States Department of the Treasury and the Federal National Mortgage Association, acting through the Federal Housing Finance Agency as its duly appointed conservator, dated September 27, 2019 (Incorporated by reference to Exhibit 10.1 to Fannie Mae's Current Report on Form 8-K, filed October 1, 2019)
4.26	Letter Agreement between the United States Department of the Treasury and the Federal National Mortgage Association, acting through the Federal Housing Finance Agency as its duly appointed conservator, dated January 14, 2021 (Incorporated by reference to Exhibit 10.1 to Fannie Mae's Current Report on Form 8-K, filed January 20, 2021)
10.1	Repayment Provisions for SEC Executive Officers, amended and restated as of March 8, 2012† (Incorporated by reference to Exhibit 10.44 to Fannie Mae's Quarterly Report on Form 10-Q for the quarter ended March 31, 2012, filed May 9, 2012)
10.2	Fannie Mae Form of Indemnification Agreement for directors and officers of Fannie Mae (Incorporated by reference to Exhibit 10.15 to Fannie Mae's Annual Report on Form 10-K for the year ended December 31, 2008, filed February 26, 2009.)
10.3	Fannie Mae Form of Indemnification Agreement for directors and officers of Fannie Mae (Incorporated by reference to Exhibit 10.2 to Fannie Mae's Annual Report on Form 10-K for the year ended December 31, 2016, filed February 17, 2017)
10.4	Fannie Mae Form of Indemnification Agreement for directors and officers of Fannie Mae (Incorporated by reference to Exhibit 10.3 to Fannie Mae's Annual Report on Form 10-K for the year ended December 31, 2018, filed February 14, 2019)
10.5	Form of Relocation Repayment Agreement for Officers of Fannie Mae† (Incorporated by reference to Exhibit 10.1 to Fannie Mae's Quarterly Report on Form 10-Q for the quarter ended March 31, 2019, filed May 1, 2019)
10.6	Fannie Mae Supplemental Retirement Savings Plan, as amended through April 29, 2008† (Incorporated by reference to Exhibit 10.2 to Fannie Mae's Quarterly Report on Form 10-Q for the quarter ended June 30, 2008, filed August 8, 2008)
10.7	Amendment to Fannie Mae Supplemental Retirement Savings Plan, effective October 8, 2008† (Incorporated by reference to Exhibit 10.32 to Fannie Mae's Annual Report on Form 10-K for the year ended December 31, 2008, filed February 26, 2009)
10.8	Amendment to Fannie Mae Supplemental Retirement Savings Plan, effective May 14, 2010† (Incorporated by reference to Exhibit 10.2 to Fannie Mae's Quarterly Report on Form 10-Q for the quarter ended June 30, 2010, filed August 5, 2010)
10.9	Amendment to Fannie Mae Supplemental Retirement Savings plan for 2012 Executive Compensation Program, adopted May 18, 2012† (Incorporated by reference to Exhibit 10.3 to Fannie Mae's Quarterly Report on Form 10-Q for the quarter ended June 30, 2012, filed August 8, 2012)
10.10	Amendment to Fannie Mae Supplemental Retirement Savings Plan, effective July 1, 2013† (Incorporated by reference to Exhibit 10.4 to Fannie Mae's Quarterly Report on Form 10-Q for the quarter ended September 30, 2013, filed November 7, 2013)
10.11	Amendment to Fannie Mae Supplemental Retirement Savings Plan, effective December 31, 2020†
10.12	Amended and Restated Senior Preferred Stock Purchase Agreement, dated as of September 26, 2008, between the United States Department of the Treasury and Federal National Mortgage Association, acting through the Federal Housing Finance Agency as its duly appointed conservator (Incorporated by reference Exhibit 4.1 to Fannie Mae's Current Report on Form 8-K, filed October 2, 2008)

10.13	Amendment to Amended and Restated Senior Preferred Stock Purchase Agreement, dated as of May 6, 2009, between the United States Department of the Treasury and Federal National Mortgage Association, acting through the Federal Housing Finance Agency as its duly appointed conservator (Incorporated by reference to Exhibit 4.21 to Fannie Mae's Quarterly Report on Form 10-Q, filed May 8, 2009)
10.14	Second Amendment to Amended and Restated Senior Preferred Stock Purchase Agreement, dated as of December 24, 2009, between the United States Department of the Treasury and Federal National Mortgage Association, acting through the Federal Housing Finance Agency as its duly appointed conservator (Incorporated by reference to Exhibit 4.1 to Fannie Mae's Current Report on Form 8-K, filed December 30, 2009)
10.15	Third Amendment to Amended and Restated Senior Preferred Stock Purchase Agreement, dated as of August 17, 2012, between the United States Department of the Treasury and Federal National Mortgage Association, acting through the Federal Housing Finance Agency as its duly appointed conservator (Incorporated by reference to Exhibit 4.1 to Fannie Mae's Current Report on Form 8-K, filed August 17, 2012)
10.16	Letter Agreement between the United States Department of the Treasury and the Federal National Mortgage Association, acting through the Federal Housing Finance Agency as its duly appointed conservator, dated December 21, 2017 (Incorporated by reference to Exhibit 10.1 to Fannie Mae's Current Report on Form 8-K, filed December 21, 2017)
10.17	Letter Agreement between the United States Department of the Treasury and the Federal National Mortgage Association, acting through the Federal Housing Finance Agency as its duly appointed conservator, dated September 27, 2019 (Incorporated by reference to Exhibit 10.1 to Fannie Mae's Current Report on Form 8-K, filed October 1, 2019)
10.18	Letter Agreement between the United States Department of the Treasury and the Federal National Mortgage Association, acting through the Federal Housing Finance Agency as its duly appointed conservator, dated January 14, 2021 (Incorporated by reference to Exhibit 10.1 to Fannie Mae's Current Report on Form 8-K, filed January 20, 2021)
31.1	Certification of Chief Executive Officer pursuant to Securities Exchange Act Rule 13a-14(a)
31.2	Certification of Chief Financial Officer pursuant to Securities Exchange Act Rule 13a-14(a)
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350
99.1	Third Amended and Restated Limited Liability Company Agreement of Common Securitization Solutions, LLC, dated as of January 9, 2020 (Incorporated by reference to Exhibit 99.1 to Fannie Mae's Annual Report on Form 10-K for the year ended December 31, 2019, dated February 13, 2020)
101. INS	Inline XBRL Instance Document* - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document
101. SCH	Inline XBRL Taxonomy Extension Schema*
101. CAL	Inline XBRL Taxonomy Extension Calculation*
101. DEF	Inline XBRL Taxonomy Extension Definition*
101. LAB	Inline XBRL Taxonomy Extension Label*
101. PRE	Inline XBRL Taxonomy Extension Presentation*
104	Cover Page Interactive Data File*—The Cover Page Interactive Data File does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document included as Exhibit 101

† This Exhibit is a management contract or compensatory plan or arrangement.

* The financial information contained in these XBRL documents is unaudited.

Item 16. Form 10-K Summary

None.

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.

Federal National Mortgage Association

/s/ Hugh R. Frater

Hugh R. Frater
Chief Executive Officer

Date: February 12, 2021

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Hugh R. Frater and Celeste M. Brown, and each of them severally, his or her true and lawful attorney-in-fact with power of substitution and resubstitution to sign in his or her name, place and stead, in any and all capacities, to do any and all things and execute any and all instruments that such attorney may deem necessary or advisable under the Securities Exchange Act of 1934 and any rules, regulations and requirements of the U.S. Securities and Exchange Commission in connection with the Annual Report on Form 10-K and any and all amendments hereto, as fully for all intents and purposes as he or she might or could do in person, and hereby ratifies and confirms all said attorneys-in-fact and agents, each acting alone, and his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

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 and on the dates indicated.

Signature	Title	Date
/s/ Sheila C. Bair Sheila C. Bair	Chair of the Board of Directors	February 12, 2021
/s/ Hugh R. Frater Hugh R. Frater	Chief Executive Officer and Director	February 12, 2021
/s/ Celeste M. Brown Celeste M. Brown	Executive Vice President and Chief Financial Officer	February 12, 2021
/s/ Chryssa C. Halley Chryssa C. Halley	Senior Vice President and Controller	February 12, 2021
/s/ Amy E. Alving Amy E. Alving	Director	February 12, 2021

Signature	Title	Date
/s/ Renee L. Glover Renee L. Glover	Director	February 12, 2021
/s/ Michael J. Heid Michael J. Heid	Director	February 12, 2021
/s/ Robert H. Herz Robert H. Herz	Director	February 12, 2021
/s/ Antony Jenkins Antony Jenkins	Director	February 12, 2021
/s/ Karin Kimbrough Karin Kimbrough	Director	February 12, 2021
/s/ Diane C. Nordin Diane C. Nordin	Director	February 12, 2021
/s/ Jonathan Plutzik Jonathan Plutzik	Director	February 12, 2021
/s/ Manuel Sánchez Rodríguez Manuel Sánchez Rodríguez	Director	February 12, 2021

Index to Consolidated Financial Statements

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To Fannie Mae:

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Fannie Mae and consolidated entities (in conservatorship) (the "Company") as of December 31, 2020 and 2019, the related consolidated statements of operations and comprehensive income, cash flows, and changes in equity (deficit) for each of the three years in the period ended December 31, 2020, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 12, 2021, expressed an adverse opinion on the Company's internal control over financial reporting because of a material weakness.

Change in Accounting Principle

As discussed in Note 1 to the consolidated financial statements, the Company has changed its method of accounting for the allowance for credit losses in the year ended December 31, 2020 due to the adoption of the Financial Accounting Standards Board Accounting Standards Update (“ASU”) 2016-13, Financial Instruments—Credit Losses (Topic 326), *Measurement of Credit Losses on Financial Instruments*, which was later amended by ASU 2019-04, ASU 2019-05 and ASU 2019-11.

Emphasis of a Matter

As discussed in Note 1 to the consolidated financial statements, the Company is currently under the control of its conservator and regulator, the Federal Housing Finance Agency (“FHFA”). Further, the Company directly and indirectly received substantial support from various agencies of the United States Government, including the United States Department of Treasury and FHFA. The Company is dependent upon continued support of the United States Government, various United States Government agencies and the Company’s conservator and regulator, FHFA.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the 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 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 financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Allowance for Loan Losses — Refer to Notes 1 and 4 to the financial statements

Critical Audit Matter Description

The Company's allowance for loan losses is a valuation allowance that reflects an estimate of expected credit losses related to its recorded investment in held for investment loans. The allowance for loan losses requires consideration of a broad range of information about current conditions and reasonable and supportable forecast information to develop loan loss estimates. The Company used a discounted cash flow method to measure expected credit losses on its single-family mortgage loans and an undiscounted loss method to measure expected credit losses on its multifamily mortgage loans. The internal models used to estimate credit losses incorporate historical credit loss experience, adjusted for current economic forecasts and the current credit profile of the Company's loan book of business. The models use reasonable and supportable forecasts for key economic drivers, such as home prices (single-family), interest rates (single-family), rental income (multifamily) and capitalization rates (multifamily). The cash flow analysis incorporates estimates produced by the Company's internal models, which include the probability of prepayment, default rates, and loss severity in the event of default. The modeled estimates are adjusted when management believes the model does not capture the entirety of losses it expects to incur. Accordingly, the estimate of lifetime expected credit losses requires significant management judgments and assumptions about highly complex and inherently uncertain matters.

Estimating expected credit losses as a result of the economic dislocation caused by the COVID-19 pandemic and heightened economic uncertainty required significant management judgment. Management's estimate of the quantitative impact of COVID-19 on the allowance for loan losses relied on various assumptions to determine the expected credit losses for both single-family and multifamily loans. These assumptions included expectations surrounding the length of time that loans remain in forbearance and the type and extent of loss mitigation that may be needed when loans exit a COVID-19-related forbearance, political uncertainty and the high degree of uncertainty regarding the future course of the pandemic, including new strains of the virus and its effect on the economy.

We identified the allowance for loan losses as a critical audit matter because of the complexity of the Company's internal models and the significant assumptions used by management. Auditing the allowance for loan losses required a high degree of auditor judgment and an increased extent of effort, including the need to involve credit specialists when performing audit procedures to evaluate the reasonableness of management's models and assumptions.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the internal models and assumptions used by management to estimate the allowance for loan losses included the following, among others:

- We tested the effectiveness of internal controls, including those related to the internal models and significant management assumptions.
- With the assistance of our credit specialists, we evaluated the internal models and management's assumptions, including inputs into and the resulting estimates of the expected cash flows, including the probability of prepayment, default rates and loss severity in the event of default.
- With the assistance of our credit specialists, we evaluated management's assumptions, including those assumptions related to the COVID-19 pandemic. For single-family loans, we evaluated the assumptions for home price growth, projected interest rates, the rate of borrower participation in a COVID-19 forbearance program and the type and extent of loss mitigation that may be needed when the loan exits forbearance. For multifamily loans, we evaluated management's assumptions related to forecasts of property rental income and capitalization rates. Additionally, we evaluated the assumptions regarding the effect on the economy and expected credit losses from political uncertainty and the uncertainty regarding the future course of the pandemic for both single-family and multifamily loans.
- We tested the accuracy of historical loan performance data and current economic data consumed by the internal models used to calculate expected credit losses.
- We evaluated the appropriateness of economic and other forecasts used in internal models, including the reversion period applied for periods beyond the reasonable and supportable forecast period.

/s/ Deloitte & Touche LLP

McLean, Virginia
February 12, 2021

We have served as the Company's auditor since 2005.

FANNIE MAE

(In conservatorship)

Consolidated Balance Sheets

(Dollars in millions)

	As of December 31,	
	2020	**2019**
ASSETS		
Cash and cash equivalents	**$ 38,337**	$ 21,184
Restricted cash (includes $68,308 and $33,294, respectively, related to consolidated trusts)	**77,286**	40,223
Federal funds sold and securities purchased under agreements to resell or similar arrangements	**28,200**	13,578
Investments in securities:		
Trading, at fair value (includes $6,544 and $3,037, respectively, pledged as collateral)	**136,542**	48,123
Available-for-sale, at fair value (with an amortized cost of $1,606, net of allowance for credit losses of $3 as of December 31, 2020)	**1,697**	2,404
Total investments in securities	**138,239**	50,527
Mortgage loans:		
Loans held for sale, at lower of cost or fair value	**5,197**	6,773
Loans held for investment, at amortized cost:		
Of Fannie Mae	**112,726**	94,911
Of consolidated trusts	**3,546,521**	3,241,494
Total loans held for investment (includes $6,490 and $7,825, respectively, at fair value)	**3,659,247**	3,336,405
Allowance for loan losses	**(10,552)**	(9,016)
Total loans held for investment, net of allowance	**3,648,695**	3,327,389
Total mortgage loans	**3,653,892**	3,334,162
Advances to lenders	**10,449**	6,453
Deferred tax assets, net	**12,947**	11,910
Accrued interest receivable, net (includes $9,635 and $8,172, respectively, related to consolidated trusts and net of an allowance of $216 as of December 31, 2020)	**9,937**	8,604
Acquired property, net	**1,261**	2,366
Other assets	**15,201**	14,312
Total assets	**$ 3,985,749**	$ 3,503,319
LIABILITIES AND EQUITY		
Liabilities:		
Accrued interest payable (includes $8,955 and $9,361, respectively, related to consolidated trusts)	**$ 9,719**	$ 10,228
Debt:		
Of Fannie Mae (includes $3,728 and $5,687, respectively, at fair value)	**289,572**	182,247
Of consolidated trusts (includes $24,586 and $21,880, respectively, at fair value)	**3,646,164**	3,285,139
Other liabilities (includes $1,523 and $376, respectively, related to consolidated trusts)	**15,035**	11,097
Total liabilities	**3,960,490**	3,488,711
Commitments and contingencies (Note 16)	**—**	—
Fannie Mae stockholders' equity:		
Senior preferred stock (liquidation preference of $142,192 and $131,178, respectively)	**120,836**	120,836
Preferred stock, 700,000,000 shares are authorized—555,374,922 shares issued and outstanding	**19,130**	19,130
Common stock, no par value, no maximum authorization—1,308,762,703 shares issued and 1,158,087,567 shares outstanding	**687**	687
Accumulated deficit	**(108,110)**	(118,776)
Accumulated other comprehensive income	**116**	131
Treasury stock, at cost, 150,675,136 shares	**(7,400)**	(7,400)
Total stockholders' equity (See Note 1: Senior Preferred Stock Purchase Agreement, Senior Preferred Stock and Warrant for information on the related dividend obligation and liquidation preference)	**25,259**	14,608
Total liabilities and equity	**$ 3,985,749**	$ 3,503,319

See Notes to Consolidated Financial Statements

FANNIE MAE

(In conservatorship)

Consolidated Statements of Operations and Comprehensive Income

(Dollars and shares in millions, except per share amounts)

	For the Year Ended December 31,		
	2020	**2019**	**2018**
Interest income:			
Trading securities	**$ 874**	$ 1,627	$ 1,336
Available-for-sale securities	**98**	175	230
Mortgage loans	**106,316**	117,374	115,029
Federal funds sold and securities purchased under agreements to resell or similar arrangements	**146**	843	742
Other	**135**	163	136
Total interest income	**107,569**	120,182	117,473
Interest expense:			
Short-term debt	**(182)**	(501)	(468)
Long-term debt	**(82,521)**	(98,388)	(95,732)
Total interest expense	**(82,703)**	(98,889)	(96,200)
Net interest income	**24,866**	21,293	21,273
Benefit (provision) for credit losses	**(678)**	4,011	3,309
Net interest income after benefit (provision) for credit losses	**24,188**	25,304	24,582
Investment gains, net	**907**	1,770	952
Fair value gains (losses), net	**(2,501)**	(2,214)	1,121
Fee and other income	**462**	566	555
Non-interest income (loss)	**(1,132)**	122	2,628
Administrative expenses:			
Salaries and employee benefits	**(1,554)**	(1,486)	(1,451)
Professional services	**(921)**	(967)	(1,032)
Other administrative expenses	**(593)**	(570)	(576)
Total administrative expenses	**(3,068)**	(3,023)	(3,059)
Foreclosed property expense	**(177)**	(515)	(617)
Temporary Payroll Tax Cut Continuation Act of 2011 ("TCCA") fees	**(2,673)**	(2,432)	(2,284)
Credit enhancement expense	**(1,361)**	(1,134)	(679)
Change in expected credit enhancement recoveries	**233**	—	—
Other expenses, net	**(1,131)**	(745)	(472)
Total expenses	**(8,177)**	(7,849)	(7,111)
Income before federal income taxes	**14,879**	17,577	20,099
Provision for federal income taxes	**(3,074)**	(3,417)	(4,140)
Net income	**11,805**	14,160	15,959
Other comprehensive loss:			
Changes in unrealized losses on available-for-sale securities, net of reclassification adjustments and taxes	**(23)**	(179)	(344)
Other, net of taxes	**8**	(12)	(4)
Total other comprehensive loss	**(15)**	(191)	(348)
Total comprehensive income	**$ 11,790**	$ 13,969	$ 15,611
Net income	**$ 11,805**	$ 14,160	$ 15,959
Dividends distributed or amounts attributable to senior preferred stock	**(11,790)**	(13,969)	(12,613)
Net income attributable to common stockholders	**$ 15**	$ 191	$ 3,346
Earnings per share:			
Basic	**$ 0.00**	$ 0.03	$ 0.58
Diluted	**0.00**	0.03	0.57
Weighted-average common shares outstanding:			
Basic	**5,867**	5,762	5,762
Diluted	**5,893**	5,893	5,893

See Notes to Consolidated Financial Statements

FANNIE MAE

(In conservatorship)

Consolidated Statements of Cash Flows

(Dollars in millions)

	For the Year Ended December 31,		
	2020	**2019**	**2018**
Cash flows provided by (used in) operating activities:			
Net income	**$ 11,805**	$ 14,160	$ 15,959
Reconciliation of net income to net cash provided by (used in) operating activities:			
Amortization of cost basis adjustments	**(9,190)**	(6,002)	(5,949)
Provision (benefit) for credit losses	**678**	(4,011)	(3,309)
Valuation gains	**(2,618)**	(1,809)	(911)
Current and deferred federal income taxes	**3,152**	1,517	3,680
Net gains related to the disposition of acquired property and preforeclosure sales, including credit enhancements	**(924)**	(917)	(1,785)
Net change in accrued interest receivable	**(2,749)**	332	204
Net change in servicer advances	**932**	(67)	(206)
Other, net	**(225)**	(363)	442
Net change in trading securities	**(73,659)**	(1,630)	(5,454)
Interest payment on discounted debt	**(136)**	(5,964)	(423)
Net cash provided by (used in) operating activities	**(72,934)**	(4,754)	2,248
Cash flows provided by investing activities:			
Proceeds from maturities and paydowns of trading securities held for investment	**47**	58	182
Proceeds from sales of trading securities held for investment	**110**	49	96
Proceeds from maturities and paydowns of available-for-sale securities	**364**	469	695
Proceeds from sales of available-for-sale securities	**361**	537	760
Purchases of loans held for investment	**(766,699)**	(261,808)	(172,155)
Proceeds from repayments of loans acquired as held for investment of Fannie Mae	**10,672**	12,508	15,082
Proceeds from sales of loans acquired as held for investment of Fannie Mae	**8,744**	17,794	17,511
Proceeds from repayments and sales of loans acquired as held for investment of consolidated trusts	**1,120,473**	552,135	401,045
Advances to lenders	**(339,043)**	(141,395)	(108,294)
Proceeds from disposition of acquired property and preforeclosure sales	**5,991**	7,425	9,321
Net change in federal funds sold and securities purchased under agreements to resell or similar arrangements	**(14,622)**	19,360	(13,468)
Other, net	**287**	(80)	78
Net cash provided by investing activities	**26,685**	207,052	150,853
Cash flows provided by (used in) financing activities:			
Proceeds from issuance of debt of Fannie Mae	**580,220**	789,572	789,355
Payments to redeem debt of Fannie Mae	**(472,795)**	(834,294)	(834,366)
Proceeds from issuance of debt of consolidated trusts	**1,091,242**	435,235	357,846
Payments to redeem debt of consolidated trusts	**(1,097,692)**	(575,706)	(471,151)
Payments of cash dividends on senior preferred stock to Treasury	**—**	(5,601)	(9,372)
Proceeds from senior preferred stock purchase agreement with Treasury	**—**	—	3,687
Other, net	**(510)**	480	63
Net cash provided by (used in) financing activities	**100,465**	(190,314)	(163,938)
Net increase (decrease) in cash, cash equivalents and restricted cash	**54,216**	11,984	(10,837)
Cash, cash equivalents and restricted cash at beginning of period	**61,407**	49,423	60,260
Cash, cash equivalents and restricted cash at end of period	**$ 115,623**	$ 61,407	$ 49,423
Cash paid during the period for:			
Interest	**$ 113,878**	$ 121,542	$ 110,415
Income taxes	**3,950**	1,900	460
Non-cash activities:			
Net mortgage loans acquired by assuming debt	**$ 369,733**	$ 273,174	$ 231,478
Net transfers from mortgage loans of Fannie Mae to mortgage loans of consolidated trusts	**709,451**	248,463	185,310
Transfers from advances to lenders to loans held for investment of consolidated trusts	**318,426**	128,272	102,865
Net transfers from mortgage loans to acquired property	**3,940**	6,681	8,131

See Notes to Consolidated Financial Statements

FANNIE MAE

(In conservatorship)

Consolidated Statements of Changes in Equity (Deficit)

(Dollars and shares in millions)

	Fannie Mae Stockholders' Equity (Deficit)									
	Shares Outstanding									
	Senior Preferred	Preferred	Common	Senior Preferred Stock	Preferred Stock	Common Stock	Accumulated Deficit	Accumulated Other Comprehensive Income	Treasury Stock	Total Equity (Deficit)
Balance as of December 31, 2017	**1**	**556**	**1,158**	**$117,149**	**$ 19,130**	**$ 687**	**$ (133,805)**	**$ 553**	**$ (7,400)**	**$ (3,686)**
Senior preferred stock dividends paid	—	—	—	—	—	—	(9,372)	—	—	(9,372)
Increase to senior preferred stock	—	—	—	3,687	—	—	—	—	—	3,687
Comprehensive income:										
Net income	—	—	—	—	—	—	15,959	—	—	15,959
Other comprehensive income, net of tax effect:										
Changes in net unrealized gains on available-for-sale securities (net of taxes of $21)	—	—	—	—	—	—	—	(79)	—	(79)
Reclassification adjustment for gains included in net income (net of taxes of $70)	—	—	—	—	—	—	—	(265)	—	(265)
Other (net of taxes of $0)	—	—	—	—	—	—	—	(4)	—	(4)
Total comprehensive income										15,611
Reclassification related to Tax Cuts and Jobs Act	—	—	—	—	—	—	(117)	117	—	—
Balance as of December 31, 2018	**1**	**556**	**1,158**	**$120,836**	**$ 19,130**	**$ 687**	**$ (127,335)**	**$ 322**	**$ (7,400)**	**$ 6,240**
Senior preferred stock dividends paid	—	—	—	—	—	—	(5,601)	—	—	(5,601)
Comprehensive income:										
Net income	—	—	—	—	—	—	14,160	—	—	14,160
Other comprehensive income, net of tax effect:										
Changes in net unrealized gains on available-for-sale securities (net of taxes of $0)	—	—	—	—	—	—	—	1	—	1
Reclassification adjustment for gains included in net income (net of taxes of $48)	—	—	—	—	—	—	—	(180)	—	(180)
Other (net of taxes of $3)	—	—	—	—	—	—	—	(12)	—	(12)
Total comprehensive income										13,969
Balance as of December 31, 2019	**1**	**556**	**1,158**	**$120,836**	**$ 19,130**	**$ 687**	**$ (118,776)**	**$ 131**	**$ (7,400)**	**$ 14,608**
Transition impact, net of tax, from the adoption of the current expected credit loss standard	—	—	—	—	—	—	(1,139)	—	—	(1,139)
Balance as of January 1, 2020, adjusted	**1**	**556**	**1,158**	**120,836**	**19,130**	**687**	**(119,915)**	**131**	**(7,400)**	**13,469**
Comprehensive income:										
Net income	**—**	**—**	**—**	**—**	**—**	**—**	**11,805**	**—**	**—**	**11,805**
Other comprehensive income, net of tax effect:										
Changes in net unrealized gains on available-for-sale securities (net of taxes of $3)	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**(12)**	**—**	**(12)**
Reclassification adjustment for gains included in net income (net of taxes of $3)	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**(11)**	**—**	**(11)**
Other (net of taxes of $2)	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**8**	**—**	**8**
Total comprehensive income										**11,790**
Balance as of December 31, 2020	**1**	**556**	**1,158**	**$120,836**	**$ 19,130**	**$ 687**	**$ (108,110)**	**$ 116**	**$ (7,400)**	**$ 25,259**

See Notes to Consolidated Financial Statements

FANNIE MAE

(In conservatorship)

Notes to Consolidated Financial Statements

1. Summary of Significant Accounting Policies

Organization

Fannie Mae is a leading source of financing for mortgages in the United States. We are a shareholder-owned corporation organized as a government-sponsored entity ("GSE") and existing under the Federal National Mortgage Association Charter Act (the "Charter Act" or our "charter"). Our charter is an act of Congress, and we have a mission under that charter to provide liquidity and stability to the residential mortgage market and to promote access to mortgage credit. As such, we are subject to government oversight and regulation. Our regulators include the Federal Housing Finance Agency ("FHFA"), the U.S. Department of Housing and Urban Development ("HUD"), the U.S. Securities and Exchange Commission ("SEC"), and the U.S. Department of the Treasury ("Treasury"). The U.S. government does not guarantee our securities or other obligations.

We operate in the secondary mortgage market, primarily working with lenders who originate loans to borrowers. We do not originate loans or lend money directly to consumers in the primary mortgage market. Instead, we securitize mortgage loans originated by lenders into Fannie Mae mortgage-backed securities ("MBS") that we guarantee; purchase mortgage loans and mortgage-related securities, primarily for securitization and sale at a later date; manage mortgage credit risk; and engage in other activities that increase the supply of affordable housing.

We have two reportable business segments: Single-Family and Multifamily. The Single-Family business operates in the secondary mortgage market relating to loans secured by properties containing four or fewer residential dwelling units. The Multifamily business operates in the secondary mortgage market relating primarily to loans secured by properties containing five or more residential units. We describe the management reporting and allocation process used to generate our segment results in "Note 10, Segment Reporting."

Conservatorship

On September 7, 2008, the Secretary of the Treasury and the Director of FHFA announced several actions taken by Treasury and FHFA regarding Fannie Mae, which included: (1) placing us in conservatorship, with FHFA acting as our conservator, and (2) the execution of a senior preferred stock purchase agreement by our conservator, on our behalf, and Treasury, pursuant to which we issued to Treasury both senior preferred stock and a warrant to purchase common stock.

Under the Federal Housing Enterprises Financial Safety and Soundness Act of 1992, as amended, including by the Federal Housing Finance Regulatory Reform Act of 2008 (together, the "GSE Act"), the conservator immediately succeeded to (1) all rights, titles, powers and privileges of Fannie Mae, and of any stockholder, officer or director of Fannie Mae with respect to Fannie Mae and its assets, and (2) title to the books, records and assets of any other legal custodian of Fannie Mae. The conservator subsequently issued an order that provided for our Board of Directors to exercise specified authorities. The conservator also provided instructions regarding matters for which conservator decision or notification is required. The conservator retains the authority to amend or withdraw its order and instructions at any time.

The conservator has the power to transfer or sell any asset or liability of Fannie Mae (subject to limitations and post-transfer notice provisions for transfers of qualified financial contracts) without any approval, assignment of rights or consent of any party. However, mortgage loans and mortgage-related assets that have been transferred to a Fannie Mae MBS trust must be held by the conservator for the beneficial owners of the Fannie Mae MBS and cannot be used to satisfy the general creditors of Fannie Mae. Neither the conservatorship nor the terms of our agreements with Treasury change our obligation to make required payments on our debt securities or perform under our mortgage guaranty obligations.

The conservatorship has no specified termination date and there continues to be significant uncertainty regarding our future, including how long we will continue to exist in our current form, the extent of our role in the market, the level of government support of our business, how long we will be in conservatorship, what form we will have and what ownership interest, if any, our current common and preferred stockholders will hold in us after the conservatorship is terminated and whether we will continue to exist following conservatorship. Under the GSE Act, FHFA must place us into receivership if the Director of FHFA makes a written determination that our assets are less than our obligations or if we have not been paying our debts, in either case, for a period of 60 days. In addition, the Director of FHFA may place us into receivership at his discretion at any time for other reasons set forth in the GSE Act, including if we are critically undercapitalized or if we are undercapitalized and have no reasonable prospect of becoming adequately capitalized. Should we be placed into receivership, different assumptions would be required to determine the carrying value of our assets, which could lead to substantially different financial results. Treasury has made a commitment under the senior preferred stock purchase agreement to provide funding to us under certain circumstances if we have a net worth deficit. We are not aware of any plans of FHFA (1) to fundamentally change our business model, or (2) to reduce the aggregate amount available to or held by the company under our capital structure, which includes the senior preferred stock purchase agreement.

Senior Preferred Stock Purchase Agreement, Senior Preferred Stock and Warrant

Senior Preferred Stock Purchase Agreement

Under our senior preferred stock purchase agreement with Treasury, in September 2008 we issued Treasury one million shares of senior preferred stock and a warrant to purchase shares of our common stock. The senior preferred stock purchase agreement and the dividend and liquidation provisions of the senior preferred stock were amended in January 2021 pursuant to a letter agreement between us, through FHFA in its capacity as conservator, and Treasury. The terms of the agreement, including Treasury's funding commitment, and the dividend and liquidation provisions of the senior preferred stock are described more fully in "Note 11, Equity."

The January 2021 letter agreement made a number of changes to the covenants in the senior preferred stock purchase agreement, as well as to the terms of the senior preferred stock. Because these changes were made subsequent to December 31, 2020, there was no impact to our 2020 financial statements as a result of the changes in the January 2021 letter agreement. These changes include the following:

- The dividend provisions of the senior preferred stock were amended to permit us to retain increases in our net worth until our net worth exceeds the amount of adjusted total capital necessary for us to meet the capital requirements and buffers under the enterprise regulatory capital framework discussed in "Note 12, Regulatory Capital Requirements." After the "capital reserve end date," which is defined as the last day of the second consecutive fiscal quarter during which we have maintained capital equal to, or in excess of, all of the capital requirements and buffers under the enterprise regulatory capital framework, the amount of quarterly dividends to Treasury will be equal to the lesser of any quarterly increase in our net worth and a 10% annual rate on the then-current liquidation preference of the senior preferred stock.
- At the end of each fiscal quarter, through and including the capital reserve end date, the liquidation preference of the senior preferred stock will be increased by an amount equal to the increase in our net worth, if any, during the immediately prior fiscal quarter.
- We may issue and retain up to $70 billion in proceeds from the sale of common stock without Treasury's prior consent, provided that (1) Treasury has already exercised its warrant in full, and (2) all currently pending significant litigation relating to the conservatorship and to an amendment to the senior preferred stock purchase agreement made in August 2012 has been resolved, which may require Treasury's assent.
- FHFA may release us from conservatorship without Treasury's consent after (1) all currently pending significant litigation relating to the conservatorship and to the August 2012 amendment to the senior preferred stock purchase agreement has been resolved, and (2) our common equity tier 1 capital, together with any other common stock that we may issue in a public offering, equals or exceeds 3% of our "adjusted total assets" under our enterprise regulatory capital framework.
- New restrictive covenants were added that will impact both our single-family and multifamily business activities.

We are still evaluating the appropriate accounting for this amendment to the senior preferred stock purchase agreement. The amendment will be accounted for as either a modification or an extinguishment of the existing instrument. To the extent that the amendment is required to be accounted for as a modification, there will be no change in the carrying value of the senior preferred stock, as it will be accounted for as an extension of the existing arrangement. However, to the extent that the amendment qualifies as an extinguishment, we will record the amended senior preferred stock at fair value with the difference between the current carrying value and the amended stock's fair value recorded in accumulated deficit.

Senior Preferred Stock

For information about the senior preferred stock, see "Note 11, Equity."

Warrant

On September 7, 2008, we issued to Treasury a warrant to purchase, at a nominal price, shares of our common stock equal to 79.9% of the total common stock outstanding on a fully diluted basis on the date the warrant is exercised. The warrant may be exercised, in whole or in part, at any time on or before September 7, 2028. We recorded the warrant at fair value in our stockholders' equity as a component of additional paid-in-capital. The fair value of the warrant was calculated using the Black-Scholes Option Pricing Model. Since the warrant has an exercise price of $0.00001 per share, the model is insensitive to the risk-free rate and volatility assumptions used in the calculation and the share value of the warrant is equal to the price of the underlying common stock. We estimated that the fair value of the warrant at issuance was $3.5 billion based on the price of our common stock on September 8, 2008, which was after the dilutive effect of the warrant had been reflected in the market price. Subsequent changes in the fair value of the warrant are not recognized in our financial statements. If the warrant is exercised, the stated value of the common stock issued will be reclassified as "Common stock" in our consolidated balance sheets. Because the warrant's exercise price per share is considered non-substantive (compared to the market price of our common stock), the warrant was determined to have characteristics of non-voting common stock, and thus is included in the computation of basic and diluted earnings (loss) per share. The weighted-average shares of common stock outstanding for 2020, 2019 and 2018 included shares of common stock that would be issuable upon full exercise of the warrant issued to Treasury.

Impact of U.S. Government Support

We continue to rely on support from Treasury to eliminate any net worth deficits we may experience in the future, which would otherwise trigger our being placed into receivership. Based on consideration of all the relevant conditions and events affecting our operations, including our reliance on the U.S. government, we continue to operate as a going concern and in accordance with FHFA's provision of authority.

In addition to MBS issuances, we fund our business through the issuance of short-term and long-term debt securities in the domestic and international capital markets. Accordingly, we are subject to "roll over," or refinancing, risk on our outstanding debt. Our ability to issue long-term debt has been strong primarily due to actions taken by the federal government to support our business and our debt securities.

We believe that continued federal government support of our business, as well as our status as a government-sponsored enterprise, are essential to maintaining our current level of access to debt funding. Changes or perceived changes in federal government support of our business without appropriate capitalization of the company could materially and adversely affect our liquidity, financial condition and results of operations. Changes or perceived changes in our status as a government-sponsored enterprise could also materially and adversely affect our liquidity, financial condition and results of operations. In addition, due to our reliance on the U.S. government's support, our access to debt funding or the cost of debt funding also could be materially adversely affected by a change or perceived change in the creditworthiness of the U.S government. A downgrade in our credit ratings could reduce demand for our debt securities and increase our borrowing costs. Future changes or disruptions in the financial markets could significantly impact the amount, mix and cost of funds we obtain, which also could increase our liquidity and "roll over" risk and have a material adverse impact on our liquidity, financial condition and results of operations.

Related Parties

Because Treasury holds a warrant to purchase shares of Fannie Mae common stock equal to 79.9% of the total number of shares of Fannie Mae common stock, we and Treasury are deemed related parties. As of December 31, 2020, Treasury held an investment in our senior preferred stock with an aggregate liquidation preference of $142.2 billion. See "Senior Preferred Stock Purchase Agreement, Senior Preferred Stock and Warrant" above for additional information on transactions under this agreement.

FHFA's control of both Fannie Mae and Freddie Mac has caused Fannie Mae, FHFA and Freddie Mac to be deemed related parties. Additionally, Fannie Mae and Freddie Mac jointly own Common Securitization Solutions, LLC ("CSS"), a limited liability company created to operate a common securitization platform; as such, CSS is deemed a related party. As a part of our joint ownership, Fannie Mae, Freddie Mac and CSS are parties to a limited liability company agreement that sets forth the overall framework for the joint venture, including Fannie Mae's and Freddie Mac's rights and responsibilities as members of CSS. Fannie Mae, Freddie Mac and CSS are also parties to a customer services agreement that sets forth the terms under which CSS provides mortgage securitization services to us and Freddie Mac, including the operation of the common securitization platform as well as an administrative services agreement. CSS operates as a separate company from us and Freddie Mac, with all funding and limited administrative support services and other resources provided to it by us and Freddie Mac through our capital contributions.

In the ordinary course of business, Fannie Mae may purchase and sell securities issued by Treasury and Freddie Mac. These transactions occur on the same terms as those prevailing at the time for comparable transactions with unrelated parties. Since June 2019, some of the structured securities we issue are backed in whole or in part by Freddie Mac securities. Fannie Mae and Freddie Mac each have agreed to indemnify the other party for losses caused by: its failure to meet its payment or other specified obligations under the trust agreements pursuant to which the underlying resecuritized securities were issued; its failure to meet its obligations under the customer services agreement; its violations of laws; or with respect to material misstatements or omissions in offering documents, ongoing disclosures and related materials relating to the underlying resecuritized securities. Additionally, we make regular income tax payments to and receive tax refunds from the Internal Revenue Service ("IRS"), a bureau of Treasury. We received a refund of $4.0 billion, including $340 million of interest, from the IRS during the year ended December 31, 2020 for income tax adjustments related to tax years 2010 through 2016.

Transactions with Treasury

Our administrative expenses were reduced by $19 million, $20 million and $24 million for the years ended December 31, 2020, 2019 and 2018, respectively, due to reimbursements from Treasury and Freddie Mac for expenses incurred as program administrator for Treasury's Home Affordable Modification Program ("HAMP") and other initiatives under Treasury's Making Home Affordable Program.

In December 2011, Congress enacted the Temporary Payroll Cut Continuation Act of 2011 ("TCCA") which, among other provisions, required that we increase our single-family guaranty fees by at least 10 basis points and remit this increase to Treasury. Effective April 1, 2012, we increased the guaranty fee on all single-family residential mortgages delivered to us by 10 basis points. In 2012, FHFA and Treasury advised us to remit this fee increase to Treasury with respect to all loans acquired by us on or after April 1, 2012 and before January 1, 2022, and to continue to remit these amounts to Treasury on and after January 1, 2022 with respect to loans we acquired before this date until those loans are paid off or otherwise liquidated. The resulting fee revenue and expense are recorded in "Interest income: Mortgage loans" and "TCCA fees," respectively, in our consolidated statements of operations and comprehensive income.

In 2020, FHFA provided guidance that we are not required to accrue or remit TCCA fees to Treasury with respect to loans backing MBS trusts that have been delinquent for four months or longer. Once payments on such loans resume, we will resume accrual and remittance to Treasury of the associated TCCA fees on the loans.

We recognized $2.7 billion, $2.4 billion and $2.3 billion in TCCA fees during the years ended December 31, 2020, 2019 and 2018, respectively, of which $697 million and $626 million had not been remitted as of December 31, 2020 and 2019, respectively.

The GSE Act requires us to set aside certain funding obligations, a portion of which is attributable to Treasury's Capital Magnet Fund. In December 2014, FHFA directed us to set aside amounts for these contributions during each fiscal year, except for any fiscal year for which a draw from Treasury was made under the terms of the senior preferred stock purchase agreement or in which such allocation or transfer would cause such a draw. These funding obligations, recognized in "Other expenses, net" in our consolidated statements of operations and comprehensive income, were measured as the product of 4.2 basis points and the unpaid principal balance of our total new business purchases for the respective period, with 35% of this amount payable to Treasury's Capital Magnet Fund. We recognized $211 million, $98 million and $75 million in "Other expenses, net" in connection with Treasury's Capital Magnet Fund for the years ended December 31, 2020, 2019 and 2018, respectively. We paid $98 million and $75 million to Treasury's Capital Magnet Fund in 2020 and 2019, respectively. In 2021, we expect to pay $211 million to Treasury's Capital Magnet Fund based on our new business purchases in 2020.

On January 14, 2021, we, through FHFA acting on our behalf in its capacity as our conservator, and Treasury, entered into a letter agreement modifying the terms of the senior preferred stock purchase agreement and senior preferred stock held by Treasury. These modifications and other specified provisions of the letter agreement are described under "Senior Preferred Stock Purchase Agreement, Senior Preferred Stock and Warrant" above.

Transactions with FHFA

The GSE Act authorizes FHFA to establish an annual assessment for regulated entities, including Fannie Mae, which is payable on a semi-annual basis (April and October), for FHFA's costs and expenses, as well as to maintain FHFA's working capital. We recognized FHFA assessment fees, which are recorded in "Administrative expenses" in our consolidated statements of operations and comprehensive income, of $139 million, $121 million and $110 million for the years ended December 31, 2020, 2019 and 2018, respectively.

Transactions with CSS and Freddie Mac

We contributed capital to CSS, the company we jointly own with Freddie Mac, of $88 million, $105 million and $135 million for the years ended December 31, 2020, 2019 and 2018, respectively.

Basis of Presentation

The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP"). To conform to our current-period presentation, we have reclassified certain amounts reported in our prior periods' consolidated financial statements.

Presentation of Advances to Lenders

Advances to lenders represent our payments of cash in exchange for the receipt of mortgage loans from lenders in a transfer that is accounted for as a secured lending arrangement. These transfers primarily occur when we provide early funding to lenders for loans that they will subsequently either sell to us or securitize into a Fannie Mae MBS that they will deliver to us. Early lender funding advances have terms up to 60 days and earn a short-term market rate of interest. Advances to lenders has been presented as a separate line item for all periods presented, as increased mortgage refinance activity resulted in a higher balance at period end. In prior periods, advances to lenders were recorded in "Other assets."

Presentation of Freestanding Credit Enhancement Expense and Recoveries

Freestanding credit enhancements primarily include our Connecticut Avenue Securities® ("CAS") and Credit Insurance Risk Transfer™ ("CIRT™") programs, enterprise-paid mortgage insurance ("EPMI"), and certain lender risk-sharing arrangements, including our multifamily Delegated Underwriting and Servicing ("DUS®") program. We have revised our presentation of the expenses and recoveries associated with these programs as described below.

Credit Enhancement Expense

Credit enhancement expense consists of costs associated with our freestanding credit enhancements. We exclude from this expense costs related to our CAS transactions accounted for as debt instruments and credit risk transfer programs accounted for as derivative instruments. Credit enhancement expense has been presented as a separate line item for all periods presented, as these expenses have become a more significant driver of our results of operations. In prior periods, credit enhancement expenses were recorded in "Other expenses, net."

Change in Expected Credit Enhancement Recoveries

Change in expected credit enhancement recoveries consists of the change in benefits recognized from our freestanding credit enhancements, including any realized amounts. Benefits, if any, from our CAS, CIRT and EPMI programs previously recorded in "Fee and other income" have been reclassified to "Change in expected credit enhancement recoveries" for all periods presented. Benefits from other lender risk-sharing programs, including our multifamily DUS program, were recorded as a reduction of credit-related expense in periods prior to 2020. However, with our adoption of the Current Expected Credit Loss standard on January 1, 2020, benefits from freestanding credit enhancements are no longer recorded as a reduction of credit-related expenses. These benefits from lender risk-sharing have been reclassified into "Change in expected credit enhancement recoveries" on a prospective basis beginning January 1, 2020.

Presentation of Yield Maintenance Fees

Prior period multifamily yield maintenance fees have been reclassified to conform to the current-period presentation. Multifamily yield maintenance fees, or prepayment premiums, are fees that a borrower pays when they prepay their loan. For multifamily loans held in a consolidated trust, a portion of the yield maintenance fee is typically passed through to the holders of the trust certificate. As of January 1, 2020, we classify all yield maintenance fees as interest income. For consolidated loans, the portion of the fee passed through to the certificate holders of the trust is classified as interest expense. Previously, we classified multifamily yield maintenance fees as interest income only when the fee was associated with a loan refinancing, otherwise the fee was classified as fee and other income. The portion of the fees passed through to the certificate holders of the trust were previously classified as interest expense only when the fee was associated with a loan refinancing, otherwise the fee was classified as other expense. The changes in presentation have been applied retrospectively to all periods presented and were immaterial for prior periods.

Use of Estimates

Preparing consolidated financial statements in accordance with GAAP requires management to make estimates and assumptions that affect our reported amounts of assets and liabilities, and disclosure of contingent assets and liabilities as of the dates of our consolidated financial statements, as well as our reported amounts of revenues and expenses during the reporting periods. Management has made significant estimates in a variety of areas including, but not limited to, our allowance for loan losses. Actual results could be different from these estimates.

Principles of Consolidation

Our consolidated financial statements include our accounts as well as the accounts of the other entities in which we have a controlling financial interest. All intercompany balances and transactions have been eliminated. The typical condition for a controlling financial interest is ownership of a majority of the voting interests of an entity. A controlling financial interest may also exist in an entity such as a variable interest entity ("VIE") through arrangements that do not involve voting interests.

VIE Assessment

We have interests in various entities that are considered VIEs. A VIE is an entity (1) that has total equity at risk that is not sufficient to finance its activities without additional subordinated financial support from other entities, (2) where the group of equity holders does not have the power to direct the activities of the entity that most significantly impact the entity's economic performance, or the obligation to absorb the entity's expected losses or the right to receive the entity's expected residual returns, or both, or (3) where the voting rights of some investors are not proportional to their obligations to absorb the expected losses of the entity, their rights to receive the expected residual returns of the entity, or both, and substantially all of the entity's activities either involve or are conducted on behalf of an investor that has disproportionately few voting rights.

We determine whether an entity is a VIE by performing a qualitative analysis, which requires certain subjective decisions including, but not limited to, the design of the entity, the variability that the entity was designed to create and pass along to its interest holders, the rights of the parties and the purpose of the arrangement.

The primary types of VIE entities with which we are involved are securitization trusts guaranteed by us via lender swap and portfolio securitization transactions, special-purpose vehicles ("SPVs") associated with certain credit risk transfer programs, limited partnership investments in low-income housing tax credit ("LIHTC") and other housing partnerships, as well as mortgage and asset-backed trusts that were not created by us. For more information on the primary types of VIE entities with which we are involved, see "Note 2, Consolidations and Transfers of Financial Assets."

Primary Beneficiary Determination

If an entity is a VIE, we consider whether our variable interest in that entity causes us to be the primary beneficiary. We are deemed to be the primary beneficiary of a VIE when we have both (1) the power to direct the activities of the VIE that most significantly impact the entity's economic performance, and (2) exposure to benefits and/or losses that could potentially be significant to the entity. The primary beneficiary of the VIE is required to consolidate and account for the assets, liabilities, and noncontrolling interests of the VIE in its consolidated financial statements. The assessment of which party has the power to direct the activities of the VIE may require significant management judgment when (1) more than one party has power or (2) more than one party is involved in the design of the VIE but no party has the power to direct the ongoing activities that could be significant.

We continually assess whether we are the primary beneficiary of the VIEs with which we are involved and therefore may consolidate or deconsolidate a VIE through the duration of our involvement. Examples of certain events that may change whether or not we consolidate the VIE include a change in the design of the entity or a change in our ownership in the entity.

Measurement of Consolidated Assets and Liabilities

When we are the transferor of assets into a VIE that we consolidate at the time of the transfer, we continue to recognize the assets and liabilities of the VIE at the amounts that they would have been recognized if we had not transferred them, and no gain or loss is recognized. For all other VIEs that we consolidate (that is, those for which we are not the transferor), we recognize the assets and liabilities of the VIE in our consolidated financial statements at fair value, and we recognize a gain or loss for the difference between (1) the fair value of the consideration paid, fair value of noncontrolling interests and the reported amount of any previously held interests, and (2) the net amount of the fair value of the assets and liabilities recognized upon consolidation. However, for the securitization trusts established under our lender swap program, no gain or loss is recognized if the trust is consolidated at formation as there is no difference in the respective fair value of (1) and (2) above. We record gains or losses that are associated with the consolidation of VIEs as a component of "Investment gains, net" in our consolidated statements of operations and comprehensive income.

If we cease to be deemed the primary beneficiary of a VIE, we deconsolidate the VIE. We use fair value to measure the initial cost basis for any retained interests that are recorded upon the deconsolidation of a VIE. Any difference between the fair value and the previous carrying amount of our investment in the VIE is recorded in "Investment gains, net" in our consolidated statements of operations and comprehensive income.

Purchase/Sale of Fannie Mae Securities

We actively purchase and sell guaranteed MBS that have been issued through lender swap and portfolio securitization transactions. The accounting for the purchase and sale of our guaranteed MBS issued by the trusts differs based on the characteristics of the securitization trusts and whether the trusts are consolidated.

Uniform Mortgage-Backed Securities ("UMBS")

Uniform Mortgage-Backed Securities ("UMBS") are common mortgage-backed securities issued by both Fannie Mae and Freddie Mac to finance fixed-rate mortgage loans backed by one- to four-unit single-family properties. We and Freddie Mac began issuing UMBS in June 2019. We and Freddie Mac also began resecuritizing UMBS certificates into structured securities in June 2019. The structured securities backed by UMBS that we issue include Supers, which are single-class resecuritization transactions, Real Estate Mortgage Investment Conduit securities ("REMICs") and interest-only and principal-only strip securities ("SMBS"), which are multi-class resecuritization transactions.

Since June 2019, we have resecuritized UMBS, Supers and other structured securities issued by Freddie Mac. The mortgage loans that serve as collateral for Freddie Mac-issued UMBS are not held in trusts that are consolidated by Fannie Mae. When we include Freddie Mac securities in our structured securities, we are subject to additional credit risk because we guarantee securities that were not previously guaranteed by Fannie Mae. However, Freddie Mac continues to guarantee the payment of principal and interest on the underlying Freddie Mac securities that we have resecuritized. We have concluded that this additional credit risk is negligible because of the funding commitment available to Freddie Mac through its senior preferred stock purchase agreement with Treasury. Prior to June 2019, the vast majority of underlying assets of our resecuritization trusts were limited to Fannie Mae securities that were collateralized by mortgage loans held in consolidated trusts.

Single-Class Securitization Trusts

We create single-class securitization trusts to issue single-class Fannie Mae MBS (including UMBS) that evidence an undivided interest in the mortgage loans held in the trust. Investors in single-class Fannie Mae MBS receive principal and interest payments in proportion to their percentage ownership of the MBS issuance. We guarantee to each single-class securitization trust that we will supplement amounts received by the securitization trust as required to permit timely payments of principal and interest on the related Fannie Mae MBS. This guaranty exposes us to credit losses on the loans underlying Fannie Mae MBS.

Single-class securitization trusts are used for lender swap and portfolio securitization transactions. A lender swap transaction occurs when a mortgage lender delivers a pool of single-family mortgage loans to us, which we immediately deposit into an MBS trust. The MBS are then issued to the lender in exchange for the mortgage loans. A portfolio securitization transaction occurs when we purchase mortgage loans from third-party sellers for cash and later deposit these loans into an MBS trust. The securities issued through a portfolio securitization are then sold to investors for cash. We consolidate single-class securitization trusts that are issued under these programs when our role as guarantor and master servicer provides us with the power to direct matters, such as the servicing of the mortgage loans, that impact the credit risk to which we are exposed. In contrast, we do not consolidate single-class securitization trusts when other organizations have the power to direct these activities (for example, when the loan collateral is subject to a Federal Housing Administration guaranty and related Servicing Guide).

When we purchase single-class Fannie Mae MBS issued from a consolidated trust, we account for the transaction as an extinguishment of the related debt in our consolidated financial statements. We record a gain or loss on the extinguishment of such debt to the extent that the purchase price of the MBS does not equal the carrying value of the related consolidated debt reported in our consolidated balance sheets (including unamortized premiums, discounts or other cost basis adjustments) at the time of purchase. When we sell single-class Fannie Mae MBS that were issued from a consolidated trust, we account for the transaction as the issuance of debt in our consolidated financial statements. We amortize the related premiums, discounts and other cost basis adjustments into income over the contractual life of the MBS.

If a single-class securitization trust is not consolidated, we account for the purchase and subsequent sale of such securities as the transfer of an investment security in accordance with the accounting guidance for transfers of financial assets.

Single-Class Resecuritization Trusts

Fannie Mae single-class resecuritization trusts are created by depositing MBS into a new securitization trust for the purpose of aggregating multiple mortgage-related securities into one combined security. Single-class resecuritization securities pass through directly to the holders of the securities all of the cash flows of the underlying MBS held in the trust. Since June 2019, these securities can be collateralized directly or indirectly by cash flows from underlying securities issued by Fannie Mae, Freddie Mac, or a combination of both. Resecuritization trusts backed directly or indirectly only by Fannie Mae MBS are non-commingled resecuritization trusts. Resecuritization trusts collateralized directly or indirectly by cash flows either in part or in whole from Freddie Mac MBS are commingled resecuritization trusts.

Securities issued by our non-commingled single-class resecuritization trusts are backed solely by Fannie Mae MBS, and the guaranty we provide on the trust does not subject us to additional credit risk because we have already provided a guarantee on the underlying securities. Further, the securities issued by our non-commingled single-class resecuritization trusts pass through all of the cash flows of the underlying Fannie Mae MBS directly to the holders of the securities. Accordingly, these securities are deemed to be substantially the same as the underlying Fannie Mae MBS collateral. Additionally, our involvement with these trusts does not provide us with any incremental rights or powers that would enable us to direct any activities of the trusts. We have concluded that we are not the primary beneficiary of and, as a result, we do not consolidate our non-commingled single-class resecuritization trusts. Therefore, we account for purchases and sales of securities issued by non-commingled single-class resecuritization trusts as extinguishments and issuances of the underlying MBS debt, respectively.

Securities issued by our commingled single-class resecuritization trusts are backed in whole or in part by Freddie Mac securities. As discussed in "Note 6, Financial Guarantees," the guaranty we provide to the commingled single-class resecuritization trust subjects us to additional credit risk to the extent that we are providing a guaranty for the timely payment of principal and interest on the underlying Freddie Mac securities that we have not previously guaranteed. Accordingly, securities issued by our commingled resecuritization trusts are not deemed to be substantially the same as the underlying collateral. We do not have any incremental rights or powers related to commingled single-class resecuritization trusts that would enable us to direct any activities of the underlying trust. As a result, we have concluded that we are not the primary beneficiary of, and therefore do not consolidate, our commingled single-class resecuritization trusts unless we have the unilateral right to dissolve the trust. We have this right when we hold 100% of the beneficial interests issued by the resecuritization trust. Therefore, we account for purchases and sales of these securities as the transfer of an investment security.

Multi-Class Resecuritization Trusts

Multi-class resecuritization trusts are trusts we create to issue multi-class Fannie Mae structured securities, including REMICs and SMBS, in which the cash flows of the underlying mortgage assets are divided, creating several classes of securities, each of which represents a beneficial ownership interest in a separate portion of cash flows. We guarantee to each multi-class resecuritization trust that we will supplement amounts received by the trusts as required to permit timely guaranty payments on the related Fannie Mae structured securities. Since June 2019, these multi-class structured securities can be collateralized, directly or indirectly, by securities issued by Fannie Mae, Freddie Mac or a combination of both.

The guaranty we provide to our non-commingled multi-class resecuritization trusts does not subject us to additional credit risk, because the underlying assets are Fannie Mae-issued securities for which we have already provided a guaranty. However, for commingled multi-class structured securities, we are subject to additional credit risk to the extent we are providing a guaranty for the timely payment of principal and interest on the underlying Freddie Mac securities that we have not previously guaranteed. For both commingled and non-commingled multi-class resecuritization trusts, we may also be exposed to prepayment risk via our ownership of securities issued by these trusts. We do not have the ability via our involvement with a multi-class resecuritization trust to impact either the credit risk or prepayment risk to which we are exposed. Therefore, we have concluded that we do not have the characteristics of a controlling financial interest and do not consolidate multi-class resecuritization trusts unless we have the unilateral right to dissolve the trust as noted below.

Securities issued by multi-class resecuritization trusts do not directly pass through all of the cash flows of the underlying securities, and therefore the issued and underlying securities are not considered substantially the same. Accordingly, we account for purchases and sales of securities issued by the multi-class resecuritization trusts as purchases and sales of investment securities.

Since June 2019, we may include UMBS, Supers and other structured securities that are either issued or backed by securities issued by Freddie Mac in our resecuritization trusts.

As a result, we adopted a consolidation threshold for multi-class resecuritization trusts that is based on our ability to unilaterally dissolve the resecuritization trust. This ability exists only when we hold 100% of the outstanding beneficial interests issued by the resecuritization trust. This change in the consolidation threshold was applied prospectively upon the introduction of UMBS in the second quarter of 2019 and prior-period amounts were not recast. Prior to the introduction of UMBS, we consolidated multi-class resecuritization trusts when we held a substantial portion of the outstanding beneficial interests issued by the trust. Our adoption of the updated consolidation threshold did not have a material impact on our consolidated financial statements.

Transfers of Financial Assets

We evaluate each transfer of financial assets to determine whether the transfer qualifies as a sale. If a transfer does not meet the criteria for sale treatment, the transferred assets remain in our consolidated balance sheets and we record a liability to the extent of any proceeds received in connection with the transfer. We record transfers of financial assets in which we surrender control of the transferred assets as sales.

When a transfer that qualifies as a sale is completed, we derecognize all assets transferred and recognize all assets obtained and liabilities incurred at fair value. The difference between the carrying basis of the assets transferred and the fair value of the net proceeds from the sale is recorded as a component of "Investment gains, net" in our consolidated statements of operations and comprehensive income. Retained interests are primarily derived from transfers associated with our portfolio securitizations in the form of Fannie Mae securities. We separately describe the subsequent accounting, as well as how we determine fair value, for our retained interests in the "Investments in Securities" section of this note.

We enter into repurchase agreements that involve contemporaneous trades to purchase and sell securities. These transactions are accounted for as secured financings since the transferor has not relinquished control over the transferred assets. These transactions are reported as securities purchased under agreements to resell and securities sold under agreements to repurchase in our consolidated balance sheets except for securities purchased under agreements to resell on an overnight basis, which are included in cash and cash equivalents in our consolidated balance sheets.

Cash and Cash Equivalents, Restricted Cash and Statements of Cash Flows

Short-term investments that have a maturity at the date of acquisition of three months or less and are readily convertible to known amounts of cash are generally considered cash equivalents. We also include securities purchased under agreements to resell on an overnight basis in "cash and cash equivalents" in our consolidated balance sheets. We may pledge as collateral certain short-term investments classified as cash equivalents.

"Restricted cash" in our consolidated balance sheets represents cash advanced to the extent such amounts are due to, but have not yet been remitted to, MBS certificateholders. Similarly, when we or our servicers collect and hold cash that is due to certain Fannie Mae MBS trusts in advance of our requirement to remit these amounts to the trusts, we recognize the collected cash amounts as restricted cash. In addition, we recognize restricted cash when we and our servicers advance payments on delinquent loans to consolidated Fannie Mae MBS trusts. Cash may also be recognized as restricted cash as a result of restrictions related to certain consolidated partnership funds as well as for certain collateral arrangements for which we do not have the right to use the cash.

In the presentation of our consolidated statements of cash flows, we present cash flows from derivatives that do not contain financing elements and mortgage loans held for sale at acquisition as operating activities. We present cash flows from federal funds sold and securities purchased under agreements to resell or similar arrangements as investing activities and cash flows from federal funds purchased and securities sold under agreements to repurchase as financing activities in "Other, net." We classify cash flows from trading securities based on their nature and purpose.

We classify cash flows related to mortgage loans acquired as held-for-investment, including loans of Fannie Mae and loans of consolidated trusts, as either investing activities (for principal repayments or sales proceeds) or operating activities (for interest received from borrowers included as a component of our net income). Cash flows related to debt securities issued by consolidated trusts are classified as either financing activities (for repayments of principal to certificateholders) or operating activities (for interest payments to certificateholders included as a component of our net income). We distinguish between the payments and proceeds related to the debt of Fannie Mae and the debt of consolidated trusts, as applicable. We present our non-cash activities in the consolidated statements of cash flows at the associated unpaid principal balance.

Investments in Securities

Securities Classified as Trading or Available-for-Sale ("AFS")

We classify and account for our securities as either trading or available-for-sale ("AFS"). We measure trading securities at fair value in our consolidated balance sheets with unrealized and realized gains and losses included as a component of "Fair value gains (losses), net" in our consolidated statements of operations and comprehensive income. We include interest and dividends on securities in our consolidated statements of operations and comprehensive income. Interest income includes the amortization of cost basis adjustments, including premiums and discounts, recognized as a yield adjustment using the interest method over the contractual term of the security. We measure AFS securities at fair value in our consolidated balance sheets, with unrealized gains and losses included in accumulated other comprehensive income, net of income taxes. We recognize realized gains and losses on AFS securities when securities are sold. We calculate the gains and losses using the specific identification method and record them in “Investment gains, net” in our consolidated statements of operations and comprehensive income. As of December 31, 2020, we did not have any securities classified as held-to-maturity.

Fannie Mae MBS included in “Investments in securities”

When we own Fannie Mae MBS issued by unconsolidated trusts, we do not derecognize any components of the guaranty assets, guaranty obligations, or any other outstanding recorded amounts associated with the guaranty transaction because our contractual obligation to the MBS trust remains in force until the trust is liquidated. We determine the fair value of Fannie Mae MBS based on observable market prices because most Fannie Mae MBS are actively traded. For any subsequent purchase or sale, we continue to account for any outstanding recorded amounts associated with the guaranty transaction on the same basis of accounting.

Impairment of Available-for-Sale Debt Securities

An AFS debt security is impaired if the fair value of the investment is less than its amortized cost basis. In these circumstances, we separate the difference between the amortized cost basis of the security and its fair value into the amount representing the credit loss, which we recognize as an allowance in “Benefit (provision) for credit losses” in our consolidated statements of operations and comprehensive income, and the amount related to all other factors, which we recognize in “Total other comprehensive loss,” net of taxes, in our consolidated statements of operations and comprehensive income. Credit losses are evaluated on an individual security basis and are limited to the difference between the fair value of the debt security and its amortized cost basis. If we intend to sell a debt security or it is more likely than not that we will be required to sell the debt security before recovery, any allowance for credit losses on the debt security is reversed and the amortized cost basis of the debt security is written down to its fair value through “Investment gains, net.”

Mortgage Loans

Loans Held for Sale

When we acquire mortgage loans that we intend to sell or securitize via trusts that will not be consolidated, we classify the loans as held for sale (“HFS”). We report the carrying value of HFS loans at the lower of cost or fair value. Any excess of an HFS loan’s cost over its fair value is recognized as a valuation allowance, with changes in the valuation allowance recognized as “Investment gains, net” in our consolidated statements of operations and comprehensive income. We recognize interest income on HFS loans on an accrual basis, unless we determine that the ultimate collection of contractual principal or interest payments in full is not reasonably assured. Purchased premiums, discounts and other cost basis adjustments on HFS loans are deferred upon loan acquisition, included in the cost basis of the loan, and not amortized. We determine any lower of cost or fair value adjustment on HFS loans at an individual loan level.

For nonperforming loans transferred from held for investment (“HFI”) to HFS, based upon a change in our intent, we record the loans at the lower of cost or fair value on the date of transfer. When the fair value of the nonperforming loan is less than its amortized cost, we record a write-off against the allowance for loan losses in an amount equal to the difference between the amortized cost basis and the fair value of the loan. If the amount written off upon transfer exceeds the allowance related to the transferred loan, we record the excess in provision for credit losses. If the amounts written off are less than the allowance related to the loans, we recognize a benefit for credit losses.

Nonperforming loans include both seriously delinquent and reperforming loans, which are loans that were previously delinquent but are performing again because payments on the mortgage loan have become current with or without the use of a loan modification plan. Single-family seriously delinquent loans are loans that are 90 days or more past due or in the foreclosure process. Multifamily seriously delinquent loans are loans that are 60 days or more past due.

In the event that we reclassify a performing loan from HFI to HFS, based upon a change in our intent, the allowance for loan losses previously recorded on the HFI mortgage loan is reversed through “Benefit (provision) for credit losses” at the time of reclassification. The mortgage loan is reclassified into HFS at its amortized cost basis and a valuation allowance is established to the extent that the amortized cost basis of the loan exceeds its fair value. The initial recognition of the valuation allowance and any subsequent changes are recorded as a gain or loss in “Investment gains, net.”

Loans Held for Investment

When we acquire mortgage loans that we have the ability and the intent to hold for the foreseeable future or until maturity, we classify the loans as HFI. When we consolidate a securitization trust, we recognize the loans underlying the trust in our consolidated balance sheets. The trusts do not have the ability to sell mortgage loans and the use of such loans is limited exclusively to the settlement of obligations of the trusts. Therefore, mortgage loans acquired when we have the intent to securitize via consolidated trusts are generally classified as HFI in our consolidated balance sheets both prior to and subsequent to their securitization.

We report the carrying value of HFI loans at the unpaid principal balance, net of unamortized premiums and discounts, other cost basis adjustments, and allowance for loan losses. We define the amortized cost of HFI loans as unpaid principal balance and accrued interest receivable, net, including any unamortized premiums, discounts, and other cost basis adjustments. For purposes of our consolidated balance sheets, we present accrued interest receivable separately from the amortized cost of our loans held for investment. We recognize interest income on HFI loans on an accrual basis using the effective yield method over the contractual life of the loan, including the amortization of any deferred cost basis adjustments, such as the premium or discount at acquisition, unless we determine that the ultimate collection of contractual principal or interest payments in full is not reasonably assured.

Nonaccrual Loans

For loans that were current as of March 1, 2020 and subsequently became delinquent or entered into forbearance during the COVID-19 pandemic, see the changes to our application of our nonaccrual guidance in the section on “New Accounting Guidance” below.

For loans not subject to the COVID-19-related nonaccrual guidance, we discontinue accruing interest on loans when we believe collectability of principal and interest is not reasonably assured, which for a single-family loan we have determined, based on our historical experience, to be when the loan becomes two months or more past due according to its contractual terms. Interest previously accrued but not collected on loans is reversed through interest income at the date a loan is placed on nonaccrual status. For single-family loans on nonaccrual status, we recognize income when cash payments are received. We return a non-modified single-family loan to accrual status at the point that the borrower brings the loan current. We return a modified single-family loan to accrual status at the point that the borrower successfully makes all required payments during the trial period (generally three to four months) and the modification is made permanent. As of January 1, 2020, we place a multifamily loan on nonaccrual status when the loan becomes two months or more past due according to its contractual terms unless the loan is well secured such that collectability of principal and accrued interest is reasonably assured. For multifamily loans on nonaccrual status, we apply any payment received on a cost recovery basis to reduce principal on the mortgage loan. We return a multifamily loan to accrual status when the borrower cures the delinquency of the loan. Activity related to the multifamily nonaccrual policy has been immaterial historically. Single-family and multifamily loans are reported past due if a full payment of principal and interest is not received within one month of its due date.

Restructured Loans

A modification to the contractual terms of a loan that results in granting a concession to a borrower experiencing financial difficulty is considered a troubled debt restructuring (“TDR”). Our loss mitigation programs primarily include modifications that result in the capitalization of past due amounts in combination with interest rate reductions and/or the extension of the loan’s maturity date. Such restructurings are granted to borrowers in financial difficulty on either a permanent or contingent basis, as in the case of modifications with a trial period. We consider these types of loan restructurings to be TDRs.

We generally do not include principal or past due interest forgiveness as part of our loss mitigation programs, and, as a result, we generally do not charge off any outstanding principal or accrued interest amounts at the time of loan modification. We believe that the loan underwriting activities we perform as a part of our loan modification process coupled with the borrower’s successful performance during any required trial period provides us reasonable assurance regarding the collectability of the principal and interest due in accordance with the loan’s modified terms, which include any past due interest amounts that are capitalized as principal at the time of modification. As such, the loan is returned to accrual status when the loan modification is completed (i.e., at the end of the trial period), and we accrue interest thereafter in accordance with our interest accrual policy. If the loan was on nonaccrual status prior to entering the trial period, it remains on nonaccrual status until the borrower demonstrates performance via the trial period and the modification is finalized.

We also engage in other loss mitigation activities with troubled borrowers, which include repayment plans, forbearance arrangements, and modifications that are limited to the capitalization only of past due amounts (i.e., payment deferrals). For all of these activities, we consider the deferral or capitalization of three or fewer missed payments to represent only an insignificant delay, and thus not a TDR. If we defer or capitalize more than three missed payments either through a legal or informal modification, the delay is no longer considered insignificant, and the restructuring is accounted for as a TDR. Our current TDR accounting described herein is temporarily impacted by our election to account for certain eligible loss mitigation activities under the relief granted pursuant to the Coronavirus Aid, Relief, and Economic Security Act (“CARES Act”). See the section below on “New Accounting Guidance” for more information on the impact of the CARES Act.

We measure impairment of a loan restructured in a TDR based on the excess of the amortized cost in the loan over the present value of the expected future cash inflows discounted at the loan’s original effective interest rate. Costs incurred to complete a TDR are expensed as incurred. However, when foreclosure is probable, we measure impairment based on the difference between our amortized cost in the loan and the fair value of the underlying property, adjusted for the estimated costs to sell the property and estimated insurance or other proceeds we expect to receive.

Allowance for Loan Losses

The Current Expected Credit Loss Standard

The Financial Accounting Standards Board (the “FASB”) issued Accounting Standards Update (“ASU”) 2016-13, “Financial Instruments—Credit Losses (Topic 326), Measurement of Credit Losses on Financial Instruments” in June 2016, which was later amended by ASU 2019-04, ASU 2019-05 and ASU 2019-11. These ASUs (the “CECL standard”) replaced the incurred loss impairment methodology for loans that are collectively evaluated for impairment with a methodology that reflects lifetime expected credit losses and requires consideration of a broader range of reasonable and supportable forecast information to develop a lifetime credit loss estimate. The CECL standard also requires credit losses related to AFS debt securities to be recorded through an allowance for credit losses. Our adoption of this standard on January 1, 2020 did not have a material impact on our portfolio of AFS debt securities.

The CECL standard became effective for our fiscal year beginning January 1, 2020. We have changed our accounting policies as described below and implemented system, model and process changes to adopt the standard. Upon adoption, we used a discounted cash flow method to measure expected credit losses on our single-family mortgage loans and an undiscounted loss method to measure expected credit losses on our multifamily mortgage loans. The models used to estimate credit losses incorporated our historical credit loss experience, adjusted for current economic forecasts and the current credit profile of our loan book of business. The models used reasonable and supportable forecasts for key economic drivers, such as home prices (single-family), rental income (multifamily) and capitalization rates (multifamily).

Allowance for Loan Losses

Our allowance for loan losses is a valuation account that is deducted from the amortized cost basis of HFI loans to present the net amount expected to be collected on the loans. The allowance for loan losses reflects an estimate of expected credit losses on single-family and multifamily HFI loans held by Fannie Mae and by consolidated Fannie Mae MBS trusts. Estimates of credit losses are based on expected cash flows derived from internal models that estimate loan performance under simulated ranges of economic environments. Our modeled loan performance is based on our historical experience of loans with similar risk characteristics, adjusted to reflect current conditions and reasonable and supportable forecasts. Our historical loss experience and our credit loss estimates capture the possibility of remote events that could result in credit losses on loans that are considered low risk. The allowance for loan losses does not consider benefits from freestanding credit enhancements, such as our CAS and CIRT programs and multifamily DUS lender risk-sharing arrangements, which are recorded in “Other assets” in our consolidated balance sheets. For loans that were current as of March 1, 2020 and subsequently became delinquent or entered into forbearance during the COVID-19 pandemic, see changes to our allowance for loan losses in the section on “New Accounting Guidance” below. For loans not subject to the COVID-19 related guidance, we have elected not to measure an allowance for credit losses on accrued interest receivable balances as we have a nonaccrual policy to ensure the timely reversal of unpaid accrued interest. See “Note 4, Allowance for Loan Losses” for additional information about our current-period provision for loan losses, including a discussion of the estimates used in measuring the impact of the COVID-19 pandemic on our allowance.

Changes to our estimate of expected credit losses, including changes due to the passage of time, are recorded through the benefit (provision) for credit losses. When calculating our allowance for loan losses, we consider only our amortized cost in the loans at the balance sheet date. We record write-offs as a reduction to the allowance for loan losses when losses are confirmed through the receipt of assets in satisfaction of a loan, such as the underlying collateral upon foreclosure or cash upon completion of a short sale. Additionally, we record write-offs as a reduction to our allowance for loan losses when a loan is determined to be uncollectible, upon the transfer of a nonperforming loan from HFI to HFS and pursuant to the write-off provisions of FHFA’s Advisory Bulletin 2012-02, “Framework for Adversely Classifying Loans, Other Real Estate Owned, and Other Assets and Listing Assets for Special Mention” (the “Advisory Bulletin”).

The excess of a loan's unpaid principal balance, accrued interest and any applicable cost basis adjustments ("our total exposure") over the fair value of the assets is treated as a write-off loss that is deducted from the allowance for loan losses. We include expected recoveries of amounts previously written off and expected to be written off in determining our allowance for loan losses.

Single-Family Loans

We estimate the amount expected to be collected on our single-family loans using a discounted cash flow approach. Our allowance for loan losses is calculated as the difference between the amortized cost basis of the loan and the present value of expected cash flows on the loan. Expected cash flows include payments from the borrower, net of servicing fees, contractually attached credit enhancements and proceeds from the sale of the underlying collateral, net of selling costs.

When foreclosure of a single-family loan is probable, the allowance for loan losses is calculated as the difference between the amortized cost basis of the loan and the fair value of the collateral as of the reporting date, adjusted for the estimated costs to sell the property and the amount of expected recoveries from contractually attached credit enhancements or other proceeds we expect to receive.

Expected cash flows are developed using internal models that capture market and loan characteristic inputs. Market inputs include information such as actual and forecasted home prices, interest rates, volatility and spreads, while loan characteristic inputs include information such as mark-to-market loan-to-value ("LTV") ratios, delinquency status, geography and borrower FICO credit scores. The model assigns a probability to borrower events including contractual payment, loan payoff and default under various economic environments based on historical data, current conditions and reasonable and supportable forecasts.

The two primary drivers of our forecasted economic environments are interest rates and home prices. Our model projects the range of possible interest rate scenarios over the life of the loan based on actual interest rates and observed option pricing volatility in the capital markets. We develop regional forecasts based on Metropolitan Statistical Area data for single-family home prices using a multi-path simulation that captures home price projections over a five-year period, the period for which we can develop reasonable and supportable forecasts. After the five-year period, the home price forecast immediately reverts to a historical long-term growth rate.

Expected cash flows on the loan are discounted at the effective interest rate on the loan, adjusted for expected prepayments. For single-family loans that have not been modified in a TDR, the discount rate is updated each reporting period to reflect changes in expected prepayments. Expected cash flows do not include expected extensions of the contractual term unless such extension is the result of a reasonably expected TDR.

We consider the effects of actual and reasonably expected TDRs in our estimate of credit losses. These effects include any economic concession provided or expected to be provided to a borrower experiencing financial difficulty. We consider our current servicing practices and our historical experience to estimate reasonably expected TDRs. When a loan is contractually modified in a TDR, to capture the concession, the discount rate on the loan is locked to the rate in effect just prior to the modification and is no longer updated for changes in expected prepayments.

Multifamily Loans

Our allowance for loan losses on multifamily loans is calculated based on estimated probabilities of default and loss severities to derive expected loss ratios, which are then applied to the amortized cost basis of the loans. Our probabilities of default and severity are estimated using internal models based on historical loss experience of loans with similar risk characteristics that affect credit performance, such as debt service coverage ratio ("DSCR"), mark-to-market LTV ratio, collateral type, age, loan size, geography, prepayment penalty term and note type. Our models simulate a range of possible future economic scenarios, which are used to estimate probabilities of default and loss severities. Key inputs to our models include rental income, which drives expected DSCRs for our loans, and capitalization rates, which project future property values. Our reasonable and supportable forecasts for multifamily rental income and capitalization rates, which are projected based on Metropolitan Statistical Area data, extend through the contractual maturity of the loans. For TDRs, we use a discounted cash flow approach to estimate expected credit losses.

When foreclosure of a multifamily loan is probable, the allowance for loan losses is calculated as the difference between the amortized cost basis of the loan and the fair value of the collateral as of the reporting date, adjusted for the estimated costs to sell the property.

Allowance for Loan Losses Prior to the Adoption of the CECL Standard

For periods prior to the adoption of the CECL standard, we maintained an allowance for loan losses for loans classified as held for investment, including both loans held in our portfolio and loans held in consolidated Fannie Mae MBS trusts.

This amount was calculated to represent probable losses incurred related to loans in our consolidated balance sheets, including concessions granted to borrowers upon modifications of their loans, as of the balance sheet date. The allowance for loan losses was a valuation allowance that reflected an estimate of incurred credit losses related to our loans held for investment. Our allowance for loan losses consisted of a specific loss reserve for individually impaired loans and a collective loss reserve for all other loans.

We established a specific single-family loss reserve for individually impaired loans, which included loans we restructured as TDRs. The single-family loss reserve for individually impaired loans represented the majority of our single-family loss reserves due to the high volume of restructured loans. We typically measured impairment based on the difference between our amortized cost (previously referred to as recorded investment) in the loan and the present value of the estimated cash flows we expected to receive, which we calculated using the effective interest rate of the original loan or the effective interest rate at acquisition for an acquired credit-impaired loan. However, when foreclosure was probable on an individually impaired loan, we measured impairment based on the difference between our amortized costs in the loan and the fair value of the underlying property, adjusted for the estimated discounted costs to sell the property and estimated insurance or other proceeds we expected to receive. When a loan was restructured or modified, we measured impairment using a cash flow analysis discounted at the loan's original effective interest rate.

We established a collective single-family loss reserve for all other single-family loans in our single-family guaranty book of business using a model that estimated the probability of default on these loans to derive a loss reserve estimate given multiple factors, such as origination year, mark-to-market LTV ratio, delinquency status and loan product type. The loss severity estimates we used in determining our loss reserves reflected current available information on actual events and conditions as of each balance sheet date, including current home prices. Our loss severity estimates did not incorporate assumptions about future changes in home prices. We did, however, use recent regional historical sales and appraisal information, including the sales of our own foreclosed properties, to develop our loss severity estimates for all loan categories.

We established a collective multifamily loss reserve for all loans in our multifamily guaranty book of business that were not individually impaired using an internal model that applied loss factors to loans in similar risk categories. Our loss factors were developed based on our historical default and loss severity experience. Management could also apply judgment to adjust the loss factors derived from our models, taking into consideration model imprecision and specific known events, such as current credit conditions, that could affect the credit quality of our multifamily loan portfolio but were not yet reflected in our model-generated loss factors.

We established a specific multifamily loss reserve for multifamily loans that we determined were individually impaired. We identified multifamily loans for evaluation for impairment through a credit risk assessment process. As part of this assessment process, we stratified multifamily loans into different internal risk categories based on the credit risk inherent in each individual loan and management judgment. We categorized loan credit risk, taking into consideration available operating statements and expected cash flows from the underlying property, the estimated value of the property, the historical loan payment experience and current relevant market conditions that could impact credit quality. If we concluded that a multifamily loan was impaired, we measured the impairment based on the difference between our amortized cost in the loan and the fair value of the underlying property less the estimated discounted costs to sell the property and any lender loss sharing or other proceeds we expected to receive. When a multifamily loan was deemed individually impaired because we had modified it, we measured the impairment based on the difference between our amortized cost in the loan and the present value of expected cash flows discounted at the loan's original interest rate unless foreclosure was probable, in which case we measured impairment the same way we measured it for other individually impaired multifamily loans.

Advances to Lenders

Advances to lenders represent our payments of cash in exchange for the receipt of mortgage loans from lenders in a transfer that is accounted for as a secured lending arrangement. These transfers primarily occur when we provide early funding to lenders for loans that they will subsequently either sell to us or securitize into a Fannie Mae MBS that they will deliver to us. We individually negotiate early lender funding advances with our lender customers. Early lender funding advances have terms up to 60 days and earn a short-term market rate of interest.

We report cash outflows from advances to lenders as an investing activity in our consolidated statements of cash flows. Settlements of the advances to lenders, other than through lender repurchases of loans, are not collected in cash, but rather in the receipt of either loans or Fannie Mae MBS. Accordingly, this activity is reflected as a non-cash transfer in our consolidated statements of cash flows in the line item entitled "Transfers from advances to lenders to loans held for investment of consolidated trusts."

Acquired Property, Net

We recognize foreclosed property (*i.e.*, "Acquired property, net") upon the earlier of the loan foreclosure event or when we take physical possession of the property (*i.e.*, through a deed-in-lieu of foreclosure transaction). We initially measure foreclosed property at its fair value less its estimated costs to sell. We treat any excess of our amortized cost in the loan over the fair value less estimated costs to sell the property as a write-off to the "Allowance for loan losses" in our consolidated balance sheets. Any excess of the fair value less estimated costs to sell the property over our amortized cost in the loan is recognized first to recover any previously written-off amounts, then to recover any forgone, contractually due interest, and lastly to "Foreclosed property expense" in our consolidated statements of operations and comprehensive income.

We classify foreclosed properties as HFS when we intend to sell the property and the following conditions are met at either acquisition or within a relatively short period thereafter: we are actively marketing the property and it is available for immediate sale in its current condition such that the sale is reasonably expected to take place within one year. We report these properties at the lower of their carrying amount or fair value less estimated selling costs. We do not depreciate these properties.

We recognize a loss for any subsequent write-down of the property to its fair value less its estimated costs to sell through a valuation allowance with an offsetting charge to "Foreclosed property expense" in our consolidated statements of operations and comprehensive income. We recognize a recovery for any subsequent increase in fair value less estimated costs to sell up to the cumulative loss previously recognized through the valuation allowance. We recognize gains or losses on sales of foreclosed property through "Foreclosed property expense" in our consolidated statements of operations and comprehensive income.

Properties that do not meet the criteria to be classified as HFS are classified as held for use and are recorded in "Other assets" in our consolidated balance sheets. These properties are depreciated and are evaluated for impairment when circumstances indicate that the carrying amount of the property is no longer recoverable.

Commitments to Purchase and Sell Mortgage Loans and Securities

We enter into commitments to purchase and sell mortgage-backed securities and to purchase single-family and multifamily mortgage loans. Certain commitments to purchase or sell mortgage-backed securities and to purchase single-family mortgage loans are accounted for as derivatives. Our commitments to purchase multifamily loans are not accounted for as derivatives because they do not meet the criteria for net settlement.

When derivative purchase commitments settle, we include the fair value on the settlement date in the cost basis of the loan or unconsolidated security we purchase. When derivative commitments to sell securities settle, we include the fair value of the commitment on the settlement date in the cost basis of the security we sell. Purchases and sales of securities issued by our consolidated MBS trusts are treated as extinguishments or issuances of debt, respectively. For commitments to purchase and sell securities issued by our consolidated MBS trusts, we recognize the fair value of the commitment on the settlement date as a component of debt extinguishment gains and losses or in the cost basis of the debt issued, respectively.

Regular-way securities trades provide for delivery of securities within the time generally established by regulations or conventions in the market in which the trade occurs and are exempt from application of derivative accounting. Commitments to purchase or sell securities that we account for on a trade-date basis are also exempt from the derivative accounting requirements. We record the purchase and sale of an existing security on its trade date when the commitment to purchase or sell the existing security settles within the period of time that is customary in the market in which those trades take place.

Additionally, contracts for the forward purchase or sale of when-issued and to-be-announced ("TBA") securities are exempt from the derivative accounting requirements if there is no other way to purchase or sell that security, delivery of that security and settlement will occur within the shortest period possible for that type of security and it is probable at inception and throughout the term of the individual contract that physical delivery of the security will occur. Since our commitments for the purchase of when-issued and TBA securities can be net settled and we do not document that physical settlement is probable, we account for all such commitments as derivatives.

Derivative Instruments

We recognize all derivatives as either assets or liabilities in our consolidated balance sheets at their fair value on a trade date basis.

We offset the carrying amounts of certain derivatives that are in gain positions and loss positions as well as cash collateral receivables and payables associated with derivative positions pursuant to the terms of enforceable master netting arrangements. We offset these amounts only when we have the legal right to offset under the contract and we have met all of the offsetting conditions. For our over-the-counter ("OTC") derivative positions, our master netting arrangements allow us to net derivative assets and liabilities with the same counterparty. For our cleared derivative contracts, our master netting arrangements allow us to net our exposure by clearing organization and by clearing member.

After offsetting, we report derivatives in a gain position in "Other assets" and derivatives in a loss position in "Other liabilities" in our consolidated balance sheets.

We evaluate financial instruments that we purchase or issue and other financial and non-financial contracts for embedded derivatives. To identify embedded derivatives that we must account for separately, we determine if: (1) the economic characteristics of the embedded derivative are not clearly and closely related to the economic characteristics of the financial instrument or other contract (*i.e.*, the host contract); (2) the financial instrument or other contract itself is not already measured at fair value with changes in fair value included in earnings; and (3) a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative. If the embedded derivative meets all three of these conditions, we elect to carry the hybrid contract in its entirety at fair value with changes in fair value recorded in earnings.

Collateral

We enter into various transactions where we pledge and accept collateral, the most common of which are our derivative transactions. Required collateral levels vary depending on the credit rating and type of counterparty. We also pledge and receive collateral under our repurchase and reverse repurchase agreements. In order to reduce potential exposure to repurchase counterparties, a third-party custodian typically maintains the collateral and any margin. We monitor the fair value of the collateral received from our counterparties, and we may require additional collateral from those counterparties, as we deem appropriate.

Cash Collateral

We record cash collateral accepted from a counterparty that we have the right to use as "Cash and cash equivalents" and cash collateral accepted from a counterparty that we do not have the right to use as "Restricted cash" in our consolidated balance sheets. We net our obligation to return cash collateral pledged to us against the fair value of derivatives in a gain position recorded in "Other assets" in our consolidated balance sheets as part of our counterparty netting calculation.

For derivative positions with the same counterparty under master netting arrangements where we pledge cash collateral, we remove it from "Cash and cash equivalents" and net the right to receive it against the fair value of derivatives in a loss position recorded in "Other liabilities" in our consolidated balance sheets as a part of our counterparty netting calculation.

Non-Cash Collateral

We classify securities pledged to counterparties as either "Investments in securities" or "Cash and cash equivalents" in our consolidated balance sheets. Securities pledged to counterparties that have been consolidated with the underlying assets recognized as loans are included as "Mortgage loans" in our consolidated balance sheets.

Our liability to third party holders of Fannie Mae MBS that arises as the result of a consolidation of a securitization trust is collateralized by the underlying loans and/or mortgage-related securities.

Debt

Our consolidated balance sheets contain debt of Fannie Mae as well as debt of consolidated trusts. We report debt issued by us as "Debt of Fannie Mae" and by consolidated trusts as "Debt of consolidated trusts." Debt issued by us represents debt that we issue to third parties to fund our general business activities and certain credit risk-sharing securities. The debt of consolidated trusts represents the amount of Fannie Mae MBS issued from such trusts that is held by third-party certificateholders and prepayable without penalty at any time. We report deferred items, including premiums, discounts and other cost basis adjustments, as adjustments to the related debt balances in our consolidated balance sheets.

We classify interest expense as either short-term or long-term based on the contractual maturity of the related debt. We recognize the amortization of premiums, discounts and other cost basis adjustments through interest expense using the effective interest method usually over the contractual term of the debt. Amortization of premiums, discounts and other cost basis adjustments begins at the time of debt issuance.

When we purchase a Fannie Mae MBS issued from a consolidated single-class securitization trust, we extinguish the related debt of the consolidated trust as the MBS debt is no longer owed to a third-party. We record debt extinguishment gains or losses related to debt of consolidated trusts to the extent that the purchase price of the MBS does not equal the carrying value of the related consolidated MBS debt reported in our consolidated balance sheet (including unamortized premiums, discounts and other cost basis adjustments) at the time of purchase as a component of “Other expenses, net” in our consolidated statements of operations and comprehensive income.

Income Taxes

We recognize deferred tax assets and liabilities based on the differences in the book and tax bases of assets and liabilities. We measure deferred tax assets and liabilities using enacted tax rates that are applicable to the period(s) that the differences are expected to reverse. We adjust deferred tax assets and liabilities for the effects of changes in tax laws and rates in the period of enactment. We recognize investment and other tax credits through our effective tax rate calculation assuming that we will be able to realize the full benefit of the credits. We invest in LIHTC projects and elect the proportional amortization method for the associated tax credits. We amortize the cost of a LIHTC investment each reporting period in proportion to the tax credits and other tax benefits received. We recognize the resulting amortization as a component of the “provision for federal income taxes” in our consolidated statements of operations and comprehensive income.

We reduce our deferred tax assets by an allowance if, based on the weight of available positive and negative evidence, it is more likely than not (a probability of greater than 50%) that we will not realize some portion, or all, of the deferred tax asset.

We account for uncertain tax positions using a two-step approach whereby we recognize an income tax benefit if, based on the technical merits of a tax position, it is more likely than not that the tax position would be sustained upon examination by the taxing authority, which includes all related appeals and litigation. We then measure the recognized tax benefit based on the largest amount of tax benefit that is greater than 50% likely to be realized upon settlement with the taxing authority, considering all information available at the reporting date. We recognize interest expense and penalties on unrecognized tax benefits as “Other expenses, net” in our consolidated statements of operations and comprehensive income.

Earnings (Loss) per Share

Earnings (loss) per share (“EPS”) is presented for basic and diluted EPS. We compute basic EPS by dividing net income (loss) attributable to common stockholders by the weighted-average number of shares of common stock outstanding during the period. However, as a result of our conservatorship status and the terms of the senior preferred stock, no amounts would be available to distribute as dividends to common or preferred stockholders (other than to Treasury as the holder of the senior preferred stock). Net income (loss) attributable to common stockholders excludes amounts attributable to the senior preferred stock, which increase the liquidation preference as described above in “Senior Preferred Stock Purchase Agreement, Senior Preferred Stock and Warrant.” Weighted average common shares includes 4.7 billion shares for the year ended December 31, 2020, and 4.6 billion shares for the years ended December 31, 2019 and 2018, that would be issued upon the full exercise of the warrant issued to Treasury from the date the warrant was issued through December 31, 2020, 2019 and 2018, respectively.

The calculation of diluted EPS includes all the components of basic earnings per share, plus the dilutive effect of common stock equivalents such as convertible securities and stock options. Weighted-average shares outstanding is increased to include the number of additional common shares that would have been outstanding if the dilutive potential common shares had been issued. Our diluted EPS weighted-average shares outstanding includes 26 million shares of convertible preferred stock for the year ended December 31, 2020 and 131 million shares of convertible preferred stock for the years ended December 31, 2019 and 2018, respectively. During periods in which a net loss attributable to common stockholders has been incurred, potential common equivalent shares outstanding are not included in the calculation because it would have an anti-dilutive effect.

New Accounting Guidance

The CARES Act and Interagency Regulatory Guidance

The Coronavirus Aid, Relief, and Economic Security Act, referred to as the CARES Act, which was enacted in March 2020, provides temporary relief from the accounting and reporting requirements for TDRs regarding certain loan modifications related to COVID-19. In December of 2020, the temporary relief provided by the CARES Act was extended pursuant to the Consolidated Appropriations Act of 2021. The CARES Act as extended provides that a financial institution may elect to suspend the TDR requirements under GAAP for loan modifications related to the COVID-19 pandemic that occur between March 1, 2020 through the earlier of January 1, 2022 or 60 days after the date on which the COVID-19 national emergency terminates (the “Applicable Period”), as long as the loan was not more than 30 days delinquent as of December 31, 2019. Loan modifications as defined by the CARES Act include forbearance arrangements, repayment plans, interest rate modifications and any similar arrangements that defer or delay the payment of principal or interest.

We have elected to account for eligible loan modifications under Section 4013 of the CARES Act. Therefore, the initial relief (i.e., the forbearance arrangement) and the subsequent agreements (i.e., repayment plans, payment deferrals and loan modifications) that are necessary to allow the borrower to repay the past due amounts (collectively, the "COVID-19 Relief"), will not be subject to the specialized accounting or disclosures that are required for TDRs if the initial relief related to COVID-19 is granted during the Applicable Period and the borrower was no more than 30 days past due as of December 31, 2019.

In addition to the CARES Act, the Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation, National Credit Union Administration, Office of the Comptroller of the Currency, Consumer Financial Protection Bureau and the State Banking Regulators (collectively, the "Banking Agencies") issued an "Interagency Statement on Loan Modifications and Reporting for Financial Institutions Working with Customers Affected by the Coronavirus" (the "Interagency Statement") in April 2020. The Interagency Statement primarily provides incremental guidance related to the nonaccrual of interest income. It indicates that financial institutions may continue to accrue interest income on loans that are granted short-term payment delays, such as forbearance, if the delay is in response to COVID-19 and the loan was less than 30 days past due at the time the delay was granted.

Pursuant to the Interagency Statement, we continue to recognize interest income at the current contractual yield for up to six months of delinquency on loans that were current at March 1, 2020 and have been negatively impacted by COVID-19. For loans that are in a forbearance arrangement beyond six months of delinquency, we continue to accrue interest income provided collection of principal and interest continues to be reasonably assured.

Our evaluation of whether the collection of principal and interest is reasonably assured considers the probability of default, the current value of the collateral and any proceeds that are expected from contractually attached mortgage insurance. Once the forbearance period has ended, we will also consider the extent to which the borrower and the servicer have agreed to any of the loss mitigation options that are available. Multifamily loans that are in a forbearance arrangement are placed on nonaccrual status when the borrower is six months past due unless the loan is both well secured and in the process of collection.

Loans that have been placed on nonaccrual status are returned to accrual status when the loan is brought current through borrower reperformance. A single-family loan may also be returned to accrual status when the loan is brought current through a modification of the loan or a payment deferral. Multifamily loans that have been placed in a repayment plan or that have been brought current through a modification are returned to accrual status once the borrower has made six consecutive contractual payments under the terms of the repayment plan or the modified loan.

For loans in a forbearance arrangement that are placed on nonaccrual status, cash payments for interest are applied as a reduction of accrued interest receivable until the receivable has been reduced to zero, and then recognized as interest income.

If a loan is modified, any capitalized interest that has not been previously recognized as interest income is recorded as a discount to the loan and amortized over the life of the loan.

For loans that have been negatively impacted by COVID-19, we establish a valuation allowance for expected credit losses on the accrued interest receivable balance applying the process that we have established for both single-family and multifamily loans. The credit expense related to this valuation allowance is classified as a component of the provision for credit losses. Accrued interest receivable is written off when the amount is deemed to be uncollectible, in accordance with our write-off policy for mortgage loans. Loans that are in active forbearance plans are not evaluated for write-off.

As a result of this update to our application of our nonaccrual policy for loans negatively impacted by COVID-19, we recognized $2.8 billion in interest income in 2020. We also recognized $216 million of provision for loan losses on the related accrued interest receivable in 2020.

Adoption of the CECL Standard

As described above, the CECL standard became effective for our fiscal year beginning January 1, 2020. The adoption of the standard on January 1, 2020 reduced our retained earnings by $1.1 billion on an after-tax basis. The adoption of this guidance increased our overall credit loss reserves primarily as the result of an increase in our single-family loan loss reserves that were previously evaluated on a collective basis for impairment. This increase was partially offset by a decrease in estimated credit losses on loans that were previously considered individually impaired (our TDRs).

The increase in our single-family and multifamily loan loss reserves that were previously evaluated on a collective basis was primarily driven by the migration from an incurred-loss approach, which allowed us to consider only default events and economic conditions that already existed as of each financial reporting date, to an estimate that incorporates both expected default events over the expected life of each mortgage loan and a forecast of key inputs, such as home price (single-family) or rental income (multifamily), in different economic environments over a reasonable and supportable period. The increase in loss reserves for the single-family portion of our book was low relative to its size due to the credit quality of these loans and because, as of the date of adoption, our current model forecasted home price growth.

The allowance for loan losses on the TDR book was already measured using an expected lifetime credit loss estimate. The credit losses on this portion of our single-family book decreased upon the adoption of the CECL standard because the new guidance required us to exclude from our estimate of credit losses all pre-foreclosure and post-foreclosure costs that are expected to be advanced after the balance sheet date. Prior to the adoption of the CECL standard, we incorporated these costs in our estimate of credit losses for this book.

Impacts on Key Balance Sheet Line Items upon Implementation of the CECL Standard

The following table discloses the impact of adopting the CECL standard on key balance sheet line items.

	Balance as of December 31, 2019	Transition Impact of Adoption of the CECL Standard	Balance as of January 1, 2020
		(Dollars in millions)	
Mortgage loans held for sale	$ 6,773	$ 50	$ 6,823
Allowance for loan losses	(9,016)	(1,722)	(10,738)
Other assets[1]	14,312	230	14,542
Deferred tax assets, net	11,910	303	12,213
Accumulated deficit (beginning retained earnings)	(118,776)	(1,139)	(119,915)

(1) Transition adjustment primarily represents the reclassification and recognition of freestanding credit enhancements not contractually attached to the loan.

For a discussion of the current-period measurement of our allowance for loan losses under the CECL standard, including the expected impact of the COVID-19 pandemic, see "Note 4, Allowance for Loan Losses."

Reference Rate Reform

In March 2020, the FASB issued ASU 2020-04, "Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting" ("ASU 2020-04"), which provides optional temporary relief to ease the potential burden of transitioning away from LIBOR and other discontinued interest rates. Specifically, ASU 2020-04 provides optional practical expedients and exceptions under GAAP related to contract modifications and hedging relationships that reference LIBOR or another reference rate expected to be discontinued. Qualifying for the accounting relief provided by ASU 2020-04 is subject to meeting certain criteria and is generally only available to contract modifications made and hedging relationships entered into or evaluated prospectively from March 12, 2020 through December 31, 2022.

In May 2020, we modified trust agreements governing our Fannie Mae REMIC and other multi-class transactions issued prior to July 2013 that are backed by floating rate or reverse floating rate securities to include fallback provisions in order to ease the potential burden of transitioning away from LIBOR. The update to the fallback language in the Omnibus Trust Supplement qualified for the accounting relief provided by ASU 2020-04, and we accounted for the update as a modification to the existing agreements. The impact of the May 2020 agreement modifications governing Fannie Mae REMIC and multi-class transactions issued prior to July 2013 was not material to Fannie Mae. We had no hedge accounting relationships between March 12, 2020 and December 31, 2020. We will continue to evaluate ASU 2020-04 to determine the timing and extent to which we will apply the provided accounting relief.

On January 7, 2021, the FASB issued ASU 2021-01, an update to ASU 2020-04, which clarifies the scope of the optional relief for reference rate reform provided by ASC Topic 848. The ASU permits entities to apply certain of the optional practical expedients and exceptions in ASC 848 to the accounting for derivative contracts and hedging activities that may be affected by changes in interest rates used for discounting cash flows, computing variation margin settlements and calculating price alignment interest (the "discounting transition"). These optional practical expedients and exceptions may be applied to derivative instruments impacted by the discounting transition even if such instruments do not reference a rate that is expected to be discontinued. The ASU is effective immediately and an entity may elect to apply the amendments as of any date from the beginning of an interim period that includes or is subsequent to March 12, 2020 or on a prospective basis to new modifications from any date within an interim period that includes or is subsequent to January 7, 2021, up to the date that financial statements are available to be issued. The adoption of this ASU is not expected to have a material impact on our financial statements.

2. Consolidations and Transfers of Financial Assets

We have interests in various entities that are considered to be VIEs. The primary types of entities are:

- securitization and resecuritization trusts, guaranteed by us via lender swap transactions;
- portfolio securitization transactions;
- commingled resecuritization trusts;
- mortgage-backed trusts that were not created by us;
- housing partnerships that are established to finance the acquisition, construction, development or rehabilitation of affordable multifamily and single-family housing; and
- certain credit risk transfer transactions.

These interests include investments in securities issued by VIEs, such as Fannie Mae MBS created pursuant to our securitization transactions. We consolidate the substantial majority of our single-class securitization trusts because our role as guarantor and master servicer provides us with the power to direct matters (primarily the servicing of mortgage loans) that impact the credit risk to which we are exposed. In contrast, we do not consolidate single-class securitization trusts when other organizations have the power to direct these activities unless we have the unilateral ability to dissolve the trust. We also do not consolidate our resecuritization trusts unless we have the unilateral ability to dissolve the trust. Historically, the vast majority of underlying assets of our resecuritization trusts were limited to Fannie Mae securities that were collateralized by mortgage loans held in consolidated trusts. However, with our issuance of UMBS, we include securities issued by Freddie Mac in some of our resecuritization trusts. The mortgage loans that serve as collateral for Freddie Mac-issued securities are not held in trusts that are consolidated by Fannie Mae.

Types of VIEs

Securitization and Resecuritization Trusts

Under our lender swap and portfolio securitization transactions, mortgage loans are transferred to a trust specifically for the purpose of issuing a single class of guaranteed securities that are collateralized by the underlying mortgage loans referred to as "first-level securities." The trust's permitted activities include receiving the transferred assets, issuing beneficial interests, establishing the guaranty and servicing the underlying mortgage loans. In our capacity as issuer, master servicer, trustee and guarantor, we earn fees for our obligations to each trust. Additionally, we may retain or purchase a portion of the securities issued by each trust.

In our structured securitization transactions, we earn fees for assisting lenders and dealers with the design and issuance of structured mortgage-related securities, referred to as "second-level securities." In contrast to first-level securities, the trust assets can include both Fannie Mae securities and Freddie Mac securities as the underlying collateral. These structured securities include Fannie Megas® and Supers®, which are single-class resecuritizations, as well as REMICs and SMBS, which are multi-class resecuritizations, and separate the cash flows from underlying assets into separately tradable interests. When we issue a structured security backed in whole or in part by Freddie Mac securities, we provide a new and separate guaranty of principal and interest on the newly-formed structured security. If Freddie Mac were to fail to make a payment due on its securities underlying a Fannie Mae-issued structured security, we would be obligated under our guaranty to fund any shortfall. To the extent that the trust assets are Fannie Mae securities, the trust has permitted activities that are similar to those for our lender swap and portfolio securitization transactions. Additionally, we may retain or purchase a portion of the securities issued by each trust.

We also hold investments in mortgage-backed securities that have been issued via private-label trusts. These trusts are structured to provide investors with a beneficial interest in a pool of receivables or other financial assets, typically mortgage loans. The trusts act as vehicles to allow loan originators to securitize assets. Securities are structured from the underlying pool of assets to provide for varying degrees of risk. The originators of the financial assets or the underwriters of the transaction create the trusts and typically own the residual interest in the trusts' assets. Our involvement in these entities is typically limited to the amortized cost in the beneficial interests that we have purchased.

Limited Partnerships

We invest in various limited partnerships that sponsor affordable housing projects utilizing the LIHTC pursuant to Section 42 of the Internal Revenue Code. The purpose of these investments is to increase the supply of affordable housing in the United States and to serve communities in need. In addition, our investments in LIHTC partnerships generate both tax credits and net operating losses that may reduce our federal income tax liability. Our LIHTC investments primarily represent limited partnership interests in entities that have been organized by a fund manager who acts as the general partner. These fund investments seek out equity investments in LIHTC operating partnerships that have been established to identify, develop and operate multifamily housing that is leased to qualifying residential tenants.

SPVs Associated with Our Credit Risk Transfer Programs

We transfer mortgage credit risk to investors through Connecticut Avenue Securities ("CAS") REMIC and CAS credit-linked note ("CLN") trusts. In October 2019, we issued our first Multifamily Connecticut Avenue Securities ("MCAS") transaction, which is a CAS CLN, and in December 2019, we issued our first single-family CAS CLN. The structure of CAS CLNs is similar to CAS REMICs; however, CAS CLNs allow us to transfer risk on reference pools containing seasoned loans. Since the REMIC election was not made on the loans in the reference pools at the time of acquisition, these trusts do not qualify as REMICs. Each CAS trust is a separate legal entity which issues notes that are fully collateralized by amounts deposited into a collateral account held by the CAS trust. To the extent that collateral held by the CAS trust and the earnings thereon are insufficient relative to the payments due to holders of the CAS notes, we may be required to make payments to the CAS trust. The CAS trusts qualify as VIEs. We do not have the power to direct significant activities of the CAS trusts while the CAS notes are outstanding, and, therefore, we do not consolidate CAS trusts.

Consolidated VIEs

If an entity is a VIE, we consider whether our variable interest in that entity causes us to be the primary beneficiary. The primary beneficiary of the VIE is required to consolidate and account for the assets, liabilities and noncontrolling interests of the VIE in its consolidated financial statements. An enterprise is deemed to be the primary beneficiary when the enterprise has the power to direct the activities of the VIE that most significantly impact the entity's economic performance and exposure to benefits and/or losses could potentially be significant to the entity. In general, the investors in the obligations of consolidated VIEs have recourse only to the assets of those VIEs and do not have recourse to us, except where we provide a guaranty to the VIE.

We continually assess whether we are the primary beneficiary of the VIEs with which we are involved and therefore may consolidate or deconsolidate a VIE through the duration of our involvement. We did not consolidate any VIEs that were not already consolidated as of December 31, 2019. However, as of December 31, 2020, we deconsolidated certain VIEs that were consolidated and had combined total assets of $1.2 billion in unpaid principal balance as of December 31, 2019. The majority of this activity related to the deconsolidation of multi-class resecuritization trusts containing consolidated Fannie Mae MBS. This resulted in the recognition of MBS debt outstanding and the fair value of our retained interests as securities in our consolidated balance sheets.

Transfers of Financial Assets

We issue Fannie Mae MBS through portfolio securitization transactions by transferring pools of mortgage loans or mortgage-related securities to one or more trusts or special purpose entities. We are considered to be the transferor when we transfer assets from our own retained mortgage portfolio in a portfolio securitization transaction. For the years ended December 31, 2020, 2019 and 2018, the unpaid principal balance of portfolio securitizations was $745.2 billion, $278.6 billion and $228.4 billion, respectively. The substantial majority of these portfolio securitization transactions generally do not qualify for sale treatment. Portfolio securitization trusts that do qualify for sale treatment primarily consist of loans that are guaranteed or insured, in whole or in part, by the U.S. government.

We retain interests from the transfer and sale of mortgage-related securities to unconsolidated single-class and multi-class portfolio securitization trusts. As of December 31, 2020, the unpaid principal balance of retained interests was $1.7 billion and its related fair value was $2.9 billion. The unpaid principal balance of retained interests was $2.9 billion and its related fair value was $4.0 billion as of December 31, 2019. For the years ended December 31, 2020, 2019 and 2018, the principal, interest and other fees received on retained interests was $700 million, $595 million and $585 million, respectively.

Portfolio Securitizations

We consolidate the substantial majority of our single-class MBS trusts; therefore, these portfolio securitization transactions do not qualify for sale treatment. The assets and liabilities of consolidated trusts created via portfolio securitization transactions that do not qualify as sales are reported in our consolidated balance sheets.

We recognize assets obtained and liabilities incurred in qualifying sales of portfolio securitizations at fair value. Proceeds from the initial sale of securities from portfolio securitizations were $666 million for year ended December 31, 2020. There were no proceeds from the initial sale of securities from portfolio securitizations for years ended December 31, 2019 and 2018, respectively. Our continuing involvement in the form of guaranty assets and guaranty liabilities with assets that were transferred into unconsolidated trusts is not material to our consolidated financial statements.

Unconsolidated VIEs

We do not consolidate VIEs when we are not deemed to be the primary beneficiary. Our unconsolidated VIEs include securitization and resecuritization trusts, limited partnerships, and certain SPVs designed to transfer credit risk. The following table displays the carrying amount and classification of our assets and liabilities that relate to our involvement with unconsolidated securitization and resecuritization trusts.

	As of December 31,	
	2020	**2019**
	(Dollars in millions)	
Assets and liabilities recorded in our consolidated balance sheets related to unconsolidated mortgage-backed trusts:		
Assets:		
Trading securities:		
Fannie Mae	**$ 1,611**	$ 2,543
Non-Fannie Mae	**3,608**	5,100
Total trading securities	**5,219**	7,643
Available-for-sale securities:		
Fannie Mae	**1,168**	1,524
Non-Fannie Mae	**318**	574
Total available-for-sale securities	**1,486**	2,098
Other assets	**41**	56
Other liabilities	**(67)**	(78)
Net carrying amount	**$ 6,679**	$ 9,719

Our maximum exposure to loss generally represents the greater of our carrying value in the entity or the unpaid principal balance of the assets covered by our guaranty. Our involvement in unconsolidated resecuritization trusts may give rise to additional exposure to loss depending on the type of resecuritization trust. Fannie Mae non-commingled resecuritization trusts are backed entirely by Fannie Mae MBS. These non-commingled single-class and multi-class resecuritization trusts are not consolidated and do not give rise to any additional exposure to loss as we already consolidate the underlying collateral.

Fannie Mae commingled resecuritization trusts are backed in whole or in part by Freddie Mac securities. The guaranty that we provide to these commingled resecuritization trusts may increase our exposure to loss to the extent that we are providing a guaranty for the timely payment and interest on the underlying Freddie Mac securities that we have not previously guaranteed. Our maximum exposure to loss for these unconsolidated trusts is measured by the amount of Freddie Mac securities that are held in these resecuritization trusts. Our maximum exposure to loss related to unconsolidated securitization and resecuritization trusts, which includes but is not limited to our exposure to these Freddie Mac securities, was approximately $146 billion and $62 billion as of December 31, 2020 and 2019, respectively.

Our total exposure as of December 31, 2019 to Freddie Mac securities backing Fannie Mae-issued REMICs may have been lower than the amount disclosed because a portion of the Freddie Mac securities backing these Fannie Mae-issued REMICs may have been backed by Fannie Mae MBS. To the extent that these Freddie Mac securities are backed by Fannie Mae MBS, our guarantee to the resecuritization trust does not subject us to any additional exposure to credit risk. The total assets of our unconsolidated securitization and resecuritization trusts were approximately $180 billion and $130 billion as of December 31, 2020 and 2019, respectively.

The maximum exposure to loss for our unconsolidated limited partnerships and similar legal entities, which consist of LIHTC, community investments and other entities, was $126 million and the related net carrying value was $121 million as of December 31, 2020. As of December 31, 2019, the maximum exposure to loss was $98 million and the related net carrying value was $79 million. The total assets of these limited partnership investments were $2.6 billion and $2.0 billion as of December 31, 2020 and 2019, respectively.

The maximum exposure to loss related to our involvement with unconsolidated SPVs that transfer credit risk represents the unpaid principal balance and accrued interest payable of obligations issued by the CAS and MCAS SPVs. The maximum exposure to loss related to these unconsolidated SPVs was $11.4 billion and $9.5 billion as of December 31, 2020 and 2019, respectively. The total assets related to these unconsolidated SPVs were $11.4 billion and $9.5 billion as of December 31, 2020 and 2019, respectively.

The unpaid principal balance of our multifamily loan portfolio was $373.7 billion as of December 31, 2020. As our lending relationship does not provide us with a controlling financial interest in the borrower entity, we do not consolidate these borrowers regardless of their status as either a VIE or a voting interest entity. We have excluded these entities from our VIE disclosures. However, the disclosures we have provided in “Note 3, Mortgage Loans,” “Note 4, Allowance for Loan Losses” and “Note 6, Financial Guarantees” with respect to this population are consistent with the FASB’s stated objectives for the disclosures related to unconsolidated VIEs.

3. Mortgage Loans

We own single-family mortgage loans, which are secured by four or fewer residential dwelling units, and multifamily mortgage loans, which are secured by five or more residential dwelling units. We classify these loans as either HFI or HFS. We report the amortized cost of HFI loans for which we have not elected the fair value option at the unpaid principal balance, net of unamortized premiums and discounts, other cost basis adjustments, and accrued interest receivable, net. For purposes of our consolidated balance sheets, we present accrued interest receivable, net separately from the amortized cost of our loans held for investment. We report the carrying value of HFS loans at the lower of cost or fair value and record valuation changes in “Investment gains, net” in our consolidated statements of operations and comprehensive income.

For purposes of the single-family mortgage loan disclosures below, we display loans by class of financing receivable type. In the current period, we revised the financing receivable classes used for disclosure to consist of: “20- and 30-year or more, amortizing fixed-rate,” “15-year or less, amortizing fixed-rate,” “Adjustable-rate” and “Other.” The “Other” class primarily consists of reverse mortgage loans, interest-only loans, negative-amortizing loans and second liens. We believe the revised classifications are more aligned with how we assess and manage the credit risk of our loans. We have revised the presentation of certain loan disclosures for prior periods to conform with the revised current-period classes of financing receivables.

The following table displays the carrying value of our mortgage loans and allowance for loan losses.

	As of December 31,	
	2020	**2019**
	(Dollars in millions)	
Single-family	**$ 3,216,146**	$ 2,972,361
Multifamily	**373,722**	327,593
Total unpaid principal balance of mortgage loans	**3,589,868**	3,299,954
Cost basis and fair value adjustments, net	**74,576**	43,224
Allowance for loan losses for HFI loans	**(10,552)**	(9,016)
Total mortgage loans[1]	**$ 3,653,892**	$ 3,334,162

(1) Excludes $9.8 billion and $8.4 billion of accrued interest receivable, net of allowance as of December 31, 2020 and 2019, respectively.

The following tables display information about our redesignation of loans, and the sales of mortgage loans during the period.

	For the Year Ended December 31,		
	2020	**2019**	**2018**
	(Dollars in millions)		
Single family loans redesignated from HFI to HFS:			
Amortized cost	**$ 8,309**	$ 18,245	$ 23,494
Lower of cost or fair value adjustment at time of redesignation[1]	**(291)**	(995)	(1,478)
Allowance reversed at time of redesignation	**963**	2,484	3,385
Single family loans redesignated from HFS to HFI:			
Amortized cost	**$ 144**	$ 28	$ 46
Allowance established at time of redesignation	**(15)**	(1)	(2)
Single-family loans sold:			
Unpaid principal balance	**$ 9,519**	$ 19,737	$ 21,918
Realized gains, net	**831**	1,238	444

(1) Consists of the write-off against the allowance at the time of redesignation.

The amortized cost of single-family mortgage loans for which formal foreclosure proceedings were in process was $5.0 billion and $7.6 billion as of December 31, 2020 and 2019, respectively. As a result of our various loss mitigation and foreclosure prevention efforts, we expect that a portion of the loans in the process of formal foreclosure proceedings will not ultimately foreclose. In addition, in response to the COVID-19 pandemic, we have prohibited our servicers from completing foreclosures on our single-family loans through March 31, 2021, except in the case of vacant or abandoned properties.

Aging Analysis

The following tables display an aging analysis of the total amortized cost of our HFI mortgage loans by portfolio segment and class, excluding loans for which we have elected the fair value option.

Pursuant to the CARES Act, for purposes of reporting to the credit bureaus, servicers must report a borrower receiving a COVID-19-related payment accommodation during the covered period, such as a forbearance plan or loan modification, as current if the borrower was current prior to receiving the accommodation and the borrower makes all required payments in accordance with the accommodation. For purposes of our disclosures regarding delinquency status, we report loans receiving COVID-19-related payment forbearance as delinquent according to the contractual terms of the loan. The increase in loans classified as delinquent as of December 31, 2020 compared with December 31, 2019 was primarily attributable to the economic dislocation caused by the COVID-19 pandemic.

	As of December 31, 2020							
	30 - 59 Days Delinquent	60 - 89 Days Delinquent	Seriously Delinquent[1]	Total Delinquent	Current	Total	Loans 90 Days or More Delinquent and Accruing Interest	Nonaccrual Loans with No Allowance
	(Dollars in millions)							
Single-family:								
20- and 30-year or more, amortizing fixed-rate	$ 24,928	$ 9,414	$ 88,276	$ 122,618	$ 2,619,585	$ 2,742,203	$ 68,526	$ 6,028
15-year or less, amortizing fixed-rate	1,987	601	5,028	7,616	449,443	457,059	4,292	240
Adjustable-rate	268	97	1,143	1,508	29,933	31,441	907	114
Other[2]	1,150	458	5,037	6,645	47,937	54,582	2,861	771
Total single-family	28,333	10,570	99,484	138,387	3,146,898	3,285,285	76,586	7,153
Multifamily[3]	1,140	N/A	3,688	4,828	372,598	377,426	610	302
Total	$ 29,473	$ 10,570	$ 103,172	$ 143,215	$ 3,519,496	$ 3,662,711	$ 77,196	$ 7,455

	As of December 31, 2019						
	30 - 59 Days Delinquent	60 - 89 Days Delinquent	Seriously Delinquent[1]	Total Delinquent	Current	Total	Loans 90 Days or More Delinquent and Accruing Interest
	(Dollars in millions)						
Single-family:							
20- and 30-year or more, amortizing fixed-rate	$ 26,882	$ 7,126	$ 13,082	$ 47,090	$ 2,470,457	$ 2,517,547	$ 28
15-year or less, amortizing fixed-rate	1,616	286	445	2,347	371,740	374,087	—
Adjustable-rate	412	85	167	664	44,244	44,908	—
Other[2]	2,323	829	1,891	5,043	64,726	69,769	136
Total single-family	31,233	8,326	15,585	55,144	2,951,167	3,006,311	164
Multifamily[3]	7	N/A	115	122	330,496	330,618	—
Total	$ 31,240	$ 8,326	$ 15,700	$ 55,266	$ 3,281,663	$ 3,336,929	$ 164

(1) Single-family seriously delinquent loans are loans that are 90 days or more past due or in the foreclosure process. Multifamily seriously delinquent loans are loans that are 60 days or more past due.

(2) Reverse mortgage loans included in "Other" are not aged due to their nature and are included in the current column.

(3) Multifamily loans 60-89 days delinquent are included in the seriously delinquent column.

Credit Quality Indicators

The following table displays the total amortized cost in our single-family HFI loans by class, year of origination and credit quality indicator, excluding loans for which we have elected the fair value option. The estimated mark-to-market LTV ratio is a primary factor we consider when estimating our allowance for loan losses for single-family loans. As LTV ratios increase, the borrower's equity in the home decreases, which may negatively affect the borrower's ability to refinance or to sell the property for an amount at or above the outstanding balance of the loan.

	As of December 31, 2020, by Year of Origination[1]						
	2020	2019	2018	2017	2016	Prior	Total
	(Dollars in millions)						
Estimated mark-to-market LTV ratio:[2]							
20- and 30-year or more, amortizing fixed-rate:							
Less than or equal to 80%	$ 794,156	$ 233,994	$ 135,849	$ 183,315	$ 221,172	$ 775,636	$ 2,344,122
Greater than 80% and less than or equal to 90%	157,500	85,227	23,440	5,270	1,592	5,958	278,987
Greater than 90% and less than or equal to 100%	109,743	4,186	820	250	124	1,994	117,117
Greater than 100%	28	7	28	77	81	1,756	1,977
Total 20 and 30-year or more, amortizing fixed-rate	1,061,427	323,414	160,137	188,912	222,969	785,344	2,742,203
15-year or less, amortizing fixed-rate:							
Less than or equal to 80%	181,418	41,374	15,768	31,497	46,088	132,596	448,741
Greater than 80% and less than or equal to 90%	6,105	811	35	14	8	20	6,993
Greater than 90% and less than or equal to 100%	1,274	9	3	4	3	10	1,303
Greater than 100%	—	—	3	3	3	13	22
Total 15-year or less, amortizing fixed-rate	188,797	42,194	15,809	31,518	46,102	132,639	457,059
Adjustable-rate:							
Less than or equal to 80%	2,935	1,839	2,412	4,765	2,678	16,248	30,877
Greater than 80% and less than or equal to 90%	234	152	79	19	5	12	501
Greater than 90% and less than or equal to 100%	56	3	1	—	—	2	62
Greater than 100%	—	—	—	—	—	1	1
Total adjustable-rate	3,225	1,994	2,492	4,784	2,683	16,263	31,441
Other:							
Less than or equal to 80%	—	41	328	811	1,028	36,216	38,424
Greater than 80% and less than or equal to 90%	—	2	20	43	30	1,298	1,393
Greater than 90% and less than or equal to 100%	—	2	8	16	10	602	638
Greater than 100%	—	—	4	8	9	631	652
Total other	—	45	360	878	1,077	38,747	41,107
Total	$ 1,253,449	$ 367,647	$ 178,798	$ 226,092	$ 272,831	$ 972,993	$ 3,271,810
Total for all classes by LTV ratio:[2]							
Less than or equal to 80%	$ 978,509	$ 277,248	$ 154,357	$ 220,388	$ 270,966	$ 960,696	$ 2,862,164
Greater than 80% and less than or equal to 90%	163,839	86,192	23,574	5,346	1,635	7,288	287,874
Greater than 90% and less than or equal to 100%	111,073	4,200	832	270	137	2,608	119,120
Greater than 100%	28	7	35	88	93	2,401	2,652
Total	$ 1,253,449	$ 367,647	$ 178,798	$ 226,092	$ 272,831	$ 972,993	$ 3,271,810

	As of December 31, 2019[1]				
	20- and 30-Year or More, Amortizing Fixed-Rate	15-Year or Less, Amortizing Fixed-Rate	Adjustable-Rate	Other	Total
	(Dollars in millions)				
Estimated mark-to-market LTV ratio:[2]					
Less than or equal to 80%	$ 2,145,018	$ 368,181	$ 43,415	$ 47,005	$ 2,603,619
Greater than 80% and less than or equal to 90%	237,623	4,556	1,275	2,872	246,326
Greater than 90% and less than or equal to 100%	130,152	1,284	215	1,398	133,049
Greater than 100%	4,754	66	3	1,365	6,188
Total	$ 2,517,547	$ 374,087	$ 44,908	$ 52,640	$ 2,989,182

(1) Excludes $13.5 billion and $17.1 billion as of December 31, 2020 and 2019, respectively, of mortgage loans guaranteed or insured, in whole or in part, by the U.S. government or one of its agencies, which represents primarily reverse mortgages for which we do not calculate an estimated mark-to-market LTV ratio.

(2) The aggregate estimated mark-to-market LTV ratio is based on the unpaid principal balance of the loan divided by the estimated current value of the property as of the end of each reported period, which we calculate using an internal valuation model that estimates periodic changes in home value.

The following table displays the total amortized cost of our multifamily HFI loans by year of origination and credit-risk rating, excluding loans for which we have elected the fair value option. Property rental income and property valuations are key inputs to our internally assigned credit risk ratings.

	As of December 31, 2020, by Year of Origination						
	2020	2019	2018	2017	2016	Prior	Total
	(Dollars in millions)						
Internally assigned credit risk rating:							
Non-classified[1]	$ 71,977	$ 68,296	$ 62,087	$ 50,907	$ 43,174	$ 70,933	$ 367,374
Classified[2]	37	1,041	1,529	2,616	1,579	3,250	10,052
Total	$ 72,014	$ 69,337	$ 63,616	$ 53,523	$ 44,753	$ 74,183	$ 377,426

	As of December 31, 2019
	(Dollars in millions)
Credit risk profile by internally assigned grade:	
Non-classified[1]	$ 323,773
Classified[2]	6,845
Total	$ 330,618

(1) A loan categorized as “Non-classified” is current or adequately protected by the current financial strength and debt service capability of the borrower.

(2) Represents loans classified as “Substandard” or “Doubtful.” Loans classified as “Substandard” have a well-defined weakness that jeopardizes the timely full repayment. “Doubtful” refers to a loan with a weakness that makes collection or liquidation in full highly questionable and improbable based on existing conditions and values. We had loans with an amortized cost of less than $1 million classified as doubtful as of December 31, 2020, and loans with an amortized cost of $5 million classified as doubtful as of December 31, 2019.

Troubled Debt Restructurings

A modification to the contractual terms of a loan that results in granting a concession to a borrower experiencing financial difficulties is considered a TDR. In addition to formal loan modifications, we also engage in other loss mitigation activities with troubled borrowers, which include repayment plans and forbearance arrangements, both of which represent informal agreements with the borrower that do not result in the legal modification of the loan's contractual terms. We account for these informal restructurings as a TDR if we defer more than three missed payments. We also classify loans to certain borrowers who have received bankruptcy relief as TDRs. However, our current TDR accounting described herein is temporarily impacted by our election to account for certain eligible loss mitigation activities under the COVID-19 Relief granted pursuant to the CARES Act, as extended by the Consolidated Appropriations Act of 2021. See "Note 1, Summary of Significant Accounting Policies" for more information on the relief from TDR accounting and disclosure requirements.

The substantial majority of the loan modifications accounted for as a TDR result in term extensions, interest rate reductions or a combination of both. The average term extension of a single-family modified loan was 163 months, 162 months and 109 months for the years ended December 31, 2020, 2019 and 2018, respectively. The average interest rate reduction was 0.37, 0.13 and 0.21 percentage points for the years ended December 31, 2020, 2019 and 2018, respectively.

The following table displays the number of loans and amortized cost of loans classified as a TDR during the period.

	For the Year Ended December 31,					
	2020		2019		2018	
	Number of Loans	Amortized Cost	Number of Loans	Amortized Cost	Number of Loans	Amortized Cost
	(Dollars in millions)					
Single-family:						
20- and 30-year or more, amortizing fixed rate	**29,938**	**$ 5,125**	43,283	$ 7,140	79,397	$ 12,485
15-year or less, amortizing fixed rate	**2,956**	**257**	4,762	424	8,953	823
Adjustable-rate	**467**	**72**	813	123	844	129
Other	**1,688**	**211**	3,001	403	6,618	916
Total single-family	**35,049**	**5,665**	51,859	8,090	95,812	14,353
Multifamily	**—**	**—**	11	56	14	74
Total TDRs	**35,049**	**$ 5,665**	51,870	$ 8,146	95,826	$ 14,427

For loans that defaulted in the period presented and that were classified as a TDR in the twelve months prior to the default, the following table displays the number of loans and the amortized cost of these loans at the time of payment default. For purposes of this disclosure, we define loans that had a payment default as: single-family and multifamily loans with completed TDRs that liquidated during the period, either through foreclosure, deed-in-lieu of foreclosure, or a short sale; single-family loans with completed modifications that are two or more months delinquent during the period; or multifamily loans with completed modifications that are one or more months delinquent during the period.

	For the Year Ended December 31,					
	2020		2019		2018	
	Number of Loans	Amortized Cost	Number of Loans	Amortized Cost	Number of Loans	Amortized Cost
	(Dollars in millions)					
Single-family:						
20- and 30-year or more, amortizing fixed rate	**14,127**	**$ 2,578**	15,189	$ 2,366	18,344	$ 2,675
15-year or less, amortizing fixed rate	**148**	**10**	594	45	206	15
Adjustable-rate	**16**	**2**	91	14	63	8
Other	**1,291**	**208**	1,975	315	3,129	523
Total single-family	**15,582**	**2,798**	17,849	2,740	21,742	3,221
Multifamily	**4**	**16**	2	18	2	3
Total TDRs that subsequently defaulted	**15,586**	**$ 2,814**	17,851	$ 2,758	21,744	$ 3,224

Nonaccrual Loans

The table below displays the forgone interest and the accrued interest receivable written off through the reversal of interest income for nonaccrual loans. For updates to our application of our nonaccrual policy for loans negatively impacted by the COVID-19 pandemic, see "Note 1, Summary of Significant Accounting Policies."

	For the Year Ended December 31, 2020
	(Dollars in millions)
Single-family:	
Interest income forgone[(1)]	$ 739
Accrued interest receivable written off through the reversal of interest income	206
Multifamily:	
Interest income forgone[(1)]	$ 19
Accrued interest receivable written off through the reversal of interest income	19

(1) For loans on nonaccrual status held as of period end, represents the amount of interest income we did not recognize but would have recognized if the loans had performed in accordance with their original contractual terms.

The table below includes the amortized cost of and interest income recognized on our HFI single-family and multifamily loans on nonaccrual status by class, excluding loans for which we have elected the fair value option.

	As of December 31,		For the Year Ended December 31, 2020
	2020	2019	
	Amortized Cost		Total Interest Income Recognized(1)
	(Dollars in millions)		
Single-family:			
20- and 30-year or more, amortizing fixed-rate	**$ 22,907**	$ 23,427	**$ 461**
15-year or less, amortizing fixed-rate	**853**	858	**15**
Adjustable-rate	**270**	288	**5**
Other	**2,475**	2,973	**43**
Total single-family	**26,505**	27,546	**524**
Multifamily	**2,069**	435	**59**
Total nonaccrual loans	**$ 28,574**	$ 27,981	**$ 583**

(1) Single-family interest income recognized includes amounts accrued while the loans were performing, including the amortization of any deferred cost basis adjustments, as well as payments received on nonaccrual loans, for nonaccrual loans held as of period end. Multifamily interest income recognized includes amounts accrued while the loans were performing and the amortization of any deferred cost basis adjustments, for nonaccrual loans held as of period end.

Individually Impaired Loans

Prior to the adoption of the CECL standard, we recorded a specific loss reserve for individually impaired loans and a collective loss reserve for all other loans. Individually impaired loans include TDRs, acquired credit-impaired loans and multifamily loans that we have assessed as probable that we will not collect all contractual amounts due, regardless of whether we are currently accruing interest, excluding loans classified as HFS and loans for which we have elected the fair value option. The following tables display the unpaid principal balance, total amortized cost and related allowance for loan losses as of December 31, 2019 and average amortized cost, total interest income recognized and interest income recognized on a cash basis for individually impaired loans for the years ended December 31, 2019 and 2018.

	As of December 31, 2019		
	Unpaid Principal Balance	**Total Amortized Cost**	**Related Allowance for Loan Losses**
		(Dollars in millions)	
Individually impaired loans:			
With related allowance recorded:			
Single-family:			
20- and 30-year or more, amortizing fixed-rate	$ 63,091	$ 61,033	$ (5,851)
15-year or less, amortizing fixed-rate	954	960	(24)
Adjustable-rate	156	157	(9)
Other	15,181	14,078	(2,291)
Total single-family	79,382	76,228	(8,175)
Multifamily	314	315	(45)
Total individually impaired loans with related allowance recorded	79,696	76,543	(8,220)
With no related allowance recorded:(1)			
Single-family:			
20- and 30-year or more, amortizing fixed-rate	18,372	17,578	—
15-year or less, amortizing fixed-rate	410	407	—
Adjustable-rate	265	265	—
Other	3,014	2,718	—
Total single-family	22,061	20,968	—
Multifamily	363	365	—
Total individually impaired loans with no related allowance recorded	22,424	21,333	—
Total individually impaired loans(2)	$ 102,120	$ 97,876	$ (8,220)

(1) The discounted cash flows or collateral value equals or exceeds the carrying value of the loan and, as such, no valuation allowance is required.

(2) Includes single-family loans restructured in a TDR with an amortized cost of $96.9 billion as of December 31, 2019. Includes multifamily loans restructured in a TDR with an amortized cost of $102 million as of December 31, 2019.

	For the Year Ended December 31,					
	2019			2018		
	Average Amortized Cost	Total Interest Income Recognized	Interest Income Recognized on a Cash Basis	Average Amortized Cost	Total Interest Income Recognized	Interest Income Recognized on a Cash Basis
	(Dollars in millions)					
Individually impaired loans:						
With related allowance recorded:						
Single-family:						
20- and 30-year or more, amortizing fixed-rate	$ 69,731	$ 2,908	$ 260	$ 83,498	$ 3,463	$ 372
15-year or less, amortizing fixed-rate	1,176	40	3	1,410	53	8
Adjustable-rate	141	6	1	154	6	1
Other	17,125	705	51	25,170	1,039	76
Total single-family	88,173	3,659	315	110,232	4,561	457
Multifamily	287	7	—	235	3	—
Total individually impaired loans with related allowance recorded	88,460	3,666	315	110,467	4,564	457
With no related allowance recorded:[1]						
Single-family:						
20- and 30-year or more, amortizing fixed-rate	15,569	977	143	14,347	938	113
15-year or less, amortizing fixed-rate	339	15	4	192	10	4
Adjustable-rate	331	15	2	466	19	2
Other	2,836	212	20	3,489	278	22
Total single-family	19,075	1,219	169	18,494	1,245	141
Multifamily	375	31	—	336	14	—
Total individually impaired loans with no related allowance recorded	19,450	1,250	169	18,830	1,259	141
Total individually impaired loans	$ 107,910	$ 4,916	$ 484	$ 129,297	$ 5,823	$ 598

(1) The discounted cash flows or collateral value equals or exceeds the carrying value of the loan and, as such, no valuation allowance is required.

4. Allowance for Loan Losses

We maintain an allowance for loan losses for HFI loans held by Fannie Mae and by consolidated Fannie Mae MBS trusts, excluding loans for which we have elected the fair value option. When calculating our allowance for loan losses, we consider the unpaid principal balance, net of unamortized premiums and discounts, and other cost basis adjustments of HFI loans at the balance sheet date. We record write-offs as a reduction to our allowance for loan losses at the point of foreclosure, completion of a short sale, upon the redesignation of nonperforming and reperforming loans from HFI to HFS or when a loan is determined to be uncollectible. See “Note 1, Summary of Significant Accounting Policies” for additional information and accounting policies on loans held for sale and changes resulting from our adoption of the CECL standard.

The following table displays changes in our allowance for single-family loans, multifamily loans and total allowance for loan losses, including the transition impact of adopting the CECL standard. The provision for loan losses excludes provision for accrued interest receivable losses, guaranty loss reserves and credit losses on AFS debt securities. Cumulatively, these expenses are recognized as “Benefit (provision) for credit losses” in our consolidated statements of operations and comprehensive income.

	For the Year Ended December 31, 2020
	(Dollars in millions)
Single-family allowance for loan losses:	
Beginning balance	$ (8,759)
Transition impact of the adoption of the CECL standard	(1,229)
Benefit for loan losses	127
Write-offs	457
Recoveries	(93)
Other	153
Ending Balance	$ (9,344)
Multifamily allowance for loan losses:	
Beginning balance	$ (257)
Transition impact of the adoption of the CECL standard	(493)
Provision for loan losses	(593)
Write-offs	136
Recoveries	(1)
Ending Balance	$ (1,208)
Total allowance for loan losses:	
Beginning balance	$ (9,016)
Transition impact of the adoption of the CECL standard	(1,722)
Provision for loan losses	(466)
Write-offs	593
Recoveries	(94)
Other	153
Ending Balance	$ (10,552)

Our benefit or provision for loan losses can vary substantially from period to period based on a number of factors, such as changes in actual and forecasted home prices or property valuations, fluctuations in actual and forecasted interest rates, borrower payment behavior, events such as natural disasters or pandemics, the types and volume of our loss mitigation activities, including forbearance and loan modifications, the volume of foreclosures completed, and the redesignation of loans from HFI to HFS. Our benefit or provision can also be impacted by updates to the models, assumptions, and data used in determining our allowance for loan losses. As described below, during 2020, our benefit or provision for loan losses and our loss reserves have been significantly affected by our estimates of the impact of the COVID-19 pandemic, which require significant management judgment. Changes in our estimates of borrowers that will ultimately receive forbearance and even more significantly, the loss mitigation outcomes of affected borrowers after the forbearance period ends, remain uncertain and can affect the amount of benefit or provision for loan losses we recognize.

The primary factors that contributed to our single-family benefit for loan losses in 2020 were:

- Benefit from actual and expected home price growth. In the first quarter of 2020, we significantly reduced our expectations for home price growth to near-zero for 2020. However, the negative impact from the first quarter of 2020 was more than offset by a robust increase in actual home price growth through the remainder of 2020 despite the COVID-19 pandemic. In addition, we also expect more moderate home price growth for 2021. Higher home prices decrease the likelihood that loans will default and decrease the amount of credit loss on loans that do default, which impacts our estimate of losses and ultimately decreases our loss reserves and provision for loan losses.
- Benefit from lower actual and projected interest rates. For much of 2020, we continued to be in a historically low interest rate environment, which we expect to continue in 2021. As mortgage interest rates decline, we expect an increase in future prepayments on single-family loans, including modified loans. Higher expected prepayments shorten the expected lives of modified loans, which decreases the expected impairment relating to term and interest-rate concessions provided on these loans and results in a benefit for loan losses.
- Benefit from the redesignation of certain reperforming single-family loans from HFI to HFS. In the third quarter of 2020, we resumed sales of reperforming loans after our suspension of new loan sales in the second quarter of 2020. As a result, we redesignated certain reperforming single-family loans from HFI to HFS in the second half of 2020, as we no longer intend to hold them for the foreseeable future or to maturity. Upon redesignation of these loans, we recorded the loans at the lower of cost or fair value with a write-off against the allowance for loan losses. Amounts recorded in the allowance related to these loans exceeded the amounts written off, resulting in a benefit.

These benefits were substantially offset by the impact of the COVID-19 pandemic, including increased delinquencies, as described below, which resulted in a net benefit for the year.

- Provision from changes in actual and expected loan delinquencies and change in assumptions regarding COVID-19 forbearance, which includes adjustments to modeled results. The economic dislocation caused by the COVID-19 pandemic was a significant driver of credit-related expenses during 2020, with the majority of the impact recognized in the first quarter of 2020. Estimating expected loan losses as a result of the COVID-19 pandemic continues to require significant management judgment regarding a number of matters, including our expectations surrounding the length of time that loans remain in forbearance and the type and extent of loss mitigation that may be needed when loans exit a COVID-19-related forbearance, political uncertainty and the high degree of uncertainty regarding the future course of the pandemic, including new strains of the virus and its effect on the economy. As a result, we believe the model used to estimate single-family loan losses does not capture the entirety of losses we expect to incur relating to COVID-19. Accordingly, management used its judgment to significantly increase the loss projections developed by our credit loss model in the first quarter of 2020. The model has consumed data from the initial quarters of the pandemic, including loan delinquencies, and updated credit profile data for loans in forbearance. As more of this data was consumed by our credit loss model throughout the year, we have reduced the non-modeled adjustment initially recorded in the first quarter of 2020.

  Management continued to apply its judgment and supplement model results as of December 31, 2020, taking into account the continued high degree of uncertainty regarding the future impact of the pandemic and its effect on the economy. In determining our allowance for loan losses as of December 31, 2020, we revised downward our estimate of the amount of single-family borrowers who would ultimately receive forbearance due to a COVID-19-related financial hardship from our March 31, 2020 estimate based on recent economic data and actual forbearance activity observed during the last nine months of 2020.

The primary factor that contributed to a decrease in single-family write-offs in 2020 compared with 2019 was a reduction in the volume of reperforming loans redesignated from HFI to HFS.

Our multifamily provision for loan losses in 2020 was driven by higher expected losses as a result of the economic dislocation caused by the COVID-19 pandemic and heightened economic uncertainty, driven by elevated unemployment, which we expect will result in a decrease in multifamily property income and property values. In addition, the multifamily provision for loan losses includes increased expected loan losses on seniors housing loans, as these properties have been disproportionately impacted by the pandemic. Consistent with the single-family discussion above, we believe the model we use to estimate multifamily loan losses does not capture the entirety of losses we expect to incur relating to COVID-19. Accordingly, management used its judgment to increase the loss projections developed by our credit loss model. The model has consumed data from the initial quarters of the pandemic, but we continue to apply management judgment and supplement model results as of December 31, 2020, taking into account the continued high degree of uncertainty that remains relating to the impact of the pandemic.

The primary factor that contributed to increased multifamily write-offs in 2020 compared with 2019 was a write down in the value of a seniors housing portfolio during the third quarter of 2020 following its default on its forbearance agreement.

The following tables display changes in single-family and multifamily allowance for loan losses for the years ended 2019 and 2018 and the amortized cost in our HFI loans by impairment or allowance methodology and portfolio segment as of each year-end prior to the adoption of the CECL standard. For a description of our previous allowance and impairment methodology refer to “Note 1, Summary of Significant Accounting Policies.”

	For the Year Ended December 31,	
	2019	**2018**
	(Dollars in millions)	
Single-family allowance for loan losses:		
Beginning balance	$ (13,969)	$ (18,849)
Benefit for loan losses	3,988	2,990
Write-offs	1,299	2,148
Recoveries	(71)	(240)
Other	(6)	(18)
Ending Balance	$ (8,759)	$ (13,969)
Multifamily allowance for loan losses:		
Beginning balance	$ (234)	$ (235)
Provision for loan losses	(27)	(3)
Write-offs	8	4
Recoveries	(4)	—
Ending Balance	$ (257)	$ (234)
Total allowance for loan losses:		
Beginning balance	$ (14,203)	$ (19,084)
Benefit for loan losses	3,961	2,987
Write-offs	1,307	2,152
Recoveries	(75)	(240)
Other	(6)	(18)
Ending Balance	$ (9,016)	$ (14,203)

	As of December 31,		
	2019		
	Single-Family	Multifamily	Total
	(Dollars in millions)		
Allowance for loan losses by segment:			
Individually impaired loans	$ (8,175)	$ (45)	$ (8,220)
Collectively reserved loans	(584)	(212)	(796)
Total allowance for loan losses	$ (8,759)	$ (257)	$ (9,016)
Amortized cost in loans by segment:			
Individually impaired loans	$ 97,196	$ 680	$ 97,876
Collectively reserved loans	2,909,115	329,938	3,239,053
Total amortized cost in loans	$ 3,006,311	$ 330,618	$ 3,336,929

5. Investments in Securities

Trading Securities

Trading securities are recorded at fair value with subsequent changes in fair value recorded as "Fair value gains (losses), net" in our consolidated statements of operations and comprehensive income. The following table displays our investments in trading securities.

	As of December 31,	
	2020	2019
	(Dollars in millions)	
Mortgage-related securities:		
Fannie Mae	**$ 2,404**	$ 3,424
Other agency[(1)]	**3,451**	4,490
Private-label and other mortgage securities	**158**	629
Total mortgage-related securities (includes $793 million and $896 million, respectively, related to consolidated trusts)	**6,013**	8,543
Non-mortgage-related securities:		
U.S. Treasury securities	**130,456**	39,501
Other securities	**73**	79
Total non-mortgage-related securities	**130,529**	39,580
Total trading securities	**$ 136,542**	$ 48,123

(1) Consists of Freddie Mac and Ginnie Mae mortgage-related securities.

Our investment in U.S. Treasury securities increased as of December 31, 2020, compared with December 31, 2019 primarily driven by proceeds from significantly higher debt issuances during 2020 as well as proceeds from loan payoffs.

The following table displays information about our net trading gains.

	For the Year Ended December 31,		
	2020	2019	2018
	(Dollars in millions)		
Net trading gains	**$ 513**	$ 322	$ 126
Net trading gains recognized in the period related to securities still held at period end	**252**	238	55

Available-for-Sale Securities

We record AFS securities at fair value with unrealized gains and losses, recorded net of tax, as a component of "Other comprehensive income (loss)" and we recognize realized gains and losses from the sale of AFS securities in "Investment gains, net" in our consolidated statements of operations and comprehensive income. We define the amortized cost basis of our AFS securities as unpaid principal balance, net of unamortized premiums and discounts, and other cost basis adjustments. Pursuant to the CECL standard, we record an allowance for credit losses for AFS securities that reflects the impairment for credit losses, which are limited to the amount that fair value is less than the amortized cost. Impairment due to non-credit losses are recorded as unrealized losses within other comprehensive income.

The following tables display the amortized cost, allowance for credit losses, gross unrealized gains and losses in accumulated other comprehensive income (loss) ("AOCI"), and fair value by major security type for AFS securities.

	As of December 31, 2020				
	Total Amortized Cost[1]	Allowance for Credit Losses	Gross Unrealized Gains in AOCI	Gross Unrealized Losses in AOCI	Total Fair Value[1]
	(Dollars in millions)				
Fannie Mae	$ 1,094	$ —	$ 86	$ (12)	$ 1,168
Other agency[2]	59	—	6	—	65
Alt-A and subprime private-label securities	4	—	2	—	6
Mortgage revenue bonds	211	(3)	8	—	216
Other mortgage-related securities	238	—	4	—	242
Total	$ 1,606	$ (3)	$ 106	$ (12)	$ 1,697

	As of December 31, 2019			
	Total Amortized Cost[1][3]	Gross Unrealized Gains	Gross Unrealized Losses	Total Fair Value[1]
	(Dollars in millions)			
Fannie Mae	$ 1,445	$ 85	$ (10)	$ 1,520
Other agency[2]	183	15	—	198
Alt-A and subprime private-label securities	34	23	—	57
Mortgage revenue bonds	309	9	(3)	315
Other mortgage-related securities	310	5	(1)	314
Total	$ 2,281	$ 137	$ (14)	$ 2,404

(1) We exclude from amortized cost and fair value accrued interest of $6 million and $10 million as of December 31, 2020 and December 31, 2019, respectively, which we record in "Other assets" in our consolidated balance sheets.

(2) Other agency securities consist of securities issued by Freddie Mac and Ginnie Mae.

(3) Prior to our adoption of the CECL standard, total amortized cost represented the unpaid principal balance, unamortized premiums, discounts and other cost basis adjustments, as well as temporary impairments recognized in "Investment gains, net" in our consolidated statements of operations and comprehensive income.

Fannie Mae and Other Agency Securities

Our Fannie Mae and other agency AFS securities consist of securities issued by us, Freddie Mac, or Ginnie Mae. The principal and interest on these securities are guaranteed by the issuing agency. We believe that the guaranty provided by the issuing agency, the support provided to the agencies by the U.S. government, the importance of the agencies to the liquidity and stability in the secondary mortgage market, and the long history of zero credit losses on agency mortgage-related securities are all indicators that there are currently no credit losses on these securities, even if the security is in an unrealized loss position. In addition, we generally hold these securities that are in an unrealized loss position to recovery. As a result, unless we intend to sell the security, we do not recognize an allowance for credit losses on agency mortgage-related securities.

Non-Agency Mortgage-Related Securities

As of December 31, 2020, substantially all of our non-agency mortgage-related securities were in an unrealized gain position. As a result, we have not recognized an allowance for credit losses on these securities.

The following tables display additional information regarding gross unrealized losses and fair value by major security type for AFS securities in an unrealized loss position, excluding allowance for credit losses.

	As of December 31, 2020			
	Less Than 12 Consecutive Months		12 Consecutive Months or Longer	
	Gross Unrealized Losses in AOCI	Fair Value	Gross Unrealized Losses in AOCI	Fair Value
	(Dollars in millions)			
Fannie Mae	$ (1)	$ 40	$ (11)	$ 94
Mortgage revenue bonds	—	—	—	—
Other mortgage-related securities	—	—	—	—
Total	$ (1)	$ 40	$ (11)	$ 94

	As of December 31, 2019			
	Less Than 12 Consecutive Months		12 Consecutive Months or Longer	
	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value
	(Dollars in millions)			
Fannie Mae	$ —	$ —	$ (10)	$ 337
Mortgage revenue bonds	—	—	(3)	3
Other mortgage-related securities	(1)	130	—	—
Total	$ (1)	$ 130	$ (13)	$ 340

The following table displays the gross realized gains and proceeds on sales of AFS securities.

	For the Year Ended December 31,		
	2020	2019	2018
	(Dollars in millions)		
Gross realized gains	**$ 57**	$ 265	$ 375
Total proceeds (excludes initial sale of securities from new portfolio securitizations)	**361**	537	662

The following tables display net unrealized gains on AFS securities and other amounts accumulated within our accumulated other comprehensive income, net of tax.

	As of
	December 31, 2020
	(Dollars in millions)
Net unrealized gains on AFS securities for which we have not recorded an allowance for credit losses	$ 74
Other	42
Accumulated other comprehensive income	$ 116

	As of	
	December 31, 2019	December 31, 2018
	(Dollars in millions)	
Net unrealized gains on AFS securities for which we have not recorded other-than-temporary impairment ("OTTI")	$ 97	$ 52
Net unrealized gains on AFS securities for which we have recorded OTTI	—	224
Other	34	46
Accumulated other comprehensive income	$ 131	$ 322

Prior to our adoption of the CECL standard on January 1, 2020, we evaluated AFS securities for other-than-temporary impairment. The balance of the unrealized credit-loss component of AFS securities held by us and recognized in our consolidated statements of operations and comprehensive income was $36 million as of December 31, 2019.

Maturity Information

The following table displays the amortized cost and fair value of our AFS securities by major security type and remaining contractual maturity, assuming no principal prepayments. The contractual maturity of mortgage-backed securities is not a reliable indicator of their expected life because borrowers generally have the right to prepay their obligations at any time.

	As of December 31, 2020									
			One Year or Less		After One Year Through Five Years		After Five Years Through Ten Years		After Ten Years	
	Total Carrying Amount [(1)]	Total Fair Value	Net Carrying Amount [(1)]	Fair Value	Net Carrying Amount [(1)]	Fair Value	Net Carrying Amount [(1)]	Fair Value	Net Carrying Amount [(1)]	Fair Value
	(Dollars in millions)									
Fannie Mae	$1,094	$1,168	$ —	$ —	$ 5	$ 6	$ 96	$ 108	$ 993	$1,054
Other agency	59	65	—	—	—	—	9	10	50	55
Alt-A and subprime private-label securities	4	6	—	—	—	—	3	3	1	3
Mortgage revenue bonds	208	216	1	1	27	28	19	20	161	167
Other mortgage-related securities	238	242	—	—	—	—	19	21	219	221
Total	$1,603	$1,697	$ 1	$ 1	$ 32	$ 34	$ 146	$ 162	$1,424	$1,500
Weighted-average yield [(1)]	5.27 %		5.90 %		6.54 %		6.11 %		5.16 %	

(1) Net carrying amount consists of book value, net of allowance for credit losses on AFS debt securities.

6. Financial Guarantees

We generate revenue by absorbing the credit risk of mortgage loans in unconsolidated trusts in exchange for a guaranty fee. We also provide credit enhancements on taxable or tax-exempt mortgage revenue bonds issued by state and local governmental entities to finance multifamily housing for low- and moderate-income families. Additionally, we issue long-term standby commitments that generally require us to purchase loans from lenders if the loans meet certain delinquency criteria.

We recognize a guaranty obligation for our obligation to stand ready to perform on our guarantees to unconsolidated trusts and other guaranty arrangements. These off-balance sheet guarantees expose us to credit losses primarily relating to the unpaid principal balance of our unconsolidated Fannie Mae MBS and other financial guarantees. The maximum remaining contractual term of our guarantees is 32 years; however, the actual term of each guaranty may be significantly less than the contractual term based on the prepayment characteristics of the related mortgage loans. With our adoption of the CECL standard on January 1, 2020, we measure our guaranty reserve for estimated credit losses for off-balance sheet exposures over the contractual period for which they are exposed to the credit risk, unless that obligation is unconditionally cancellable by the issuer.

As the guarantor of structured securities backed in whole or in part by Freddie Mac-issued securities, we extend our guaranty to the underlying Freddie Mac securities in our resecuritization trusts. However, Freddie Mac continues to guarantee the payment of principal and interest on the underlying Freddie Mac securities that we have resecuritized.

We do not charge an incremental guaranty fee to include Freddie Mac securities in the structured securities that we issue. When we began issuing UMBS in June 2019, we entered into an indemnification agreement under which Freddie Mac agreed to indemnify us for losses caused by its failure to meet its payment or other specified obligations under the trust agreements pursuant to which the underlying resecuritized securities were issued. As a result, and due to the funding commitment available to Freddie Mac through its senior preferred stock purchase agreement with Treasury, we have concluded that the associated credit risk is negligible. As such, we exclude from the following table Freddie Mac securities backing unconsolidated Fannie Mae-issued structured securities of approximately $137.3 billion and $50.1 billion as of December 31, 2020 and December 31, 2019, respectively.

The following table displays our off-balance sheet maximum exposure, guaranty obligation recognized in our consolidated balance sheets and the potential maximum recovery from third parties through available credit enhancements and recourse related to our financial guarantees.

	As of December 31,					
	2020			2019		
	Maximum Exposure	Guaranty Obligation	Maximum Recovery[1]	Maximum Exposure	Guaranty Obligation	Maximum Recovery[1]
	(Dollars in millions)					
Unconsolidated Fannie Mae MBS	**$ 4,424**	**$ 18**	**$ 4,226**	$ 5,801	$ 26	$ 5,545
Other guaranty arrangements[2]	**11,828**	**109**	**2,438**	12,670	128	2,553
Total	**$ 16,252**	**$ 127**	**$ 6,664**	$ 18,471	$ 154	$ 8,098

(1) Recoverability of such credit enhancements and recourse is subject to, among other factors, the ability of our mortgage insurers and the U.S. government, as a financial guarantor, to meet their obligations to us. For information on our mortgage insurers, see "Note 13, Concentrations of Credit Risk."

(2) Primarily consists of credit enhancements and long-term standby commitments.

7. Short-Term and Long-Term Debt

Short-Term Debt

The following table displays our outstanding short-term debt (debt with an original contractual maturity of one year or less) and weighted-average interest rates of this debt.

	As of December 31,			
	2020		2019	
	Outstanding	Weighted-Average Interest Rate[1]	Outstanding	Weighted-Average Interest Rate[1]
	(Dollars in millions)			
Federal funds purchased and securities sold under agreements to repurchase[2]	**$ —**	**— %**	$ 478	1.67 %
Short-term debt of Fannie Mae	**12,173**	**0.18**	26,662	1.56

(1) Includes the effects of discounts, premiums and other cost basis adjustments.

(2) Represents agreements to repurchase securities for a specified price, with repayment generally occurring on the following day, reported as "Other liabilities" in our consolidated balance sheets.

Long-Term Debt

Long-term debt represents debt with an original contractual maturity of greater than one year. The following table displays our outstanding long-term debt.

	As of December 31,					
	2020			2019		
	Maturities	Outstanding[1]	Weighted-Average Interest Rate[2]	Maturities	Outstanding[1]	Weighted-Average Interest Rate[2]
	(Dollars in millions)					
Senior fixed:						
Benchmark notes and bonds	2021 - 2030	$ 106,691	2.03 %	2020 - 2030	$ 86,114	2.66 %
Medium-term notes[3]	2021 - 2030	48,524	0.63	2020 - 2026	32,590	1.57
Other[4]	2021 - 2038	6,701	3.90	2020 - 2038	5,254	5.01
Total senior fixed		161,916	1.69		123,958	2.47
Senior floating:						
Medium-term notes[3]	2021 - 2022	100,089	0.35	2020 - 2021	9,774	1.66
Connecticut Avenue Securities[5]	2023 - 2031	14,978	4.16	2023 - 2031	21,424	5.61
Other[6]	2037	416	7.75	2020 - 2037	398	6.27
Total senior floating		115,483	0.86		31,596	4.40
Secured borrowings[7]	-	—	—	2021 - 2022	31	2.31
Total long-term debt of Fannie Mae[8]		277,399	1.34		155,585	2.86
Debt of consolidated trusts	2021 - 2060	3,646,164	1.88	2020 - 2059	3,285,139	2.78
Total long-term debt		$ 3,923,563	1.85 %		$ 3,440,724	2.78 %

(1) Includes the effects of fair value adjustments.

(2) Includes the effects of discounts, premiums and other cost basis adjustments.

(3) Includes long-term debt with an original contractual maturity of greater than 1 year and up to 10 years, excluding zero-coupon debt.

(4) Includes other long-term debt with an original contractual maturity of greater than 10 years and foreign exchange bonds.

(5) Credit risk-sharing securities that transfer a portion of the credit risk on specified pools of single-family mortgage loans to the investors in these securities, a portion of which is reported at fair value. Represents CAS issued prior to November 2018. See "Note 2, Consolidations and Transfers of Financial Assets" for more information about our CAS structures issued beginning November 2018.

(6) Consists of structured debt instruments that are reported at fair value.

(7) Represents our remaining liability resulting from the transfer of financial assets from our consolidated balance sheets that did not qualify as a sale under the accounting guidance for the transfer of financial instruments.

(8) Includes unamortized discounts and premiums, other cost basis adjustments and fair value adjustments in a net discount position of $392 million and $2 million as of December 31, 2020 and 2019, respectively.

Our long-term debt includes a variety of debt types. We issue fixed and floating-rate medium-term notes with maturities greater than one year that are issued through dealer banks. We also offer Benchmark Notes® in regularly-scheduled issuances that provide increased efficiency, liquidity and tradability to the market. Additionally, we have issued notes and bonds denominated in a foreign currency. We effectively convert all foreign currency-denominated transactions into U.S. dollars through the use of foreign currency swaps for the purpose of funding our mortgage assets. Our long-term debt also includes CAS securities issued prior to November 2018, which are credit risk-sharing securities that transfer a portion of the credit risk on specified pools of single-family mortgage loans to the investors in these securities.

Our other long-term debt includes callable and non-callable securities, which include all long-term non-Benchmark securities, such as zero-coupon bonds, fixed rate and other long-term securities, and are generally negotiated underwritings with one or more dealers or dealer banks.

Characteristics of Debt

As of December 31, 2020 and 2019, the face amount of our debt securities of Fannie Mae was $290.0 billion and $182.2 billion, respectively. As of December 31, 2020, we had zero-coupon debt with a face amount of $5.1 billion, which had an effective interest rate of 0.50%. As of December 31, 2019, we had zero-coupon debt with a face amount of $23.1 billion, which had an effective interest rate of 1.63%.

We issue callable debt instruments to manage the duration and prepayment risk of expected cash flows of the mortgage assets we own. Our outstanding debt as of December 31, 2020 and 2019 included $57.5 billion and $38.5 billion, respectively, of callable debt that could be redeemed, in whole or in part, at our option on or after a specified date.

The following table displays the amount of our long-term debt as of December 31, 2020 by year of maturity for each of the years 2021 through 2025 and thereafter. The first column assumes that we pay off this debt at maturity or on the call date if the call has been announced, while the second column assumes that we redeem our callable debt at the next available call date.

	Long-Term Debt by Year of Maturity	Assuming Callable Debt Redeemed at Next Available Call Date
	(Dollars in millions)	
2021	$ 66,631	$ 92,454
2022	65,593	82,824
2023	30,946	20,814
2024	19,762	14,881
2025	39,593	21,985
Thereafter	54,874	44,441
Total long-term debt of Fannie Mae(1)	277,399	277,399
Debt of consolidated trusts(2)	3,646,164	3,646,164
Total long-term debt	$ 3,923,563	$ 3,923,563

(1) Includes unamortized discounts and premiums, other cost basis adjustments and fair value adjustments.

(2) Contractual maturity of debt of consolidated trusts is not a reliable indicator of expected maturity because borrowers of the underlying loans generally have the right to prepay their obligations at any time.

8. Derivative Instruments

Derivative instruments are an integral part of our strategy in managing interest-rate risk. Derivative instruments may be privately-negotiated, bilateral contracts, or they may be listed and traded on an exchange. We refer to our derivative transactions made pursuant to bilateral contracts as our OTC derivative transactions and our derivative transactions accepted for clearing by a derivatives clearing organization as our cleared derivative transactions. We typically do not settle the notional amount of our risk management derivatives; rather, notional amounts provide the basis for calculating actual payments or settlement amounts. The derivative contracts we use for interest-rate risk management purposes fall into these broad categories:

- *Interest-rate swap contracts.* An interest-rate swap is a transaction between two parties in which each party agrees to exchange payments tied to different interest rates or indices for a specified period of time, generally based on a notional amount of principal. The types of interest-rate swaps we use include pay-fixed swaps, receive-fixed swaps and basis swaps.
- *Interest-rate option contracts.* These contracts primarily include pay-fixed swaptions, receive-fixed swaptions, cancelable swaps and interest-rate caps. A swaption is an option contract that allows us or a counterparty to enter into a pay-fixed or receive-fixed swap at some point in the future.
- *Foreign currency swaps.* These swaps convert debt that we issue in foreign denominated currencies into U.S. dollars. We enter into foreign currency swaps only to the extent that we hold foreign currency debt.
- *Futures.* These are standardized exchange-traded contracts that either obligate a buyer to buy an asset at a predetermined date and price or a seller to sell an asset at a predetermined date and price. The types of futures contracts we enter into include SOFR and U.S. Treasury.

We account for certain forms of credit risk transfer transactions as derivatives. In our credit risk transfer transactions, a portion of the credit risk associated with losses on a reference pool of mortgage loans is transferred to a third party. We enter into derivative transactions that are associated with some of our credit risk transfer transactions, whereby we manage investment risk to guarantee that certain unconsolidated VIEs have sufficient cash flows to pay their contractual obligations.

We enter into forward purchase and sale commitments that lock in the future delivery of mortgage loans and mortgage-related securities at a fixed price or yield. Certain commitments to purchase mortgage loans and purchase or sell mortgage-related securities meet the criteria of a derivative. We typically settle the notional amount of our mortgage commitments that are accounted for as derivatives.

We recognize all derivatives as either assets or liabilities in our consolidated balance sheets at their fair value on a trade-date basis. Fair value amounts, which are (1) netted to the extent a legal right of offset exists and is enforceable by law at the counterparty level and (2) inclusive of the right or obligation associated with the cash collateral posted or received, are recorded in "Other assets" or "Other liabilities" in our consolidated balance sheets. See "Note 15, Fair Value" for additional information on derivatives recorded at fair value. We present cash flows from derivatives as operating activities in our consolidated statements of cash flows.

Notional and Fair Value Position of our Derivatives

The following table displays the notional amount and estimated fair value of our asset and liability derivative instruments.

	As of December 31, 2020				As of December 31, 2019			
	Asset Derivatives		Liability Derivatives		Asset Derivatives		Liability Derivatives	
	Notional Amount	Estimated Fair Value	Notional Amount	Estimated Fair Value	Notional Amount	Estimated Fair Value	Notional Amount	Estimated Fair Value
	(Dollars in millions)							
Risk management derivatives:								
Swaps:								
Pay-fixed	**$ 88,361**	**$ —**	**$ 11,461**	**$ (595)**	$ 41,052	$ —	$ 29,178	$ (970)
Receive-fixed	**92,315**	**233**	**33,919**	**(123)**	73,579	816	26,382	(62)
Basis	**250**	**192**	**—**	**—**	273	149	—	—
Foreign currency	**237**	**57**	**239**	**(58)**	229	39	232	(65)
Swaptions:								
Pay-fixed	**5,530**	**37**	**2,025**	**(118)**	4,600	18	6,375	(219)
Receive-fixed	**3,355**	**346**	**700**	**(16)**	2,875	106	4,600	(232)
Futures[(1)]	**64,398**	**—**	**—**	**—**	20,507	—	—	—
Total gross risk management derivatives	**254,446**	**865**	**48,344**	**(910)**	143,115	1,128	66,767	(1,548)
Accrued interest receivable (payable)	**—**	**97**	**—**	**(105)**	—	226	—	(250)
Netting adjustment[(2)]	**—**	**(905)**	**—**	**995**	—	(1,288)	—	1,694
Total net risk management derivatives	**$254,446**	**$ 57**	**$ 48,344**	**$ (20)**	$143,115	$ 66	$ 66,767	$ (104)
Mortgage commitment derivatives:								
Mortgage commitments to purchase whole loans	**$ 35,292**	**$ 145**	**$ 51**	**$ —**	$ 7,115	$ 15	$ 1,787	$ (1)
Forward contracts to purchase mortgage-related securities	**144,215**	**844**	**607**	**—**	55,531	137	9,560	(28)
Forward contracts to sell mortgage-related securities	**199**	**—**	**227,828**	**(1,426)**	9,282	13	109,066	(277)
Total mortgage commitment derivatives	**179,706**	**989**	**228,486**	**(1,426)**	71,928	165	120,413	(306)
Credit enhancement derivatives	**16,829**	**179**	**11,368**	**(49)**	28,432	40	9,486	(25)
Derivatives at fair value	**$450,981**	**$ 1,225**	**$288,198**	**$ (1,495)**	$243,475	$ 271	$196,666	$ (435)

(1) Futures have no ascribable fair value since the positions are settled daily.

(2) The netting adjustment represents the effect of the legal right to offset under legally enforceable master netting arrangements to settle with the same counterparty on a net basis, including cash collateral posted and received. Cash collateral posted was $658 million and $1.0 billion as of December 31, 2020 and 2019, respectively. Cash collateral received was $568 million and $635 million as of December 31, 2020 and 2019, respectively.

We record all derivative gains and losses, including accrued interest, in “Fair value gains (losses), net” in our consolidated statements of operations and comprehensive income. The following table displays, by type of derivative instrument, the fair value gains and losses, net on our derivatives.

	For the Year Ended December 31,		
	2020	**2019**	**2018**
	(Dollars in millions)		
Risk management derivatives:			
Swaps:			
Pay-fixed	**$ (2,764)**	$ (3,964)	$ 2,940
Receive-fixed	**2,226**	3,685	(1,834)
Basis	**43**	46	(21)
Foreign currency	**23**	24	(51)
Swaptions:			
Pay-fixed	**(146)**	(380)	100
Receive-fixed	**595**	117	(39)
Futures	**(76)**	273	38
Net contractual interest expense on interest-rate swaps	**(261)**	(833)	(1,061)
Total risk management derivatives fair value gains (losses), net	**(360)**	(1,032)	72
Mortgage commitment derivatives fair value gains (losses), net	**(2,654)**	(1,043)	324
Credit enhancement derivatives fair value gains (losses), net	**182**	(35)	26
Total derivatives fair value gains (losses), net	**$ (2,832)**	$ (2,110)	$ 422

Derivative Counterparty Credit Exposure

Our derivative counterparty credit exposure relates principally to interest-rate derivative contracts. We are exposed to the risk that a counterparty in a derivative transaction will default on payments due to us, which may require us to seek a replacement derivative from a different counterparty. This replacement may be at a higher cost, or we may be unable to find a suitable replacement. We manage our derivative counterparty credit exposure relating to our risk management derivative transactions mainly through enforceable master netting arrangements, which allow us to net derivative assets and liabilities with the same counterparty or clearing organization and clearing member. For our OTC derivative transactions, we require counterparties to post collateral, which may include cash, U.S. Treasury securities, agency debt and agency mortgage-related securities.

See “Note 14, Netting Arrangements” for information on our rights to offset assets and liabilities as of December 31, 2020 and 2019.

9. Income Taxes

Provision for Federal Income Taxes

We are subject to federal income tax, but we are exempt from state and local income taxes. The following table displays the components of our provision for federal income taxes.

	For the Year Ended December 31,		
	2020	**2019**	**2018**
	(Dollars in millions)		
Current income tax benefit (provision)	**$ (3,803)**	$ (2,089)	$ 114
Deferred income tax benefit (provision)[1]	**729**	(1,328)	(4,254)
Provision for federal income taxes	**$ (3,074)**	$ (3,417)	$ (4,140)

[1] Amount excludes the current income tax effect of items recognized directly in “Total Fannie Mae stockholders equity.”

The following table displays the difference between the statutory corporate tax rate and our effective tax rate.

	For the Year Ended December 31,		
	2020	**2019**	**2018**
Statutory corporate tax rate	**21.0 %**	21.0 %	21.0 %
Equity investments in affordable housing projects	**(0.1)**	(0.2)	(0.6)
Change in unrecognized tax benefits	**—**	(1.2)	—
Other	**(0.2)**	(0.2)	0.2
Effective tax rate	**20.7 %**	19.4 %	20.6 %

Our effective tax rate is the provision for federal income taxes expressed as a percentage of income or loss before federal income taxes. Our effective tax rates for the years 2020, 2019, and 2018 were impacted by the benefits of our investments in housing projects eligible for low-income housing tax credits. Our effective tax rate for 2019 was also impacted by the favorable resolution of our uncertain tax position which reduced our provision for federal income taxes by $205 million.

Deferred Tax Assets and Liabilities

We evaluate our deferred tax assets for recoverability using a consistent approach which considers the relative impact of negative and positive evidence, including our historical profitability and projections of future taxable income.

As of December 31, 2020, we continued to conclude that the positive evidence in favor of the recoverability of our deferred tax assets outweighed the negative evidence and that it is more likely than not that our deferred tax assets will be realized. Our framework for assessing the recoverability of deferred tax assets requires us to weigh all available evidence, to the extent it exists, including:

- the sustainability of recent profitability required to realize the deferred tax assets;
- the cumulative net income or losses in our consolidated statements of operations and comprehensive income in recent years;
- unsettled circumstances that, if unfavorably resolved, would adversely affect future operations and profit levels on a continuing basis in future years; and
- the funding available to us under the senior preferred stock purchase agreement.

The following table displays our deferred tax assets and deferred tax liabilities.

	As of December 31,	
	2020	**2019**
	(Dollars in millions)	
Deferred tax assets:		
Mortgage and mortgage-related assets	**$ 8,241**	$ 9,290
Allowance for loan losses and basis in acquired property, net	**1,798**	1,240
Debt and derivative instruments	**526**	627
Partnership and other equity investments	**129**	152
Interest-only securities	**2,561**	788
Total deferred tax assets	**13,255**	12,097
Deferred tax liabilities:		
Unrealized gains on AFS securities, net	**20**	26
Other, net	**288**	161
Total deferred tax liabilities	**308**	187
Deferred tax assets, net	**$ 12,947**	$ 11,910

Unrecognized Tax Benefits

The following table displays the changes in our unrecognized tax benefits.

	For the Year Ended December 31,		
	2020	2019	2018
	(Dollars in millions)		
Unrecognized tax benefits as of January 1	$ —	$ 416	$ 514
Gross decreases - tax positions in current year	—	—	(98)
Gross decreases - tax positions in prior years	—	(416)	—
Unrecognized tax benefits as of December 31[1]	$ —	$ —	$ 416

(1) Amount excludes tax credits of $151 million as of December 31, 2018. We had no unrecognized tax benefits as of December 31, 2020 and December 31, 2019.

Our tax years 2016 through 2019 remain open to examination by the IRS.

10. Segment Reporting

We have two reportable business segments, which are based on the type of business activities each perform: Single-Family and Multifamily. Results of our two business segments are intended to reflect each segment as if it were a stand-alone business. The sum of the results for our two business segments equals our consolidated results of operations.

The section below provides a discussion of our business segments.

Single-Family Business Segment

- Works with our lender customers to acquire and securitize single-family mortgage loans delivered to us by lenders into Fannie Mae MBS.
- Issues structured Fannie Mae MBS backed by single-family mortgage assets and provides other services to our lender customers.
- Prices and manages the credit risk on loans in our single-family guaranty book of business. Also enters into transactions that transfer a portion of the credit risk on some of the loans in our single-family guaranty book of business to third parties.
- Works to reduce costs of defaulted single-family loans through home retention solutions and foreclosure alternatives, management of foreclosures and our REO inventory, selling nonperforming loans and pursuing contractual remedies from lenders, servicers and providers of credit enhancements.

Multifamily Business Segment

- Works with our lender customers to acquire and securitize multifamily mortgage loans delivered to us by lenders into Fannie Mae MBS.
- Issues structured multifamily Fannie Mae MBS through our Fannie Mae Guaranteed Multifamily Structures ("Fannie Mae GeMS") program and provides other services to our lender customers.
- Prices and manages the credit risk on loans in our multifamily guaranty book of business. Lenders retain a portion of the credit risk in most multifamily transactions.
- Enters into transactions that transfer an additional portion of Fannie Mae's credit risk on some of the loans in our multifamily guaranty book of business to third parties.
- Works to maintain credit quality of the book, prevent foreclosure, reduce costs of defaulted multifamily loans, manage our REO inventory, and pursue contractual remedies from lenders, servicers and providers of credit enhancements.

Segment Allocations and Results

The majority of our assets, revenues and expenses are directly associated with each respective business segment and are included in determining its asset balance and operating results. Those assets, revenues and expenses that are not directly attributable to a particular business segment are allocated based on the size of each segment's guaranty book of business. The substantial majority of the gains and losses associated with our risk management derivatives are allocated to our Single-Family business segment.

The following table displays total assets by segment.

	As of December 31,	
	2020	**2019**
	(Dollars in millions)	
Single-Family	**$ 3,569,130**	$ 3,149,212
Multifamily	**416,619**	354,107
Total assets	**$ 3,985,749**	$ 3,503,319

We operate our business solely in the United States and its territories, and accordingly, we generate no revenue from and have no long-lived assets, other than financial instruments, in geographic locations other than the United States and its territories.

The following tables display our segment results.

	For the Year Ended December 31, 2020		
	Single-Family	**Multifamily**	**Total**
	(Dollars in millions)		
Net interest income[(1)]	$ 21,502	$ 3,364	$ 24,866
Fee and other income[(2)]	368	94	462
Net revenues	21,870	3,458	25,328
Investment gains, net[(3)]	728	179	907
Fair value gains (losses), net[(4)]	(2,539)	38	(2,501)
Administrative expenses	(2,559)	(509)	(3,068)
Credit-related expense:[(5)]			
Provision for credit losses	(75)	(603)	(678)
Foreclosed property expense	(157)	(20)	(177)
Total credit-related expense	(232)	(623)	(855)
TCCA fees[(6)]	(2,673)	—	(2,673)
Credit enhancement expense[(7)]	(1,141)	(220)	(1,361)
Change in expected credit enhancement recoveries[(8)]	89	144	233
Other expenses, net	(1,055)	(76)	(1,131)
Income before federal income taxes	12,488	2,391	14,879
Provision for federal income taxes	(2,607)	(467)	(3,074)
Net income	$ 9,881	$ 1,924	$ 11,805

	For the Year Ended December 31, 2019		
	Single-Family	Multifamily	Total
	(Dollars in millions)		
Net interest income[1]	$ 18,013	$ 3,280	$ 21,293
Fee and other income[2]	453	113	566
Net revenues	18,466	3,393	21,859
Investment gains, net[3]	1,589	181	1,770
Fair value gains (losses), net[4]	(2,216)	2	(2,214)
Administrative expenses	(2,565)	(458)	(3,023)
Credit-related income (expense):[5]			
Benefit (provision) for credit losses	4,038	(27)	4,011
Foreclosed property income (expense)	(523)	8	(515)
Total credit-related income (expense)	3,515	(19)	3,496
TCCA fees[6]	(2,432)	—	(2,432)
Credit enhancement expense[7]	(927)	(207)	(1,134)
Change in expected credit enhancement recoveries[8]	—	—	—
Other expenses, net	(734)	(11)	(745)
Income before federal income taxes	14,696	2,881	17,577
Provision for federal income taxes	(2,859)	(558)	(3,417)
Net income	$ 11,837	$ 2,323	$ 14,160

	For the Year Ended December 31, 2018		
	Single-Family	Multifamily	Total
	(Dollars in millions)		
Net interest income[1]	$ 18,162	$ 3,111	$ 21,273
Fee and other income[2]	450	105	555
Net revenues	18,612	3,216	21,828
Investment gains, net[3]	850	102	952
Fair value gains (losses), net[4]	1,210	(89)	1,121
Administrative expenses	(2,631)	(428)	(3,059)
Credit-related income (expense):[5]			
Benefit (provision) for credit losses	3,313	(4)	3,309
Foreclosed property expense	(604)	(13)	(617)
Total credit-related income (expense)	2,709	(17)	2,692
TCCA fees[6]	(2,284)	—	(2,284)
Credit enhancement expense[7]	(514)	(165)	(679)
Change in expected credit enhancement recoveries[8]	—	—	—
Other income (expenses), net	(498)	26	(472)
Income before federal income taxes	17,454	2,645	20,099
Provision for federal income taxes	(3,708)	(432)	(4,140)
Net income	$ 13,746	$ 2,213	$ 15,959

(1) Net interest income primarily consists of guaranty fees received as compensation for assuming and managing the credit risk on loans underlying Fannie Mae MBS held by third parties for the respective business segment, and the difference between the interest income earned on the respective business segment's mortgage assets in our retained mortgage portfolio and the interest expense associated with the debt funding those assets. Revenues from single-family guaranty fees include revenues generated by the 10 basis point increase in guaranty fees pursuant to the TCCA, the incremental revenue from which is remitted to Treasury and not retained by us. Also includes yield maintenance fees we recognized on the prepayment of multifamily loans. Prior periods have been restated to conform to current-period presentation. See "Note 1, Summary of Significant Accounting Policies" for more information about our change in presentation.

(2) Single-family fee and other income primarily consists of compensation for engaging in structured transactions and providing other lender services. Multifamily fee and other income consists of fees associated with Multifamily business activities.

(3) Single-family investment gains and losses primarily consist of gains and losses on the sale of mortgage assets. Multifamily investment gains and losses primarily consists of gains and losses on resecuritization activity.

(4) Single-family fair value gains and losses primarily consist of fair value gains and losses on risk management and mortgage commitment derivatives, trading securities, fair value option debt, and other financial instruments associated with our single-family guaranty book of business. Multifamily fair value gains and losses primarily consist of fair value gains and losses on MBS commitment derivatives, trading securities and other financial instruments associated with our multifamily guaranty book of business.

(5) Credit-related income or expense is based on the guaranty book of business of the respective business segment and consists of the applicable segment's benefit or provision for credit losses and foreclosed property income or expense on loans underlying the segment's guaranty book of business. The presentation of our credit-related income or expense as of December 31, 2019 and 2018 represents amounts recognized prior to our transition to the lifetime loss model prescribed by the CECL standard.

(6) Consists of the portion of our single-family guaranty fees that is remitted to Treasury pursuant to the TCCA.

(7) Single-family credit enhancement expense consists of costs associated with our freestanding credit enhancements, which include primarily costs associated with our CIRT, CAS and EPMI programs. Multifamily credit enhancement expense primarily consists of costs associated with our MCIRT and MCAS programs as well as amortization expense for certain lender risk-sharing programs. Excludes CAS transactions accounted for as debt instruments and credit risk transfer programs accounted for as derivative instruments.

(8) Consists of change in benefits recognized from our freestanding credit enhancements, primarily from our CAS and CIRT programs as well as certain lender risk-sharing arrangements, including our multifamily DUS program. See "Note 1, Summary of Significant Accounting Policies" for more information about our change in presentation.

11. Equity

Common Stock

Shares of common stock outstanding, net of shares held as treasury stock, totaled $1.2 billion as of December 31, 2020 and 2019.

During conservatorship, the rights and powers of shareholders are suspended. Accordingly, our common shareholders have no ability to elect directors or to vote on other matters during the conservatorship unless FHFA elects to delegate this authority to them. The senior preferred stock purchase agreement with Treasury prohibits the payment of dividends on common stock without the prior written consent of Treasury. The conservator also has eliminated common stock dividends. In addition, we issued a warrant to Treasury that provides Treasury with the right to purchase for a nominal price shares of our common stock equal to 79.9% of the total number of shares of common stock outstanding on a fully diluted basis on the date of exercise, which would substantially dilute the ownership in Fannie Mae of our common stockholders at the time of exercise. Refer to the "Senior Preferred Stock and Common Stock Warrant" section of this note for more information.

Preferred Stock

The following table displays our senior preferred stock and preferred stock outstanding.

Title	Issue Date	Issued and Outstanding as of December 31, 2020 Shares	2020 Amount	2019 Shares	2019 Amount	Stated Value per Share	Annual Dividend Rate as of December 31, 2020	Redeemable on or After
		(Dollars and shares in millions, except per share amounts)						
Senior Preferred Stock								
Series 2008-2	September 8, 2008	**1**	**$120,836**	1	$120,836	$ 120,836 [(1)]	N/A [(2)]	N/A [(3)]
Preferred Stock								
Series D	September 30, 1998	**3**	**$ 150**	3	$ 150	$ 50	5.250 %	September 30, 1999
Series E	April 15, 1999	**3**	**150**	3	150	50	5.100	April 15, 2004
Series F	March 20, 2000	**14**	**690**	14	690	50	0.150 [(4)]	March 31, 2002 [(5)]
Series G	August 8, 2000	**6**	**288**	6	288	50	— [(6)]	September 30, 2002 [(5)]
Series H	April 6, 2001	**8**	**400**	8	400	50	5.810	April 6, 2006
Series I	October 28, 2002	**6**	**300**	6	300	50	5.375	October 28, 2007
Series L	April 29, 2003	**7**	**345**	7	345	50	5.125	April 29, 2008
Series M	June 10, 2003	**9**	**460**	9	460	50	4.750	June 10, 2008
Series N	September 25, 2003	**5**	**225**	5	225	50	5.500	September 25, 2008
Series O	December 30, 2004	**50**	**2,500**	50	2,500	50	7.000 [(7)]	December 31, 2007
Convertible Series 2004-I[(8)]	December 30, 2004	**—**	**2,492**	—	2,492	100,000	5.375	January 5, 2008
Series P	September 28, 2007	**40**	**1,000**	40	1,000	25	4.500 [(9)]	September 30, 2012
Series Q	October 4, 2007	**15**	**375**	15	375	25	6.750	September 30, 2010
Series R[(10)]	November 21, 2007	**21**	**530**	21	530	25	7.625	November 21, 2012
Series S	December 11, 2007	**280**	**7,000**	280	7,000	25	7.750 [(11)]	December 31, 2010 [(12)]
Series T[(13)]	May 19, 2008	**89**	**2,225**	89	2,225	25	8.250	May 20, 2013
Total		**556**	**$ 19,130**	556	$ 19,130			

(1) Initial stated value per share was $1,000. Based on our draws of funds under the senior preferred stock purchase agreement with Treasury, the stated value per share on December 31, 2020 was $120,836.

(2) Dividends on the senior preferred stock are currently calculated based on our net worth as of the end of the immediately preceding fiscal quarter less an applicable capital reserve amount. The applicable capital reserve amount was $3 billion for 2018 and the first and second quarters of 2019. The capital reserve amount increased to $25 billion effective for dividend periods beginning July 1, 2019 and ending September 30, 2020. The capital reserve amount, starting with the quarterly dividend period ending on December 31, 2020, increased to the amount of adjusted total capital necessary for us to meet the capital requirements and buffers set forth in the enterprise regulatory capital framework described in “Note 12, Regulatory Capital Requirements.”

(3) Any liquidation preference of our senior preferred stock in excess of $1 billion may be repaid through an issuance of common or preferred stock, which would require the consent of the conservator and Treasury. The initial $1 billion liquidation preference may be repaid only in conjunction with termination of Treasury’s funding commitment under the senior preferred stock purchase agreement.

(4) Rate effective March 31, 2020. Variable dividend rate resets every two years at a per annum rate equal to the two-year Constant Maturity U.S. Treasury Rate (“CMT”) minus 0.16% with a cap of 11% per year.

(5) Represents initial call date. Redeemable every two years thereafter.

(6) Rate effective September 30, 2020. Variable dividend rate resets every two years at a per annum rate equal to the two-year CMT rate minus 0.18% with a cap of 11% per year.

(7) Rate effective December 31, 2020. Variable dividend rate resets quarterly thereafter at a per annum rate equal to the greater of 7% or 10-year CMT rate plus 2.375%.

(8) Issued and outstanding shares were 24,922 as of December 31, 2020 and 2019.

(9) Rate effective December 31, 2020. Variable dividend rate resets quarterly thereafter at a per annum rate equal to the greater of 4.5% or 3-Month LIBOR plus 0.75%.

(10) On November 21, 2007, we issued 20 million shares of preferred stock in the amount of $500 million. Subsequent to the initial issuance, we issued an additional 1.2 million shares in the amount of $30 million on December 14, 2007 under the same terms as the initial issuance.

(11) Rate effective December 31, 2020. Variable dividend rate resets quarterly thereafter at a per annum rate equal to the greater of 7.75% or 3-Month LIBOR plus 4.23%.

(12) Represents initial call date. Redeemable every five years thereafter.

(13) On May 19, 2008, we issued 80 million shares of preferred stock in the amount of $2.0 billion. Subsequent to the initial issuance, we issued an additional 8 million shares in the amount of $200 million on May 22, 2008 and 1 million shares in the amount of $25 million on June 4, 2008 under the same terms as the initial issuance.

As described under “Senior Preferred Stock and Common Stock Warrant” below, we issued senior preferred stock that ranks senior to all other series of preferred stock as to both dividends and distributions upon dissolution, liquidation or winding down of the company. The senior preferred stock purchase agreement with Treasury also prohibits the payment of dividends on preferred stock (other than the senior preferred stock) without the prior written consent of Treasury. The conservator also has eliminated preferred stock dividends, other than dividends on the senior preferred stock.

Each series of our preferred stock has no par value, is non-participating, is non-voting and has a liquidation preference equal to the stated value per share. None of our preferred stock is convertible into or exchangeable for any of our other stock or obligations, with the exception of the Convertible Series 2004-1.

Shares of the Convertible Series 2004-1 Preferred Stock are convertible at any time, at the option of the holders, into shares of Fannie Mae common stock at a conversion price of $94.31 per share of common stock (equivalent to a conversion rate of 1,060.3329 shares of common stock for each share of Series 2004-1 Preferred Stock). The conversion price is adjustable, as necessary, to maintain the stated conversion rate into common stock. Events which may trigger an adjustment to the conversion price include certain changes in our common stock dividend rate, subdivisions of our outstanding common stock into a greater number of shares, combinations of our outstanding common stock into a smaller number of shares and issuances of any shares by reclassification of our common stock. No such events have occurred.

Holders of preferred stock (other than the senior preferred stock) are entitled to receive non-cumulative, quarterly dividends when, and if, declared by our Board of Directors, but have no right to require redemption of any shares of preferred stock. Payment of dividends on preferred stock (other than the senior preferred stock) is not mandatory but has priority over payment of dividends on common stock, which are also declared by the Board of Directors. If dividends on the preferred stock are not paid or set aside for payment for a given dividend period, dividends may not be paid on our common stock for that period. There were no dividends declared or paid on preferred stock (other than the senior preferred stock) for the years ended December 31, 2020 or 2019.

After a specified period, we have the option to redeem preferred stock (other than the senior preferred stock) at its redemption price plus the dividend (whether or not declared) for the then-current period accrued to, but excluding, the date of redemption. The redemption price is equal to the stated value for all issues of preferred stock except Series O, which has a redemption price of $50 to $52.50 depending on the year of redemption and Convertible Series 2004-1, which has a redemption price of $105,000 per share.

Our preferred stock is traded in the over-the-counter market.

Senior Preferred Stock and Common Stock Warrant

On September 8, 2008, we issued to Treasury one million shares of Variable Liquidation Preference Senior Preferred Stock, Series 2008-2, with an aggregate stated value and initial liquidation preference of $1.0 billion. On September 7, 2008, we issued a warrant to purchase common stock to Treasury. The warrant gives Treasury the right to purchase shares of our common stock equal to 79.9% of the total number of shares of common stock outstanding on a fully diluted basis on the date of exercise. The senior preferred stock and the warrant were issued to Treasury as an initial commitment fee in consideration of the commitment from Treasury to provide funds to us under the terms and conditions set forth in the senior preferred stock purchase agreement. We did not receive any cash proceeds as a result of issuing these shares or the warrant. We have assigned a value of $4.5 billion to Treasury’s commitment, which has been recorded as a reduction to additional paid-in-capital and was partially offset by the aggregate fair value of the warrant. There was no impact to the total balance of stockholders’ equity as a result of the issuance.

Variable Liquidation Preference Senior Preferred Stock, Series 2008-2

Shares of the senior preferred stock have no par value and have a stated value and initial liquidation preference equal to $1,000 per share, for an aggregate initial liquidation preference of $1.0 billion. As a result of the January 2021 letter agreement, the dividend rate and liquidation preference of the senior preferred stock depend on whether we have reached the “capital reserve end date” which is defined in the January 2021 letter agreement as the last day of the second consecutive fiscal quarter during which we have maintained capital equal to, or in excess of, all of the capital requirements and buffers under the enterprise regulatory capital framework discussed in "Note 12, Regulatory Capital Requirements."

Treasury, as the holder of the senior preferred stock, is entitled to receive, when, as and if declared, out of legally available funds, cumulative quarterly cash dividends. We had no dividends declared and paid on the senior preferred stock for the year ended December 31, 2020. Dividends declared and paid on the senior preferred stock were $5.6 billion and $9.4 billion for the years ended December 31, 2019 and 2018, respectively. The dividends we have paid to Treasury on the senior preferred stock during conservatorship have been declared by, and paid at the direction of, our conservator, acting as successor to the rights, titles, powers and privileges of the Board of Directors. Dividend payments we make to Treasury do not restore or increase the amount of funding available to us under the senior preferred stock purchase agreement.

Dividend amount prior to capital reserve end date. The terms of the senior preferred stock provide for dividends each quarter in the amount, if any, by which our net worth as of the end of the immediately preceding fiscal quarter exceeds an applicable capital reserve amount. The January 2021 letter agreement increased the applicable capital reserve amount, starting with the quarterly dividend period ending on December 31, 2020, from $25 billion to the amount of adjusted total capital necessary for us to meet the capital requirements and buffers set forth in the enterprise regulatory capital framework. If our net worth does not exceed this amount as of the end of the immediately preceding fiscal quarter, then dividends will neither accumulate nor be payable for such period. Our net worth is defined as the amount, if any, by which our total assets (excluding Treasury's funding commitment and any unfunded amounts related to the commitment) exceed our total liabilities (excluding any obligation with respect to capital stock), in each case as reflected on our balance sheet prepared in accordance with GAAP.

*Dividend amount following capital reserve end date***.** Beginning on the first dividend period following the capital reserve end date, the applicable quarterly dividend amount on the senior preferred stock will be the lesser of:

(1) a 10% annual rate on the then-current liquidation preference of the senior preferred stock; and

(2) an amount equal to the incremental increase in our net worth during the immediately prior fiscal quarter.

However, the applicable quarterly dividend amount will immediately increase to a 12% annual rate on the then-current liquidation preference of the senior preferred stock if we fail to timely pay dividends in cash to Treasury. This increased dividend amount will continue until the dividend period following the date we have paid, in cash, full cumulative dividends to Treasury (including any unpaid dividends), at which point the applicable quarterly dividend amount will revert to the prior calculation method.

Liquidation preference. Under the terms governing the senior preferred stock, the aggregate liquidation preference is increased by the following:

- any amounts Treasury pays to us pursuant to its funding commitment under the senior preferred stock purchase agreement (a total of $119.8 billion as of the date of this filing);
- any quarterly commitment fees that are payable but not paid in cash (no such fees have become payable, nor will they under the current terms of the agreement and the senior preferred stock); and
- any dividends that are payable but not paid in cash to Treasury, regardless of whether or not they are declared.

In addition:

- amendments to the terms of the senior preferred stock made in December 2017 increased the aggregate liquidation preference of the senior preferred stock by $3 billion as of December 31, 2017;
- amendments to the terms of the senior preferred stock made in September 2019 provided that, beginning on September 30, 2019, and at the end of each fiscal quarter thereafter, the liquidation preference shall be increased by an amount equal to the increase in our net worth, if any during the immediately prior fiscal quarter, until such time as the liquidation preference has increased by $22 billion pursuant to this provision; and
- the January 2021 letter agreement revised these terms to provide that at the end of each fiscal quarter, the liquidation preference shall be increased by an amount equal to the increase in our net worth, if any, during the immediately prior fiscal quarter.

The senior preferred stock ranks ahead of our common stock and all other outstanding series of our preferred stock, as well as any capital stock we issue in the future, as to both dividends and rights upon liquidation. As a result, if we are liquidated, the holder of the senior preferred stock is entitled to its then current liquidation preference before any distribution is made to the holders of our common stock or other preferred stock. The aggregate liquidation preference of the senior preferred stock was $142.2 billion as of December 31, 2020 and will further increase to $146.8 billion as of March 31, 2021, due to the increase in our net worth during the fourth quarter of 2020.

The senior preferred stock provides that we may not declare or pay dividends on, make distributions with respect to, or redeem, purchase or acquire, or make a liquidation payment with respect to, any common stock or other securities ranking junior to the senior preferred stock unless (1) full cumulative dividends on the outstanding senior preferred stock (including any unpaid dividends added to the liquidation preference) have been declared and paid in cash; and (2) all amounts required to be paid with the net proceeds of any issuance of capital stock for cash (as described in the following paragraph) have been paid in cash.

We are not permitted to redeem the senior preferred stock prior to the termination of Treasury's funding commitment under the senior preferred stock purchase agreement. Moreover, we are not permitted to pay down the liquidation preference of the outstanding shares of senior preferred stock except to the extent of (1) accumulated and unpaid dividends previously added to the liquidation preference and not previously paid down; and (2) quarterly commitment fees previously added to the liquidation preference and not previously paid down. In addition to these exceptions, if we issue any shares of capital stock for cash while the senior preferred stock is outstanding, the net proceeds of the issuance, with the exception of up to $70 billion in aggregate gross cash proceeds from the issuance of common stock, must be used to pay down the liquidation preference of the senior preferred stock; however, the liquidation preference of each share of senior preferred stock may not be paid down below $1,000 per share prior to the termination of Treasury's funding commitment. Following the termination of Treasury's funding commitment, we may pay down the liquidation preference of all outstanding shares of senior preferred stock at any time, in whole or in part.

Common Stock Warrant

The warrant gives Treasury the right to purchase shares of our common stock equal to 79.9% of the total number of shares of our common stock outstanding on a fully diluted basis on the date the warrant is exercised. The warrant may be exercised in whole or in part at any time on or before September 7, 2028, by delivery to Fannie Mae of:

- a notice of exercise;
- payment of the exercise price of $0.00001 per share; and
- the warrant.

If the market price of one share of common stock is greater than the exercise price, in lieu of exercising the warrant by payment of the exercise price, Treasury may elect to receive shares equal to the value of the warrant (or portion thereof being canceled) pursuant to the formula specified in the warrant. Upon exercise of the warrant, Treasury may assign the right to receive the shares of common stock issuable upon exercise to any other person. If the warrant is exercised, the stated value of the common stock issued will be reclassified as "Common stock" in our consolidated balance sheets. As of February 12, 2021, Treasury has not exercised the warrant.

Senior Preferred Stock Purchase Agreement with Treasury

Funding Commitment

Under the senior preferred stock purchase agreement, Treasury made a commitment to provide funding, under certain conditions, to eliminate deficits in our net worth. As of December 31, 2020, Treasury has provided us with a total of $119.8 billion under its senior preferred stock purchase agreement funding commitment, and the amount of funding remaining available to us under the agreement was $113.9 billion.

If we were to have a net worth deficit in a future period, we would be required to obtain additional funding from Treasury pursuant to the senior preferred stock purchase agreement to avoid being placed into receivership. If we were to draw additional funds from Treasury under the agreement with respect to a future period, the amount of remaining funding under the agreement would be reduced by the amount of our draw.

The senior preferred stock purchase agreement provides that the deficiency amount will be calculated differently if we become subject to receivership or other liquidation process. The deficiency amount may be increased above the otherwise applicable amount upon our mutual written agreement with Treasury. In addition, if the Director of FHFA determines that the Director will be mandated by law to appoint a receiver for us unless our capital is increased by receiving funds under the commitment in an amount up to the deficiency amount (subject to the maximum amount that may be funded under the agreement), then FHFA, in its capacity as our conservator, may request that Treasury provide funds to us in such amount. The senior preferred stock purchase agreement also provides that, if we have a deficiency amount as of the date of completion of the liquidation of our assets, we may request funds from Treasury in an amount up to the deficiency amount (subject to the maximum amount that may be funded under the agreement). Any amounts that we draw under the senior preferred stock purchase agreement will be added to the liquidation preference of the senior preferred stock. No additional shares of senior preferred stock are required to be issued under the senior preferred stock purchase agreement.

Commitment Fee

The senior preferred stock purchase agreement provides for the payment of an unspecified quarterly commitment fee to Treasury to compensate Treasury for its ongoing support under the senior preferred stock purchase agreement. As amended by the January 2021 letter agreement, the agreement provides that (1) through and continuing until the capital reserve end date, the periodic commitment fee will not be set, accrue, or be payable, and (2) not later than the capital reserve end date, we and Treasury, in consultation with the Chair of the Federal Reserve, will agree to set the periodic commitment fee.

Covenants

The senior preferred stock purchase agreement contains covenants that prohibit us from taking a number of actions without the prior written consent of Treasury, including:

- declaring or paying dividends or making other distributions on or redeeming, purchasing, retiring or otherwise acquiring our equity securities (other than the senior preferred stock or warrant);
- selling or issuing equity securities, except for stock issuances made (1) to Treasury, (2) pursuant to obligations that existed at the time we entered conservatorship, and (3) as amended by the January 2021 letter agreement, for common stock ranking pari passu or junior to the common stock issued to Treasury in connection with the exercise of its warrant, provided that (i) Treasury has already exercised its warrant in full, and (ii) all currently pending significant litigation relating to the conservatorship and the August 2012 amendment to the senior preferred stock purchase agreement has been resolved, which may require Treasury's assent. Net proceeds of the issuance of any shares of capital stock for cash while the senior preferred stock is outstanding, except for up to $70 billion in aggregate gross cash proceeds from the issuance of common stock, must be used to pay down the liquidation preference of the senior preferred stock;
- terminating or seeking to terminate our conservatorship, other than through a receivership, except that, as revised by the January 2021 letter agreement, FHFA can terminate our conservatorship without the prior consent of Treasury if several conditions are met, including (1) all currently pending significant litigation relating to the conservatorship and the August 2012 amendment to the senior preferred stock purchase agreement has been resolved, and (2) for two or more consecutive quarters, our common equity tier 1 capital (as defined in the enterprise regulatory capital framework), together with any stockholder equity that would result from a firm commitment public underwritten offering of common stock which is fully consummated concurrent with the termination of conservatorship, equals or exceeds at least 3% of our adjusted total assets (as defined in the enterprise regulatory capital framework);
- selling, transferring, leasing or otherwise disposing of any assets, except for dispositions for fair market value in limited circumstances including if (a) the transaction is in the ordinary course of business and consistent with past practice or (b) the assets have a fair market value individually or in the aggregate of less than $250 million;
- incurring indebtedness that would result in our aggregate indebtedness exceeding $300 billion;
- issuing subordinated debt;
- entering into a corporate reorganization, recapitalization, merger, acquisition or similar event; and
- engaging in transactions with affiliates other than on arm's-length terms or in the ordinary course of business.

Covenants in the senior preferred stock purchase agreement also subject us to limits on the amount of mortgage assets that we may own and the total amount of our indebtedness.

- *Mortgage Asset Limit.* The amount of mortgage assets we are permitted to own is $250 billion and, as a result of the January 2021 letter agreement, will decrease to $225 billion on December 31, 2022. We are currently managing our business to a $225 billion cap pursuant to instructions from FHFA. Our mortgage assets as of December 31, 2020 were $165 billion, which includes 10% of the notional value of interest-only securities we hold. This adjustment is based on instruction from FHFA for the purpose of measuring mortgage assets against the cap. We disclose the amount of our mortgage assets each month in the "Endnotes" to our Monthly Summaries, which are available on our website and announced in a press release.
- *Debt Limit.* Our debt limit under the senior preferred stock purchase agreement is set at 120% of the amount of mortgage assets we were allowed to own under the agreement on December 31 of the immediately preceding calendar year. This debt limit is currently $300 billion, and it will decrease to $270 billion as of December 31, 2022. As calculated for this purpose, our indebtedness as of December 31, 2020 was $290 billion.

Another covenant prohibits us from entering into any new compensation arrangements or increasing amounts or benefits payable under existing compensation arrangements with any of our executive officers (as defined by SEC rules) without the consent of the Director of FHFA, in consultation with the Secretary of the Treasury.

In addition to the changes described above to covenants already in the senior preferred stock purchase agreement, the January 2021 letter agreement added additional covenants:

- We are required to comply with the terms of the enterprise regulatory capital framework as published by FHFA in the Federal Register on December 17, 2020, disregarding any subsequent amendments or modifications.
- New restrictive covenants impact both our single-family and multifamily business activities, including the type and volume of loans we may acquire.

Annual Risk Management Plan Covenant. Each year we remain in conservatorship we are required to provide Treasury a risk management plan that sets out our strategy for reducing our risk profile, describes the actions we will take to reduce the financial and operational risk associated with each of our business segments, and includes an assessment of our performance against the planned actions described in the prior year's plan. We submitted our most recent annual risk management plan to Treasury in December 2020.

Although the senior preferred stock purchase agreement does not specify penalties for failure to comply with the covenants in the agreement, FHFA, as our conservator and regulator, has the authority to direct compliance and to impose consequences for noncompliance.

Termination Provisions

The senior preferred stock purchase agreement provides that Treasury's funding commitment will terminate under any of the following circumstances:

- the completion of our liquidation and fulfillment of Treasury's obligations under its funding commitment at that time;
- the payment in full of, or reasonable provision for, all of our liabilities (whether or not contingent, including mortgage guaranty obligations); or
- the funding by Treasury of the maximum amount under the agreement.

In addition, Treasury may terminate its funding commitment and declare the senior preferred stock purchase agreement null and void if a court vacates, modifies, amends, conditions, enjoins, stays or otherwise affects the appointment of the conservator or otherwise curtails the conservator's powers. Treasury may not terminate its funding commitment solely by reason of our being in conservatorship, receivership or other insolvency proceeding, or due to our financial condition or any adverse change in our financial condition.

Waivers and Amendments

The senior preferred stock purchase agreement provides that most provisions of the agreement may be waived or amended by mutual written agreement of the parties. No waiver or amendment of the agreement, however, may decrease Treasury's aggregate funding commitment or add conditions to Treasury's funding commitment if the waiver or amendment would adversely affect in any material respect the holders of our debt securities or guaranteed Fannie Mae MBS.

Third-party Enforcement Rights

If we default on payments with respect to our debt securities or guaranteed Fannie Mae MBS and Treasury fails to perform its obligations under its funding commitment, and if we and/or the conservator are not diligently pursuing remedies in respect of that failure, the holders of these debt securities or Fannie Mae MBS may file a claim for relief in the United States Court of Federal Claims. The relief, if granted, would require Treasury to fund to us the lesser of (1) the amount necessary to cure the payment defaults on our debt and Fannie Mae MBS and (2) the lesser of (a) the deficiency amount and (b) the maximum amount available under the agreement less the aggregate amount of funding previously provided under the commitment. Any payment that Treasury makes under those circumstances would be treated for all purposes as a draw under the senior preferred stock purchase agreement that would increase the liquidation preference of the senior preferred stock.

12. Regulatory Capital Requirements

Enterprise Regulatory Capital Framework

In November 2020, FHFA adopted a final rule establishing a new regulatory capital framework for the GSEs, which we refer to as the "enterprise regulatory capital framework." The framework establishes new risk-based and leverage-based capital requirements for the GSEs. These requirements go beyond the current statutory capital requirements of Fannie Mae. The final rule goes into effect in February 2021, but the dates on which we must comply with the requirements of the capital framework are staggered and largely dependent on whether we remain in conservatorship.

The new regulatory capital framework provides a granular assessment of credit risk specific to different mortgage loan categories, as well as components for market risk and operational risk. The regulatory capital framework set forth in the final rule includes the following:

- Supplemental capital requirements relating to the amount and form of the capital we hold, based largely on definitions of capital used in U.S. banking regulators' regulatory capital framework. The final rule specifies complementary leverage-based and risk-based requirements, which together determine the requirements for each tier of capital;
- A requirement that we hold prescribed capital buffers that can be drawn down in periods of financial stress and then rebuilt over time as economic conditions improve. If we fall below the prescribed buffer amounts, we must restrict capital distributions such as stock repurchases and dividends, as well as discretionary bonus payments to executives, until the buffer amounts are restored;
- A requirement to file quarterly public capital reports starting in 2022, regardless of our status in conservatorship;
- Specific minimum percentages, or "floors," on the risk-weights applicable to single-family and multifamily exposures, which has the effect of increasing the capital required to be held for loans otherwise subject to lower risk weights;
- Specific floors on the risk-weights applicable to retained portions of credit risk transfer transactions, which has the effect of decreasing the capital relief obtained from these transactions; and
- Additional elements based on U.S. banking regulators' regulatory capital framework, including the planned eventual introduction of an advanced approach to complement the standardized approach for measuring risk-weighted assets.

Under the final capital rule, regardless of our status in conservatorship, reporting requirements under the enterprise regulatory capital framework take effect on January 1, 2022, including public reporting of our calculations of regulatory capital levels, buffers, adjusted total assets, and total risk-weighted assets, as defined in the final rule. These reporting requirements are not expected to replace existing statutory capital reporting that is required by FHFA.

Statutory Capital Classifications

Though FHFA suspended our statutory capital classifications during conservatorship, we continue to submit capital reports to FHFA for monitoring purposes. These capital classification measures are determined based on guidance from FHFA, in which FHFA (1) directed us, for loans backing Fannie Mae MBS held by third parties, to continue reporting our minimum capital requirements based on 0.45% of the unpaid principal balance and critical capital based on 0.25% of the unpaid principal balance, regardless of whether these loans have been consolidated pursuant to accounting rules, and (2) issued a regulatory interpretation stating that our minimum capital requirements are not automatically affected by the consolidation accounting guidance. Additionally, these capital classification measures exclude the funds provided to us by Treasury pursuant to the senior preferred stock purchase agreement, as the senior preferred stock does not qualify as core capital due to its cumulative dividend provisions.

The following table displays our current capital classification measures.

	As of December 31,	
	2020	**2019**
	(Dollars in millions)	
Core capital[1]	**$ (95,694)**	$ (106,360)
Statutory minimum capital requirement[2]	**28,603**	22,392
Deficit of core capital over statutory minimum capital requirement	**$ (124,297)**	$ (128,752)

(1) The sum of (a) the stated value of our outstanding common stock (common stock less treasury stock); (b) the stated value of our outstanding non-cumulative perpetual preferred stock; (c) our paid-in capital; and (d) our retained earnings (accumulated deficit). Core capital does not include: (a) accumulated other comprehensive income or (b) senior preferred stock.

(2) Generally, the sum of (a) 2.50% of on-balance sheet assets, except those underlying Fannie Mae MBS held by third parties; (b) 0.45% of the unpaid principal balance of outstanding Fannie Mae MBS held by third parties; and (c) up to 0.45% of other off-balance sheet obligations, which may be adjusted by the Director of FHFA under certain circumstances.

Our critical capital requirement is generally equal to the sum of: (1) 1.25% of on-balance sheet assets, except those underlying Fannie Mae MBS held by third parties; (2) 0.25% of the unpaid principal balance of outstanding Fannie Mae MBS held by third parties; and (3) 0.25% of other off-balance sheet obligations, which may be adjusted by the Director of FHFA under certain circumstances.

As of December 31, 2020 and 2019, we had a minimum capital deficiency of $124.3 billion and $128.8 billion, respectively. See “Note 1, Summary of Significant Accounting Policies” and “Note 11, Equity” for more information on capital and the terms of our senior preferred stock purchase agreement with Treasury and the senior preferred stock we issued to Treasury.

Restrictions on Capital Distributions and Dividends

Statutory Restrictions. Under the GSE Act, FHFA has authority to prohibit capital distributions, including payment of dividends, if we fail to meet our capital requirements. If FHFA classifies us as significantly undercapitalized, we must obtain the approval of the Director of FHFA for any dividend payment. Under the Charter Act and the GSE Act, we are not permitted to make a capital distribution if, after making the distribution, we would be undercapitalized. The Director of FHFA, however, may permit us to repurchase shares if the repurchase is made in connection with the issuance of additional shares or obligations in at least an equivalent amount and will reduce our financial obligations or otherwise improve our financial condition.

Restrictions Relating to Conservatorship. Our conservator announced on September 7, 2008 that we would not pay any dividends on the common stock or on any series of preferred stock, other than the senior preferred stock. In addition, FHFA’s regulations relating to conservatorship and receivership operations prohibit us from paying any dividends while in conservatorship unless authorized by the Director of FHFA. The Director of FHFA has directed us to make dividend payments on the senior preferred stock on a quarterly basis for every dividend period for which dividends were payable.

Restrictions Under Senior Preferred Stock Purchase Agreement and Senior Preferred Stock. The senior preferred stock purchase agreement prohibits us from declaring or paying any dividends on Fannie Mae equity securities (other than the senior preferred stock) without the prior written consent of Treasury. In addition, the provisions of the senior preferred stock provide for dividends each quarter prior to the capital reserve end date in the amount, if any, by which our net worth as of the end of the immediately preceding fiscal quarter exceeds an applicable capital reserve amount. Starting with the quarterly dividend period ending on December 31, 2020, the applicable capital reserve amount is the amount of adjusted total capital necessary for us to meet the capital requirements and buffers set forth in the enterprise regulatory capital framework discussed above. After the capital reserve end date, the amount of quarterly dividends to Treasury will be equal to the lesser of any quarterly increase in our net worth and a 10% annual rate on the then-current liquidation preference of the senior preferred stock. As a result of this change, our ability to retain earnings in excess of the capital requirements and buffers set forth in the enterprise regulatory capital framework will be limited. For more information on the terms of the senior preferred stock purchase agreement and senior preferred stock, see “Note 1, Summary of Significant Accounting Policies” and “Note 11, Equity.”

Additional Restrictions Relating to Preferred Stock. Payment of dividends on our common stock is also subject to the prior payment of dividends on our preferred stock and our senior preferred stock. Payment of dividends on all outstanding preferred stock, other than the senior preferred stock, is also subject to the prior payment of dividends on the senior preferred stock.

13. Concentrations of Credit Risk

Concentrations of credit risk arise when a number of customers and counterparties engage in similar activities or have similar economic characteristics that make them susceptible to similar changes in industry conditions, which could affect their ability to meet their contractual obligations. Based on our assessment of business conditions that could impact our financial results, we have determined that concentrations of credit risk exist among:

- single-family and multifamily borrowers (including geographic concentrations and loans with certain higher-risk characteristics);
- mortgage insurers;
- mortgage sellers and servicers;
- multifamily lenders with risk sharing; and
- derivative counterparties and parties associated with our off-balance sheet transactions.

Concentrations for each of these groups are discussed below.

Single-Family Loan Borrowers

Regional economic conditions may affect a borrower's ability to repay his or her mortgage loan and the property value underlying the loan. Geographic concentrations increase the exposure of our portfolio to changes in credit risk. Single-family borrowers are primarily affected by home prices and interest rates.

To manage credit risk and comply with legal requirements, we typically require primary mortgage insurance or other credit enhancements if the current LTV ratio (*i.e.*, the ratio of the unpaid principal balance of a loan to the current value of the property that serves as collateral) of a single-family conventional mortgage loan is greater than 80% when the loan is delivered to us.

Multifamily Loan Borrowers

Numerous factors affect a multifamily borrower's ability to repay the loan and the value of the property underlying the loan. Multifamily loans are generally non-recourse to the borrower. The most significant factors affecting credit risk are rental income, capitalization rates for the mortgaged property, and general economic conditions. The average unpaid principal balance for multifamily loans is significantly larger than for single-family borrowers and, therefore, individual defaults for multifamily borrowers can result in more significant losses. We continually monitor the performance and risk characteristics of our multifamily loans, underlying properties and borrowers on an ongoing basis.

As part of our multifamily risk management activities, we perform detailed loan reviews that evaluate property performance, borrower and geographic concentrations, lender qualifications, counterparty risk and contract compliance. We generally require mortgage servicers to obtain and submit periodic property operating information and condition reviews, allowing us to monitor the performance of individual loans. We use this information to evaluate the credit quality of our portfolio, identify potential problem loans and initiate appropriate loss mitigation activities.

Geographic Concentration

The following table displays the regional geographic concentration of single-family and multifamily loans in our guaranty book of business, measured by the unpaid principal balance of the loans.

	Geographic Concentration[(1)]			
	Percentage of Single-Family Conventional Guaranty Book of Business		Percentage of Multifamily Guaranty Book of Business	
	As of December 31,		As of December 31,	
	2020	2019	**2020**	2019
Midwest	**14 %**	15 %	**11 %**	10 %
Northeast	**17**	17	**15**	15
Southeast	**22**	22	**27**	27
Southwest	**19**	18	**22**	23
West	**28**	28	**25**	25
Total	**100 %**	100 %	**100 %**	100 %

(1) Midwest consists of IL, IN, IA, MI, MN, NE, ND, OH, SD and WI. Northeast consists of CT, DE, ME, MA, NH, NJ, NY, PA, PR, RI, VT and VI. Southeast consists of AL, DC, FL, GA, KY, MD, MS, NC, SC, TN, VA and WV. Southwest consists of AZ, AR, CO, KS, LA, MO, NM, OK, TX and UT. West consists of AK, CA, GU, HI, ID, MT, NV, OR, WA and WY.

Risk Characteristics of our Guaranty Book of Business

One of the measures by which we gauge our credit risk is the delinquency status of the mortgage loans in our guaranty book of business.

For single-family and multifamily loans, we use this information, in conjunction with housing market and economic conditions, to structure our pricing and our eligibility and underwriting criteria to reflect the current risk of loans with higher-risk characteristics, and in some cases we decide to significantly reduce our participation in riskier loan product categories. Management also uses this data together with other credit risk measures to identify key trends that guide the development of our loss mitigation strategies.

We report the delinquency status of our single-family and multifamily guaranty book of business below. We report loans receiving COVID-19-related payment forbearance as delinquent according to the contractual terms of the loans.

Single-Family Credit Risk Characteristics

For single-family loans, management monitors the serious delinquency rate, which is the percentage of single-family loans, based on the number of loans that are 90 days or more past due or in the foreclosure process, and loans that have higher risk characteristics, such as high mark-to-market LTV ratios.

The following tables display the delinquency status and serious delinquency rates for specified loan categories of our single-family conventional guaranty book of business. The increase in loans classified as seriously delinquent as of December 31, 2020 compared with December 31, 2019 was primarily attributable to the economic dislocation caused by the COVID-19 pandemic.

	As of December 31,					
	2020			2019		
	30 Days Delinquent	60 Days Delinquent	Seriously Delinquent(1)	30 Days Delinquent	60 Days Delinquent	Seriously Delinquent(1)
Percentage of single-family conventional guaranty book of business based on UPB	**0.88 %**	**0.33 %**	**3.10 %**	1.07 %	0.29 %	0.59 %
Percentage of single-family conventional loans based on loan count	**1.02**	**0.36**	**2.87**	1.27	0.35	0.66

	As of December 31,			
	2020		2019	
	Percentage of Single-Family Conventional Guaranty Book of Business Based on UPB	Seriously Delinquent Rate(1)	Percentage of Single-Family Conventional Guaranty Book of Business Based on UPB	Seriously Delinquent Rate(1)
Estimated mark-to-market LTV ratio:				
Greater than 100%	*	**22.43 %**	*	10.14 %
Geographical distribution:				
California	**19**	**2.62**	19	0.32
Florida	**6**	**4.17**	6	0.84
Illinois	**3**	**3.10**	4	0.91
New Jersey	**3**	**4.57**	3	1.13
New York	**5**	**4.79**	5	1.18
All other states	**64**	**2.59**	63	0.64
Product distribution:				
Alt-A	**1**	**9.32**	2	2.95
Vintages:				
2004 and prior	**2**	**5.88**	2	2.48
2005-2008	**2**	**9.98**	4	4.11
2009-2020	**96**	**2.39**	94	0.35

* Represents less than 0.5% of single-family conventional book of business.

(1) Based on loan count, consists of single-family conventional loans that were 90 days or more past due or in the foreclosure process as of December 31, 2020 and 2019.

Multifamily Credit Risk Characteristics

For multifamily loans, management monitors the serious delinquency rate, which is the percentage of multifamily loans, based on unpaid principal balance, that are 60 days or more past due, and other loans that have higher risk characteristics, to determine our overall credit quality indicator. Higher risk characteristics include, but are not limited to, current DSCR below 1.0 and original LTV ratios greater than 80%. We stratify multifamily loans into different internal risk categories based on the credit risk inherent in each individual loan.

The following tables display the delinquency status and serious delinquency rates for specified loan categories of our multifamily guaranty book of business.

	As of December 31,			
	2020[1]		2019[1]	
	30 Days Delinquent	Seriously Delinquent[2]	30 Days Delinquent	Seriously Delinquent[2]
Percentage of multifamily guaranty book of business	**0.29 %**	**0.98 %**	0.02 %	0.04 %

	As of December 31,			
	2020		2019	
	Percentage of Multifamily Guaranty Book of Business[1]	Serious Delinquency Rate[2][3]	Percentage of Multifamily Guaranty Book of Business[1]	Serious Delinquency Rate[2][3]
Original LTV ratio:				
Greater than 80%	**1 %**	**1.04 %**	1 %	— %
Less than or equal to 80%	**99**	**0.98**	99	0.04
Current DSCR below 1.0[4]	**2**	**21.19**	2	0.48

(1) Calculated based on the aggregate unpaid principal balance of multifamily loans for each category divided by the aggregate unpaid principal balance of loans in our multifamily guaranty book of business.

(2) Consists of multifamily loans that were 60 days or more past due as of the dates indicated.

(3) Calculated based on the unpaid principal balance of multifamily loans that were seriously delinquent divided by the aggregate unpaid principal balance of multifamily loans for each category included in our multifamily guaranty book of business.

(4) Our estimates of current DSCRs are based on the latest available income information for these properties. Although we use the most recently available results from our multifamily borrowers, there is a lag in reporting, which typically can range from 3 to 6 months but in some cases may be longer. For certain properties, we do not receive updated financial information.

Other Concentrations

Mortgage Insurers. Mortgage insurance "risk in force" refers to our maximum potential loss recovery under the applicable mortgage insurance policies in force and is generally based on the loan-level insurance coverage percentage and, if applicable, any aggregate pool loss limit, as specified in the policy.

The following table displays our total mortgage insurance risk in force by primary and pool insurance, as well as the total risk-in-force mortgage insurance coverage as a percentage of the single-family conventional guaranty book of business.

	As of December 31,			
	2020		2019	
	Risk in Force	Percentage of Single-Family Conventional Guaranty Book of Business	Risk in Force	Percentage of Single-Family Conventional Guaranty Book of Business
	(Dollars in millions)			
Mortgage insurance risk in force:				
Primary mortgage insurance	**$ 170,890**		$ 162,855	
Pool mortgage insurance	**291**		339	
Total mortgage insurance risk in force	**$ 171,181**	**5%**	$ 163,194	6%

Mortgage insurance does not protect us from all losses on covered loans. For example, mortgage insurance does not cover property damage that is not covered by the hazard insurance we require, and such damage may result in a reduction to, or a denial of, mortgage insurance benefits. Specifically, a property damaged by a flood that was outside a Federal Emergency Management Agency ("FEMA")-identified Special Flood Hazard Area, where we require coverage, or a property damaged by an earthquake are the most likely scenarios where property damage may result in a default not covered by hazard insurance.

The table below displays our mortgage insurer counterparties that provided approximately 10% or more of the risk-in-force mortgage insurance coverage on mortgage loans in our single-family conventional guaranty book of business.

	Percentage of Risk-in-Force Coverage by Mortgage Insurer	
	As of December 31,	
	2020	2019
Counterparty:(1)		
Arch Capital Group Ltd.	**21 %**	23 %
Radian Guaranty, Inc.	**19**	20
Mortgage Guaranty Insurance Corp.	**18**	18
Genworth Mortgage Insurance Corp.	**16**	15
Essent Guaranty, Inc.	**16**	14
Others	**10**	10
Total	**100 %**	100 %

(1) Insurance coverage amounts provided for each counterparty may include coverage provided by affiliates and subsidiaries of the counterparty.

Three of our mortgage insurer counterparties that are currently not approved to write new business—PMI Mortgage Insurance Co. ("PMI"), Triad Guaranty Insurance Corporation ("Triad") and Republic Mortgage Insurance Company ("RMIC")—are currently in run-off. A mortgage insurer that is in run-off continues to collect renewal premiums and process claims on its existing insurance business, but no longer writes new insurance, which increases the risk that the mortgage insurer will fail to pay claims fully. Entering run-off may limit sources of profits and liquidity for the mortgage insurer and could also cause the quality and speed of its claims processing to deteriorate. These three mortgage insurers provided a combined $2.4 billion, or 1%, of the risk-in-force mortgage insurance coverage of our single-family conventional guaranty book of business as of December 31, 2020.

PMI and Triad have been paying only a portion of policyholder claims and deferring the remaining portion. PMI is currently paying 76.5% of claims under its mortgage insurance policies in cash and is deferring the remaining 23.5%, and Triad is currently paying 75% of claims in cash and deferring the remaining 25%. It is uncertain whether PMI or Triad will be permitted in the future to pay their deferred policyholder claims or increase or decrease the amount of cash they pay on claims. RMIC is no longer deferring payments on policyholder claims, but remains in run-off.

We have counterparty credit risk relating to the potential insolvency of, or non-performance by, monoline mortgage insurers that insure single-family loans we purchase or guarantee. There is risk that these counterparties may fail to fulfill their obligations to pay our claims under insurance policies. On at least a quarterly basis, we assess our mortgage insurer counterparties' respective abilities to fulfill their obligations to us. Our assessment includes financial reviews and analyses of the insurers' portfolios and capital adequacy. If we determine that it is probable that we will not collect all of our claims from one or more of our mortgage insurer counterparties, it could increase our loss reserves, which could adversely affect our results of operations, liquidity, financial condition and net worth.

When we estimate the credit losses that are inherent in our mortgage loans and under the terms of our guaranty obligations, we also consider the recoveries that we will receive on primary mortgage insurance, as mortgage insurance recoveries would reduce the severity of the loss associated with defaulted loans. We evaluate the financial condition of our mortgage insurer counterparties and adjust the contractually due recovery amounts to ensure that expected credit losses as of the balance sheet date are included in our loss reserve estimate. As a result, if our assessment of one or more of our mortgage insurer counterparties' ability to fulfill their respective obligations to us worsens, it could increase our loss reserves. As of December 31, 2020 and 2019, our estimated benefit from mortgage insurance, which is based on estimated credit losses as of period end, reduced our loss reserves by $1.4 billion and $410 million, respectively.

When an insured loan held in our retained mortgage portfolio subsequently goes into foreclosure, we charge off the loan, eliminating any previously-recorded loss reserves, and record REO and a mortgage insurance receivable for the claim proceeds deemed probable of recovery, as appropriate. However, if a mortgage insurer rescinds, cancels or denies insurance coverage, the initial receivable becomes due from the mortgage seller or servicer. We had outstanding receivables of $560 million recorded in "Other assets" in our consolidated balance sheets as of December 31, 2020 and $654 million as of December 31, 2019 related to amounts claimed on insured, defaulted loans excluding government-insured loans. We assessed these outstanding receivables for collectability, and established a valuation allowance of $497 million as of December 31, 2020 and $541 million as of December 31, 2019, which reduced our claim receivable to the amount considered probable of collection.

Mortgage Servicers and Sellers. Mortgage servicers collect mortgage and escrow payments from borrowers, pay taxes and insurance costs from escrow accounts, monitor and report delinquencies, and perform other required activities, including loss mitigation, on our behalf. Our mortgage servicers and sellers may also be obligated to repurchase loans or foreclosed properties, reimburse us for losses or provide other remedies under certain circumstances, such as if it is determined that the mortgage loan did not meet our underwriting or eligibility requirements, if certain loan representations and warranties are violated or if mortgage insurers rescind coverage. Our representation and warranty framework does not require repurchase for loans that have breaches of certain selling representations and warranties if they have met specified criteria for relief.

Our business with mortgage servicers is concentrated. The table below displays the percentage of our single-family guaranty book of business serviced by our top five depository single-family mortgage servicers and top five non-depository single-family mortgage servicers (i.e., servicers that are not insured depository institutions), and identifies one servicer that serviced more than 10% of our single-family guaranty book of business based on unpaid principal balance.

	Percentage of Single-Family Guaranty Book of Business	
	As of December 31,	
	2020	**2019**
Wells Fargo Bank, N.A. (together with its affiliates)	**13 %**	17 %
Remaining top five depository servicers	**11**	15
Top five non-depository servicers	**24**	27
Total	**48 %**	59 %

Overall, the decrease in concentration of our top five single-family depository and non-depository servicers from December 31, 2019 to December 31, 2020 was primarily due to higher refinance activity in 2020, which increased the volume of mortgage loans serviced by smaller non-depository servicers. Compared with depository financial institutions, our non-depository servicers pose additional risks because they may not have the same financial strength or operational capacity, or be subject to the same level of regulatory oversight as depository financial institutions.

The table below displays the percentage of our multifamily guaranty book of business serviced by our top five multifamily mortgage servicers, and identifies two servicers that serviced 10% or more of our multifamily guaranty book of business based on unpaid principal balance.

	Percentage of Multifamily Guaranty Book of Business	
	As of December 31,	
	2020	**2019**
Wells Fargo Bank, N.A. (together with its affiliates)	**12 %**	13 %
Walker & Dunlop, LLC	**12**	12
Remaining top five servicers	**24**	23
Total	**48 %**	48 %

If a significant mortgage servicer or seller counterparty, or a number of mortgage servicers or sellers, fails to meet their obligations to us, it could adversely affect our results of operations and financial condition. We mitigate these risks in several ways, including:

- establishing minimum standards and financial requirements for our servicers;
- monitoring financial and portfolio performance as compared with peers and internal benchmarks; and
- for our largest mortgage servicers, conducting periodic financial reviews to confirm compliance with servicing guidelines and servicing performance expectations.

We may take one or more of the following actions to mitigate our credit exposure to mortgage servicers that present a higher risk:

- require a guaranty of obligations by higher-rated entities;
- transfer exposure to third parties;
- require collateral;
- establish more stringent financial requirements;
- work with underperforming major servicers to improve operational processes; and
- suspend or terminate the selling and servicing relationship if deemed necessary.

Multifamily Lenders with Risk Sharing. We enter into risk sharing agreements with lenders pursuant to which the lenders agree to bear all or some portion of the credit losses on the covered loans. Our maximum potential loss recovery from lenders under these risk sharing agreements on both Delegated Underwriting and Servicing ("DUS") and non-DUS multifamily loans was $92.9 billion as of December 31, 2020, compared with $81.4 billion as of December 31, 2019. As of both December 31, 2020 and December 31, 2019, 51% of our maximum potential loss recovery on multifamily loans was from five DUS lenders.

Derivatives Counterparties. For information on credit risk associated with our derivative transactions and repurchase agreements see "Note 8, Derivative Instruments" and "Note 14, Netting Arrangements."

14. Netting Arrangements

We use master netting arrangements, which allow us to offset certain financial instruments and collateral with the same counterparty, to minimize counterparty credit exposure. The tables below display information related to derivatives, securities purchased under agreements to resell or similar arrangements, and securities sold under agreements to repurchase or similar arrangements, which are subject to an enforceable master netting arrangement or similar agreement that are either offset or not offset in our consolidated balance sheets.

	As of December 31, 2020					
				Amounts Not Offset in our Consolidated Balance Sheets		
	Gross Amount	Gross Amount Offset[1]	Net Amount Presented in our Consolidated Balance Sheets	Financial Instruments[2]	Collateral[3]	Net Amount
	(Dollars in millions)					
Assets:						
OTC risk management derivatives	$ 962	$ (952)	$ 10	$ —	$ —	$ 10
Cleared risk management derivatives	—	47	47	—	—	47
Mortgage commitment derivatives	989	—	989	(406)	(53)	530
Total derivative assets	1,951	(905)	1,046 [4]	(406)	(53)	587
Securities purchased under agreements to resell or similar arrangements[5]	46,644	—	46,644	—	(46,644)	—
Total assets	$ 48,595	$ (905)	$ 47,690	$ (406)	$ (46,697)	$ 587
Liabilities:						
OTC risk management derivatives	$ (1,015)	$ 999	$ (16)	$ —	$ —	$ (16)
Cleared risk management derivatives	—	(4)	(4)	—	2	(2)
Mortgage commitment derivatives	(1,426)	—	(1,426)	406	1,017	(3)
Total derivative liabilities	(2,441)	995	(1,446) [4]	406	1,019	(21)
Total liabilities	$ (2,441)	$ 995	$ (1,446)	$ 406	$ 1,019	$ (21)

	As of December 31, 2019					
				Amounts Not Offset in our Consolidated Balance Sheets		
	Gross Amount	Gross Amount Offset[1]	Net Amount Presented in our Consolidated Balance Sheets	Financial Instruments[2]	Collateral[3]	Net Amount
	(Dollars in millions)					
Assets:						
OTC risk management derivatives	$ 1,354	$ (1,334)	$ 20	$ —	$ —	$ 20
Cleared risk management derivatives	—	46	46	—	—	46
Mortgage commitment derivatives	165	—	165	(101)	(1)	63
Total derivative assets	1,519	(1,288)	231 [4]	(101)	(1)	129
Securities purchased under agreements to resell or similar arrangements[5]	24,928	—	24,928	—	(24,928)	—
Total assets	$ 26,447	$ (1,288)	$ 25,159	$ (101)	$ (24,929)	$ 129

Liabilities:						
OTC risk management derivatives	$ (1,798)	$ 1,695	$ (103)	$ —	$ —	$ (103)
Cleared risk management derivatives	—	(1)	(1)	—	1	—
Mortgage commitment derivatives	(306)	—	(306)	101	181	(24)
Total derivative liabilities	(2,104)	1,694	(410) (4)	101	182	(127)
Securities sold under agreements to repurchase or similar arrangements(5)	(478)	—	(478)	—	475	(3)
Total liabilities	$ (2,582)	$ 1,694	$ (888)	$ 101	$ 657	$ (130)

(1) Represents the effect of the right to offset under legally enforceable master netting arrangements to settle with the same counterparty on a net basis, including cash collateral posted and received and accrued interest.

(2) Mortgage commitment derivative amounts reflect where we have recognized both an asset and a liability with the same counterparty under an enforceable master netting arrangement but we have not elected to offset the related amounts in our consolidated balance sheets.

(3) Represents collateral received that has not been recognized and not offset in our consolidated balance sheets as well as collateral posted which has been recognized but not offset in our consolidated balance sheets. Does not include collateral held or posted in excess of our exposure. The fair value of non-cash collateral we pledged which the counterparty was permitted to sell or repledge was $4.7 billion and $2.3 billion as of December 31, 2020 and 2019, respectively. The fair value of non-cash collateral received was $46.6 billion and $24.7 billion, of which $46.6 billion and $23.8 billion could be sold or repledged as of December 31, 2020 and 2019, respectively. None of the underlying collateral was sold or repledged as of December 31, 2020 and 2019, respectively.

(4) Excludes derivative assets of $179 million and $40 million as of December 31, 2020 and 2019, respectively, and derivative liabilities of $49 million and $25 million recognized in our consolidated balance sheets as of December 31, 2020 and 2019, respectively, that are not subject to enforceable master netting arrangements.

(5) Includes $18.4 billion and $11.4 billion of securities purchased under agreements to resell classified as “Cash and cash equivalents” in our consolidated balance sheets as of December 31, 2020 and 2019, respectively.

Derivative instruments are recorded at fair value and securities purchased under agreements to resell or similar arrangements are recorded at amortized cost in our consolidated balance sheets.

We determine our rights to offset the assets and liabilities presented above with the same counterparty, including collateral posted or received, based on the contractual arrangements entered into with our individual counterparties and various rules and regulations that would govern the insolvency of a derivative counterparty. The following is a description, under various agreements, of the nature of those rights and their effect or potential effect on our financial position.

The terms of the majority of our contracts for OTC risk management derivatives are governed under master agreements of the International Swaps and Derivatives Association Inc. (“ISDA”). These agreements provide that all transactions entered into under the agreement with the counterparty constitute a single contractual relationship. An event of default by the counterparty allows the early termination of all outstanding transactions under the same ISDA agreement and we may offset all outstanding amounts related to the terminated transactions including collateral posted or received.

The terms of our contracts for cleared derivatives are governed under the rules of the clearing organization and the agreement between us and the clearing member of that clearing organization. In the event of a clearing organization default, all open positions at the clearing organization are closed and a net position (on a clearing member by clearing member basis) is calculated. Unless otherwise transferred, in the event of a clearing member default, all open positions cleared through that clearing member are closed and a net position is calculated.

The terms of our contracts for mortgage commitment derivatives are primarily governed by the Fannie Mae Single-Family Selling Guide (“Selling Guide”), for Fannie Mae-approved lenders, or Master Securities Forward Transaction Agreements (“MSFTA”), for counterparties that are not Fannie Mae-approved lenders. In the event of default by the counterparty, both the Selling Guide and the MSFTA allow us to terminate all outstanding transactions under the applicable agreement and offset all outstanding amounts related to the terminated transactions including collateral posted or received. Under the Selling Guide, upon a lender event of default, we generally may offset any amounts owed to a lender against any amounts a lender may owe us under any other existing agreement, regardless of whether or not such other agreements are in default or payments are immediately due.

The terms of our contracts for securities purchased under agreements to resell and securities sold under agreements to repurchase are governed by Master Repurchase Agreements, which are based on the guidelines prescribed by the Securities Industry and Financial Markets Association. Master Repurchase Agreements provide that all transactions under the agreement constitute a single contractual relationship. An event of default by the counterparty allows the early termination of all outstanding transactions under the same agreement and we may offset all outstanding amounts related to the terminated transactions including collateral posted or received.

In addition to these contractual relationships, we are also a clearing member of two divisions of the Fixed Income Clearing Corporation (“FICC”), a central counterparty (“CCP”). One FICC division clears our trades involving securities purchased under agreements to resell, securities sold under agreements to repurchase, and other non-mortgage related securities. The other division clears our forward purchase and sale commitments of mortgage-related securities, including dollar roll transactions. As a result of these trades, we are required to post initial and variation margin payments and are exposed to the risk that FICC fails to perform. As a clearing member of FICC, we are exposed to the risk that the CCP or one or more of the CCP's clearing members fails to perform its obligations as described below.

- A default by or the financial or operational failure of FICC would require us to replace contracts cleared through FICC, thereby increasing operational costs and potentially resulting in losses.
- We may also be exposed to losses if a clearing member of FICC defaults on its obligations as each clearing member is required to absorb a portion of those fellow-clearing member losses. As a result, we could lose the margin that we have posted to FICC. Moreover, our exposure could exceed the amount of margin that we previously posted to FICC, since FICC's rules require non-defaulting clearing members to cover, on a pro rata basis, losses caused by a clearing member's default.
- We are unable to develop an estimate of the maximum potential amount of future payments that we could be required to make to FICC under these arrangements as our exposure is dependent on the volume of trades FICC clearing members execute now and in the future, which varies daily. Although we are unable to develop an estimate of our maximum exposure, we expect that losses caused by any clearing member would be partially offset by the fair value of margin posted by the defaulting clearing member and any other available assets of the CCP for those purposes. We believe that the risk of loss is remote due to the FICC's initial and daily mark-to-market margin requirements, guarantee funds and other resources that are available in the event of a default.

We actively monitor the risks associated with FICC in order to effectively manage this counterparty risk and our associated liquidity exposure.

15. Fair Value

We use fair value measurements for the initial recording of certain assets and liabilities and periodic remeasurement of certain assets and liabilities on a recurring or nonrecurring basis.

Fair Value Measurement

Fair value measurement guidance defines fair value, establishes a framework for measuring fair value and sets forth disclosures around fair value measurements. This guidance applies whenever other accounting guidance requires or permits assets or liabilities to be measured at fair value. The guidance establishes a three-level fair value hierarchy that prioritizes the inputs into the valuation techniques used to measure fair value. The fair value hierarchy gives the highest priority, Level 1, to measurements based on unadjusted quoted prices in active markets for identical assets or liabilities. The next highest priority, Level 2, is given to measurements of assets and liabilities based on limited observable inputs or observable inputs for similar assets and liabilities. The lowest priority, Level 3, is given to measurements based on unobservable inputs.

Recurring Changes in Fair Value

The following tables display our assets and liabilities measured in our consolidated balance sheets at fair value on a recurring basis subsequent to initial recognition, including instruments for which we have elected the fair value option.

	Fair Value Measurements as of December 31, 2020				
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Netting Adjustment[1]	Estimated Fair Value
			(Dollars in millions)		
Recurring fair value measurements:					
Assets:					
Cash equivalents[2]	$ 1,120	$ —	$ —	$ —	$ 1,120
Trading securities:					
Mortgage-related securities:					
Fannie Mae	—	2,310	94	—	2,404
Other agency	—	3,450	1	—	3,451
Private-label and other mortgage securities	—	158	—	—	158
Non-mortgage-related securities:					
U.S. Treasury securities	130,456	—	—	—	130,456
Other securities	—	73	—	—	73
Total trading securities	130,456	5,991	95	—	136,542
Available-for-sale securities:					
Mortgage-related securities:					
Fannie Mae	—	973	195	—	1,168
Other agency	—	65	—	—	65
Alt-A and subprime private-label securities	—	4	2	—	6
Mortgage revenue bonds	—	—	216	—	216
Other	—	7	235	—	242
Total available-for-sale securities	—	1,049	648	—	1,697
Mortgage loans	—	5,629	861	—	6,490
Other assets:					
Risk management derivatives:					
Swaps	—	376	203	—	579
Swaptions	—	383	—	—	383
Netting adjustment	—	—	—	(905)	(905)
Mortgage commitment derivatives	—	989	—	—	989
Credit enhancement derivatives	—	—	179	—	179
Total other assets	—	1,748	382	(905)	1,225
Total assets at fair value	$ 131,576	$ 14,417	$ 1,986	$ (905)	$ 147,074
Liabilities:					
Long-term debt:					
Of Fannie Mae:					
Senior floating	$ —	$ 3,312	$ 416	$ —	$ 3,728
Total of Fannie Mae	—	3,312	416	—	3,728
Of consolidated trusts	—	24,503	83	—	24,586
Total long-term debt	—	27,815	499	—	28,314
Other liabilities:					
Risk management derivatives:					
Swaps	—	881	—	—	881
Swaptions	—	134	—	—	134
Netting adjustment	—	—	—	(995)	(995)
Mortgage commitment derivatives	—	1,426	—	—	1,426
Credit enhancement derivatives	—	—	49	—	49
Total other liabilities	—	2,441	49	(995)	1,495
Total liabilities at fair value	$ —	$ 30,256	$ 548	$ (995)	$ 29,809

	Fair Value Measurements as of December 31, 2019				
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Netting Adjustment[1]	Estimated Fair Value
Recurring fair value measurements:			(Dollars in millions)		
Assets:					
Trading securities:					
Mortgage-related securities:					
Fannie Mae	$ —	$ 3,379	$ 45	$ —	$ 3,424
Other agency	—	4,489	1	—	4,490
Private-label and other mortgage securities	—	629	—	—	629
Non-mortgage-related securities:					
U.S. Treasury securities	39,501	—	—	—	39,501
Other securities	—	79	—	—	79
Total trading securities	39,501	8,576	46	—	48,123
Available-for-sale securities:					
Mortgage-related securities:					
Fannie Mae	—	1,349	171	—	1,520
Other agency	—	198	—	—	198
Alt-A and subprime private-label securities	—	57	—	—	57
Mortgage revenue bonds	—	—	315	—	315
Other	—	8	306	—	314
Total available-for-sale securities	—	1,612	792	—	2,404
Mortgage loans	—	7,137	688	—	7,825
Other assets:					
Risk management derivatives:					
Swaps	—	1,071	159	—	1,230
Swaptions	—	124	—	—	124
Netting adjustment	—	—	—	(1,288)	(1,288)
Mortgage commitment derivatives	—	165	—	—	165
Credit enhancement derivatives	—	—	40	—	40
Total other assets	—	1,360	199	(1,288)	271
Total assets at fair value	$ 39,501	$ 18,685	$ 1,725	$ (1,288)	$ 58,623
Liabilities:					
Long-term debt:					
Of Fannie Mae:					
Senior floating	$ —	$ 5,289	$ 398	$ —	$ 5,687
Total of Fannie Mae	—	5,289	398	—	5,687
Of consolidated trusts	—	21,805	75	—	21,880
Total long-term debt	—	27,094	473	—	27,567
Other liabilities:					
Risk management derivatives:					
Swaps	—	1,346	1	—	1,347
Swaptions	—	440	11	—	451
Netting adjustment	—	—	—	(1,694)	(1,694)
Mortgage commitment derivatives	—	306	—	—	306
Credit enhancement derivatives	—	—	25	—	25
Total other liabilities	—	2,092	37	(1,694)	435
Total liabilities at fair value	$ —	$ 29,186	$ 510	$ (1,694)	$ 28,002

(1) Derivative contracts are reported on a gross basis by level. The netting adjustment represents the effect of the legal right to offset under legally enforceable master netting arrangements to settle with the same counterparty on a net basis, including cash collateral posted and received.

(2) Cash equivalents are comprised of U.S. Treasuries that have a maturity at the date of acquisition of three months or less.

The following tables display a reconciliation of all assets and liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3). The tables also display gains and losses due to changes in fair value, including both realized and unrealized gains and losses, recognized in our consolidated statements of operations and comprehensive income for Level 3 assets and liabilities.

Fair Value Measurements Using Significant Unobservable Inputs (Level 3)

For the Year Ended December 31, 2020

	Balance, December 31, 2019	Total Gains (Losses) (Realized/Unrealized) Included in Net Income	Included in Total OCI (Loss)[1]	Purchases[2]	Sales[2]	Issues[3]	Settlements[3]	Transfers out of Level 3	Transfers into Level 3	Balance, December 31, 2020	Net Unrealized Gains (Losses) Included in Net Income Related to Assets and Liabilities Still Held as of December 31, 2020[4][5]	Net Unrealized Gains (Losses) Included in OCI Related to Assets and Liabilities Still Held as of December 31, 2020[1]
	(Dollars in millions)											
Trading securities:												
Mortgage-related:												
Fannie Mae	$ 45	$ (12)	$ —	$ —	$ (1)	$ —	$ —	$ (48)	$ 110	$ 94	$ (8)	$ —
Other agency	1	—	—	—	—	—	—	(1)	1	1	—	—
Private-label and other mortgage securities	—	3	—	—	(94)	—	(3)	—	94	—	—	—
Total trading securities	$ 46	$ (9) [5][6]	$ —	$ —	$ (95)	$ —	$ (3)	$ (49)	$ 205	$ 95	$ (8)	$ —
Available-for-sale securities:												
Mortgage-related:												
Fannie Mae	$ 171	$ 1	$ 4	$ —	$ (1)	$ —	$ (15)	$ (243)	$ 278	$ 195	$ —	$ —
Alt-A and subprime private-label securities	—	—	—	—	—	—	—	—	2	2	—	—
Mortgage revenue bonds	315	(3)	2	—	—	—	(98)	—	—	216	—	4
Other	306	(6)	(1)	—	—	—	(64)	—	—	235	—	—
Total available-for-sale securities	$ 792	$ (8) [6][7]	$ 5	$ —	$ (1)	$ —	$ (177)	$ (243)	$ 280	$ 648	$ —	$ 4
Mortgage loans	$ 688	$ 47 [5][6]	$ —	$ —	$ (21)	$ —	$ (132)	$ (104)	$ 383	$ 861	$ 11	$ —
Net derivatives	162	233 [5]	—	—	—	—	(80)	18	—	333	159	—
Long-term debt:												
Of Fannie Mae:												
Senior floating	(398)	(41) [5]	—	—	—	—	23	—	—	(416)	(41)	—
Of consolidated trusts	(75)	(2) [5][6]	—	—	—	—	18	5	(29)	(83)	(1)	—
Total long-term debt	$ (473)	$ (43)	$ —	$ —	$ —	$ —	$ 41	$ 5	$ (29)	$ (499)	$ (42)	$ —

Fair Value Measurements Using Significant Unobservable Inputs (Level 3)
For the Year Ended December 31, 2019

	Balance, December 31, 2018	Total Gains (Losses) (Realized/Unrealized) Included in Net Income	Total Gains (Losses) (Realized/Unrealized) Included in Total OCI (Loss)[1]	Purchases[2]	Sales[2]	Issues[3]	Settlements[3]	Transfers out of Level 3	Transfers into Level 3	Balance, December 31, 2019	Net Unrealized Gains (Losses) Included in Net Income Related to Assets and Liabilities Still Held as of December 31, 2019[4][5]	Net Unrealized Gains (Losses) Included in OCI Related to Assets and Liabilities Still Held as of December 31, 2019[1]
	(Dollars in millions)											
Trading securities:												
Mortgage-related:												
Fannie Mae	$ 32	$ 3	$ —	$ 77	$ (22)	$ —	$ (16)	$ (108)	$ 79	$ 45	$ 1	$ —
Other agency	—	—	—	—	—	—	—	—	1	1	—	—
Private-label and other mortgage securities	1	—	—	—	—	—	(1)	—	—	—	—	—
Total trading securities	$ 33	$ 3 [5][6]	$ —	$ 77	$ (22)	$ —	$ (17)	$ (108)	$ 80	$ 46	$ 1	$ —
Available-for-sale securities:												
Mortgage-related:												
Fannie Mae	$ 152	$ —	$ 7	$ —	$ —	$ —	$ (8)	$ (103)	$ 123	$ 171	$ —	$ 6
Alt-A and subprime private-label securities	24	5	(5)	—	(23)	—	(1)	—	—	—	—	—
Mortgage revenue bonds	434	1	(3)	—	(5)	—	(112)	—	—	315	—	(1)
Other	342	13	(10)	—	—	—	(37)	(3)	1	306	—	(8)
Total available-for-sale securities	$ 952	$ 19 [6][7]	$ (11)	$ —	$ (28)	$ —	$ (158)	$ (106)	$ 124	$ 792	$ —	$ (3)
Mortgage loans	$ 937	$ 46 [5][6]	$ —	$ —	$ (52)	$ —	$ (136)	$ (254)	$ 147	$ 688	$ 26	$ —
Net derivatives	194	109 [5]	—	—	—	—	(119)	(10)	(12)	162	3	—
Long-term debt:												
Of Fannie Mae:												
Senior floating	(351)	(47) [5]	—	—	—	—	—	—	—	(398)	(47)	—
Of consolidated trusts	(201)	(8) [5][6]	—	—	—	(2)	19	200	(83)	(75)	(4)	—
Total long-term debt	$ (552)	$ (55)	$ —	$ —	$ —	$ (2)	$ 19	$ 200	$ (83)	$ (473)	$ (51)	$ —

Fair Value Measurements Using Significant Unobservable Inputs (Level 3)
For the Year Ended December 31, 2018

	Balance, December 31, 2017	Total Gains (Losses) (Realized/Unrealized): Included in Net Income	Total Gains (Losses) (Realized/Unrealized): Included in Total OCI (Loss)[1]	Purchases[2]	Sales[2]	Issues[3]	Settlements[3]	Transfers out of Level 3	Transfers into Level 3	Balance, December 31, 2018	Net Unrealized Gains (Losses) Included in Net Income Related to Assets and Liabilities Still Held as of December 31, 2018[4][5]	Net Unrealized Gains (Losses) Included in OCI Related to Assets and Liabilities Still Held as of December 31, 2018[1]
	(Dollars in millions)											
Trading securities:												
Mortgage-related:												
Fannie Mae	$ 971	$ 163	$ —	$ 1	$(1,059)	$ —	$ (1)	$ (44)	$ 1	$ 32	$ 4	$ —
Other agency	35	(1)	—	—	—	—	(1)	(33)	—	—	—	—
Private-label and other mortgage securities	195	(85)	—	—	—	—	(5)	(104)	—	1	—	—
Total trading securities	$ 1,201	$ 77 [5][6]	$ —	$ 1	$(1,059)	$ —	$ (7)	$ (181)	$ 1	$ 33	$ 4	$ —
Available-for-sale securities:												
Mortgage-related:												
Fannie Mae	$ 208	$ 2	$ 1	$ —	$ —	$ —	$ (10)	$ (49)	$ —	$ 152	$ —	$ —
Alt-A and subprime private-label securities	77	—	(45)	—	—	—	(4)	(4)	—	24	—	1
Mortgage revenue bonds	671	—	(7)	—	(22)	—	(208)	—	—	434	—	(2)
Other	357	28	(2)	—	—	—	(41)	—	—	342	—	1
Total available-for-sale securities	$ 1,313	$ 30 [6][7]	$ (53)	$ —	$ (22)	$ —	$ (263)	$ (53)	$ —	$ 952	$ —	$ —
Mortgage loans	$ 1,116	$ 38 [5][6]	$ —	$ —	$ —	$ —	$ (216)	$ (162)	$ 161	$ 937	$ 14	$ —
Net derivatives	134	(38) [5]	—	—	—	—	45	53	—	194	40	—
Long-term debt:												
Of Fannie Mae:												
Senior floating	(376)	25 [5]	—	—	—	—	—	—	—	(351)	25	—
Of consolidated trusts	(582)	9 [5][6]	—	—	—	1	44	541	(214)	(201)	(2)	—
Total long-term debt	$ (958)	$ 34	$ —	$ —	$ —	$ 1	$ 44	$ 541	$ (214)	$ (552)	$ 23	$ —

(1) Gains (losses) included in other comprehensive income are included in “Changes in unrealized gains on available-for-sale securities, net of reclassification adjustments and taxes” in our consolidated statements of operations and comprehensive income.

(2) Purchases and sales include activity related to the consolidation and deconsolidation of assets of securitization trusts. For 2018, includes the dissolution of a Fannie Mae-wrapped private-label securities trust.

(3) Issues and settlements include activity related to the consolidation and deconsolidation of liabilities of securitization trusts.

(4) Amount represents temporary changes in fair value. Amortization, accretion and the impairment of credit losses (other-than-temporary impairment in years prior to 2020) are not considered unrealized and are not included in this amount.

(5) Gains (losses) are included in “Fair value gains (losses), net” in our consolidated statements of operations and comprehensive income.

(6) Gains (losses) are included in “Net interest income” in our consolidated statements of operations and comprehensive income.

(7) Gains (losses) are included in “Investment gains, net” in our consolidated statements of operations and comprehensive income.

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The following tables display valuation techniques and the range and the weighted average of significant unobservable inputs for our Level 3 assets and liabilities measured at fair value on a recurring basis, excluding instruments for which we have elected the fair value option. Changes in these unobservable inputs can result in significantly higher or lower fair value measurements of these assets and liabilities as of the reporting date.

	Fair Value Measurements as of December 31, 2020				
	Fair Value	Significant Valuation Techniques	Significant Unobservable Inputs[1]	Range[1]	Weighted - Average[1][2]
			(Dollars in millions)		
Recurring fair value measurements:					
Trading securities:					
Mortgage-related securities:					
Agency[3]	$ 95	Various			
Available-for-sale securities:					
Mortgage-related securities:					
Agency[3]	97	Consensus			
	98	Various			
Total agency	195				
Alt-A and subprime private-label securities	2	Various			
Mortgage Revenue Bonds	144	Single Vendor	Spreads (bps)	32.0 - 315.3	93.4
	72	Various			
Total mortgage revenue bonds	216				
Other	206	Discounted Cash Flow	Spreads (bps)	425.0 - 443.0	434.2
	29	Various			
Total other	235				
Total available-for-sale securities	$ 648				
Net derivatives	$ 203	Dealer Mark			
	130	Discounted Cash Flow			
Total net derivatives	$ 333				

	Fair Value Measurements as of December 31, 2019				
	Fair Value	Significant Valuation Techniques	Significant Unobservable Inputs[1]	Range[1]	Weighted - Average[1][2]
			(Dollars in millions)		
Recurring fair value measurements:					
Trading securities:					
Mortgage-related securities:					
Agency[3]	$ 46	Various			
Available-for-sale securities:					
Mortgage-related securities:					
Agency[3]	107	Consensus			
	64	Various			
Total Agency	171				
Mortgage revenue bonds	222	Single Vendor	Spreads (bps)	23.0 - 205.1	76.1
	93	Various			
Total mortgage revenue bonds	315				
Other	267	Discounted Cash Flow	Spreads (bps)	300.0	300.0
	39	Various			
Total other	306				
Total available-for-sale securities	$ 792				
Net derivatives	$ 147	Dealer Mark			
	15	Various			
Total net derivatives	$ 162				

(1) Valuation techniques for which no unobservable inputs are disclosed generally reflect the use of third-party pricing services or dealers, and the range of unobservable inputs applied by these sources is not readily available or cannot be reasonably estimated. Where we have

disclosed unobservable inputs for consensus and single vendor techniques, those inputs are based on our validations performed at the security level using discounted cash flows.

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

(3) Includes Fannie Mae and Freddie Mac securities.

In our consolidated balance sheets certain assets and liabilities are measured at fair value on a nonrecurring basis; that is, the instruments are not measured at fair value on an ongoing basis but are subject to fair value adjustments in certain circumstances (for example, when we evaluate loans for impairment). We held no Level 1 assets or liabilities as of December 31, 2020 or December 31, 2019 that were measured on a nonrecurring basis. We held $25 million and $274 million in Level 2 assets as of December 31, 2020 and December 31, 2019, respectively, comprised of mortgage loans held for sale and mortgage loans held for investment that were impaired. We had no Level 2 liabilities that were measured at fair value on a nonrecurring basis as of December 31, 2020 or December 31, 2019.

The following table displays valuation techniques for our Level 3 assets measured at fair value on a nonrecurring basis.

		Fair Value Measurements as of December 31,	
	Valuation Techniques	**2020**	**2019**
		(Dollars in millions)	
Nonrecurring fair value measurements:			
Mortgage loans held for sale, at lower of cost or fair value	Consensus	**$ 754**	$ 471
	Single Vendor	**333**	605
Total mortgage loans held for sale, at lower of cost or fair value		**1,087**	1,076
Single-family mortgage loans held for investment, at amortized cost	Internal Model	**979**	555
Multifamily mortgage loans held for investment, at amortized cost	Appraisals	**225**	—
	Asset Manager Estimate	**—**	24
	Internal Model	**125**	—
	Various	**40**	16
Total multifamily mortgage loans held for investment, at amortized cost		**390**	40
Acquired property, net:			
Single-family	Accepted Offers	**35**	101
	Appraisals	**89**	362
	Internal Model	**41**	164
	Walk Forwards	**85**	240
	Various	**11**	51
Total single-family		**261**	918
Multifamily	Various	**25**	9
Total nonrecurring assets at fair value		**$ 2,742**	$ 2,598

We use valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs. The following is a description of the valuation techniques we use for fair value measurement and disclosure as well as our basis for classifying these measurements as Level 1, Level 2 or Level 3 of the valuation hierarchy in more specific situations.

Instruments	Valuation Techniques	Classification
U.S Treasury Securities	We classify securities whose values are based on quoted market prices in active markets for identical assets as Level 1 of the valuation hierarchy.	Level 1
Trading Securities and Available-for-Sale Securities	We classify securities in active markets as Level 2 of the valuation hierarchy if quoted market prices in active markets for identical assets are not available. For all valuation techniques used for securities where there is limited activity or less transparency around these inputs to the valuation, these securities are classified as Level 3 of the valuation hierarchy. <u>Single Vendor:</u> Uses one vendor price to estimate fair value. We generally validate these observations of fair value through the use of a discounted cash flow technique whose unobservable inputs (for example, spreads) are disclosed in the table above. <u>Dealer Mark:</u> Uses one dealer price to estimate fair value. We generally validate these observations of fair value through the use of a discounted cash flow technique whose unobservable inputs (for example, spreads) are disclosed in the table above. <u>Consensus:</u> Uses an average of two or more vendor prices for similar securities. We generally validate these observations of fair value through the use of a discounted cash flow technique whose unobservable inputs (for example, spreads) are disclosed in the table above. <u>Discounted Cash Flow:</u> In the absence of prices provided by third-party pricing services supported by observable market data, we estimate the fair value of a portion of our securities using a discounted cash flow technique that uses inputs such as default rates, prepayment speeds, loss severity and spreads based on market assumptions where available. For private-label securities, an increase in unobservable prepayment speeds in isolation would generally result in an increase in fair value, and an increase in unobservable spreads, severity rates or default rates in isolation would generally result in a decrease in fair value. For mortgage revenue bonds classified as Level 3 of the valuation hierarchy, an increase in unobservable spreads would result in a decrease in fair value. Although we have disclosed unobservable inputs for the fair value of our recurring Level 3 securities above, interrelationships exist among these inputs such that a change in one unobservable input typically results in a change to one or more of the other inputs.	Level 2 and 3
Mortgage Loans Held for Investment	<u>Build-up:</u> We derive the fair value of performing mortgage loans using a build-up valuation technique starting with the base value for our Fannie Mae MBS with similar characteristics and then add or subtract the fair value of the associated guaranty asset, guaranty obligation ("GO") and master servicing arrangement. We set the GO equal to the estimated fair value we would receive if we were to issue our guaranty to an unrelated party in a stand-alone arm's length transaction at the measurement date. The fair value of the GO is estimated based on our current guaranty pricing for loans underwritten after 2008 and our internal valuation models considering management's best estimate of key loan characteristics for loans underwritten before 2008. Our performing loans are generally classified as Level 2 of the valuation hierarchy to the extent that significant inputs are observable. To the extent that unobservable inputs are significant, the loans are classified as Level 3 of the valuation hierarchy. <u>Consensus:</u> Calculated through the extrapolation of indicative sample bids obtained from multiple active market participants plus the estimated value of any applicable mortgage insurance, the estimated fair value using the Consensus method represents an estimate of the prices we would receive if we were to sell these single-family nonperforming and certain reperforming loans in the whole-loan market. The fair value of any mortgage insurance is estimated by taking the loan-level coverage and adjusting it by the expected claims paying ability of the associated mortgage insurer. These loans are classified as Level 3 of the valuation hierarchy because significant inputs are unobservable. We estimate the fair value for a portion of our senior-subordinated trust structures using the average of two or more vendor prices at the security level as a proxy for estimating loan fair value. These loans are classified as Level 3 of the valuation hierarchy because significant inputs are unobservable. <u>Single Vendor:</u> We estimate the fair value of our reverse mortgages using the single vendor valuation technique. <u>Internal Model:</u> The internal model used to value collateral contains four sub-component models: 1) Location Model, 2) Neighborhood Model, 3) Automated Valuation Model ("AVM") Imputation Model and 4) Final Valuation Model. These models consider characteristics of the property, neighborhood, local housing markets, underlying loan and home price growth to derive a final estimated value. These loans are classified as Level 3 of the valuation hierarchy because significant inputs are unobservable.	Level 2 and 3

Instruments	Valuation Techniques	Classification
Mortgage Loans Held for Investment	Appraisals: We use appraisals to estimate the fair value for a portion of our multifamily loans based on either estimated replacement cost, the present value of future cash flows, or sales of similar properties. Significant unobservable inputs include estimated replacement or construction costs, property net operating income, capitalization rates, and adjustments made to sales of comparable properties based on characteristics such as financing, conditions of sale, and physical characteristics of the property. Broker Price Opinion ("BPO"): We use BPOs to estimate the fair value for a portion of our multifamily loans. This technique uses both current property value and the property value adjusted for stabilization and market conditions. The unobservable inputs used in this technique are property net operating income and market capitalization rates to estimate property value. Asset Manager Estimate ("AME"): This technique uses the net operating income and tax assessments of the specific property as well as MSA-specific market capitalization rates and average per unit sales values to estimate property fair value. An increase in prepayment speeds in isolation would generally result in an increase in the fair value of our mortgage loans classified as Level 3 of the valuation hierarchy, and an increase in severity rates, default rates or spreads in isolation would generally result in a decrease in fair value. Although we have disclosed unobservable inputs for the fair value of the mortgage loans classified as Level 3 above, interrelationships exist among these inputs such that a change in one unobservable input typically results in a change to one or more of the other inputs.	Level 2 and 3
Acquired Property, Net and Other Assets	*Single-family acquired property valuation techniques* Accepted Offer: An Offer to Purchase Real Estate that has been submitted by a potential purchaser of an acquired property and accepted by Fannie Mae in a pending sale. Appraisal: An appraisal is an estimate based on recent historical data of the value of a specific property by a certified or licensed appraiser. Adjustments are made for differences between comparable properties for unobservable inputs such as square footage, location, and condition of the property. Broker Price Opinion: This technique provides an estimate of what the property is worth based upon a real estate broker's use of specific market research and a sales comparison approach that is similar to the appraisal process. This information, all of which is unobservable, is used along with recent and pending sales and current listings of similar properties to arrive at an estimate of value. Appraisal and Broker Price Opinion Walk Forwards ("Walk Forwards"): We use these techniques to adjust appraisal and broker price opinion valuations for changing market conditions by applying a walk forward factor based on local price movements since the time the third-party value was obtained. Internal Model: We use an internal model to estimate fair value for distressed properties. The valuation methodology and inputs used are described under "Mortgage Loans Held for Investment." *Multifamily acquired property valuation techniques* Appraisals: We use this method to estimate property values for distressed properties. The valuation methodology and inputs used are described under "Mortgage Loans Held for Investment." Broker Price Opinions: We use this method to estimate property values for distressed properties. The valuation methodology and inputs used are described under "Mortgage Loans Held for Investment." Asset Manager Estimate ("AME"): We use this method to estimate property values for distressed properties. The valuation methodology and inputs used are described under "Mortgage Loans Held for Investment."	Level 3
Asset and Liability Derivative Instruments (collectively "Derivatives")	The valuation process for the majority of our risk management derivatives uses observable market data provided by third-party sources, resulting in Level 2 classification of the valuation hierarchy. Single Vendor: We use one vendor price to estimate fair value. We generally validate these observations of fair value through the use of a discounted cash flow technique. Clearing House: We use the clearing house-provided value for interest-rate derivatives which are transacted through a clearing house. Internal Model: We use internal models to value interest-rate derivatives which are valued by referencing yield curves derived from observable interest rates and spreads to project and discount cash flows to present value. Discounted Cash Flow: We use discounted cash flow to estimate fair value for credit enhancement derivatives related to CRT.	Level 2 and 3

Instruments	Valuation Techniques	Classification
Asset and Liability Derivative Instruments (collectively "Derivatives")	Dealer Mark: Certain highly complex structured swaps primarily use a single dealer mark due to lack of transparency in the market and may be modeled using observable interest rates and volatility levels as well as significant unobservable assumptions, resulting in Level 3 classification of the valuation hierarchy. Mortgage commitment derivatives that use observable market data, quotes and actual transaction price levels adjusted for market movement are typically classified as Level 2 of the valuation hierarchy. To the extent mortgage commitment derivatives include adjustments for market movement that cannot be corroborated by observable market data, we classify them as Level 3 of the valuation hierarchy.	Level 2 and 3
Debt of Fannie Mae and Consolidated Trusts	We classify debt instruments that have quoted market prices in active markets for similar liabilities when traded as assets as Level 2 of the valuation hierarchy. For all valuation techniques used for debt instruments where there is limited activity or less transparency around these inputs to the valuation, these debt instruments are classified as Level 3 of the valuation hierarchy. Consensus: Uses an average of two or more vendor prices or dealer marks that represents estimated fair value for similar liabilities when traded as assets. Single Vendor: Uses a single vendor price that represents estimated fair value for these liabilities when traded as assets. Discounted Cash Flow: Uses spreads based on market assumptions where available. The valuation methodology and inputs used in estimating the fair value of MBS assets are described under "Trading Securities and Available-for-Sale Securities."	Level 2 and 3

Fair Value of Financial Instruments

The following table displays the carrying value and estimated fair value of our financial instruments. The fair value of financial instruments we disclose includes commitments to purchase multifamily and single-family mortgage loans that we do not record in our consolidated balance sheets. The fair values of these commitments are included as "Mortgage loans held for investment, net of allowance for loan losses." The disclosure excludes all non-financial instruments; therefore, the fair value of our financial assets and liabilities does not represent the underlying fair value of our total consolidated assets and liabilities.

	As of December 31, 2020					
	Carrying Value	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Netting Adjustment	Estimated Fair Value
	(Dollars in millions)					
Financial assets:						
Cash and cash equivalents and restricted cash	$ 115,623	$ 97,179	$ 18,444	$ —	$ —	$ 115,623
Federal funds sold and securities purchased under agreements to resell or similar arrangements	28,200	—	28,200	—	—	28,200
Trading securities	136,542	130,456	5,991	95	—	136,542
Available-for-sale securities	1,697	—	1,049	648	—	1,697
Mortgage loans held for sale	5,197	—	116	5,502	—	5,618
Mortgage loans held for investment, net of allowance for loan losses	3,648,695	—	3,512,672	255,556	—	3,768,228
Advances to lenders	10,449	—	10,448	1	—	10,449
Derivative assets at fair value	1,225	—	1,748	382	(905)	1,225
Guaranty assets and buy-ups	115	—	—	258	—	258
Total financial assets	$ 3,947,743	$ 227,635	$ 3,578,668	$ 262,442	$ (905)	$ 4,067,840
Financial liabilities:						
Short-term debt:						
Of Fannie Mae	$ 12,173	$ —	$ 12,177	$ —	$ —	$ 12,177
Long-term debt:						
Of Fannie Mae	277,399	—	288,414	878	—	289,292
Of consolidated trusts	3,646,164	—	3,756,673	31,584	—	3,788,257
Derivative liabilities at fair value	1,495	—	2,441	49	(995)	1,495
Guaranty obligations	127	—	—	82	—	82
Total financial liabilities	$ 3,937,358	$ —	$ 4,059,705	$ 32,593	$ (995)	$ 4,091,303

	As of December 31, 2019					
	Carrying Value	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Netting Adjustment	Estimated Fair Value
	(Dollars in millions)					
Financial assets:						
Cash and cash equivalents and restricted cash	$ 61,407	$ 50,057	$ 11,350	$ —	$ —	$ 61,407
Federal funds sold and securities purchased under agreements to resell or similar arrangements	13,578	—	13,578	—	—	13,578
Trading securities	48,123	39,501	8,576	46	—	48,123
Available-for-sale securities	2,404	—	1,612	792	—	2,404
Mortgage loans held for sale	6,773	—	229	7,054	—	7,283
Mortgage loans held for investment, net of allowance for loan losses	3,327,389	—	3,270,535	127,650	—	3,398,185
Advances to lenders	6,453	—	6,451	2	—	6,453
Derivative assets at fair value	271	—	1,360	199	(1,288)	271
Guaranty assets and buy-ups	142	—	—	305	—	305
Total financial assets	$ 3,466,540	$ 89,558	$ 3,313,691	$ 136,048	$ (1,288)	$ 3,538,009
Financial liabilities:						
Federal funds purchased and securities sold under agreements to repurchase	$ 478	$ —	$ 478	$ —	$ —	$ 478
Short-term debt:						
Of Fannie Mae	26,662	—	26,667	—	—	26,667
Long-term debt:						
Of Fannie Mae	155,585	—	164,144	401	—	164,545
Of consolidated trusts	3,285,139	—	3,312,763	31,827	—	3,344,590
Derivative liabilities at fair value	435	—	2,092	37	(1,694)	435
Guaranty obligations	154	—	—	97	—	97
Total financial liabilities	$ 3,468,453	$ —	$ 3,506,144	$ 32,362	$ (1,694)	$ 3,536,812

The following is a description of the valuation techniques we use for fair value measurement of our financial instruments as well as our basis for classifying these measurements as Level 1, Level 2 or Level 3 of the valuation hierarchy in certain specific situations.

Instruments	Description	Classification
Financial instruments for which fair value approximates carrying value	We hold certain financial instruments that are not carried at fair value but for which the carrying value approximates fair value due to the short-term nature and negligible credit risk inherent in them. These financial instruments include cash and cash equivalents, the majority of advances to lenders, and federal funds and securities sold/purchased under agreements to repurchase/resell.	Level 1 and 2
Federal funds and securities sold/purchased under agreements to repurchase/ resell	The carrying value for the majority of these specific instruments approximates the fair value due to the short-term nature and the negligible inherent credit risk, as they involve the exchange of collateral that is easily traded. Were we to calculate the fair value of these instruments, we would use observable inputs.	Level 2
Mortgage loans held for sale	Loans are reported at the lower of cost or fair value in our consolidated balance sheets. The valuation methodology and inputs used in estimating the fair value of HFS loans are the same as for our HFI loans and are described under "Fair Value Measurement—Mortgage Loans Held for Investment" above. To the extent that significant inputs are unobservable, the loans are classified within Level 3 of the valuation hierarchy.	Level 2 and 3
Mortgage loans held for investment	For a description of loan valuation techniques, refer to "Fair Value Measurement—Mortgage Loans Held for Investment" described above. We measure the fair value of certain loans that are delivered under the Home Affordable Refinance Program® ("HARP®") using a modified build-up approach while the loan is performing. Under this modified approach, we set the credit component of the consolidated loans (that is, the guaranty obligation) equal to the compensation we would currently receive for a loan delivered to us under the program because the total compensation for these loans is equal to their current exit price in the government-sponsored enterprise securitization market. If, subsequent to delivery, the refinanced loan becomes past due or is modified as a part of a troubled debt restructuring, the fair value of the guaranty obligation is then measured consistent with other loans that have similar characteristics.	Level 2 and 3
Advances to lenders	The carrying value for the majority of our advances to lenders approximates the fair value due to the short-term nature and the negligible inherent credit risk. If we were to calculate the fair value of these instruments, we would use discounted cash flow models that use observable inputs such as spreads based on market assumptions, resulting in Level 2 classification. Advances to lenders also include loans that do not qualify for Fannie Mae MBS securitization and are valued using a discounted cash flow technique that uses estimated credit spreads of similar collateral and prepayment speeds that consider recent prepayment activity. We classify these valuations as Level 3 given that significant inputs are not observable or are determined by extrapolation of observable inputs.	Level 2 and 3
Guaranty assets and buy-ups	Guaranty assets related to our portfolio securitizations are recorded in our consolidated balance sheets at fair value on a recurring basis and are classified as Level 3. Guaranty assets in lender swap transactions are recorded in our consolidated balance sheets at the lower of cost or fair value. These assets, which are measured at fair value on a nonrecurring basis, are also classified as Level 3. We estimate the fair value of guaranty assets by using proprietary models to project cash flows based on management's best estimate of key assumptions such as prepayment speeds and forward yield curves. Because guaranty assets are similar to an interest-only income stream, the projected cash flows are discounted at rates that consider the current spreads on interest-only swaps that reference Fannie Mae MBS and also liquidity considerations of the guaranty assets. The fair value of guaranty assets includes the fair value of any associated buy-ups.	Level 3
Guaranty obligations	The fair value of all guaranty obligations, measured subsequent to their initial recognition, is our estimate of a hypothetical transaction price we would receive if we were to issue our guaranty to an unrelated party in a standalone arm's-length transaction at the measurement date. The valuation methodology and inputs used in estimating the fair value of the guaranty obligations are described under "Fair Value Measurement—Mortgage Loans Held for Investment—Build-up."	Level 3

Fair Value Option

We elected the fair value option for loans and debt that contain embedded derivatives that would otherwise require bifurcation. Additionally, we elected the fair value option for our credit risk-sharing securities accounted for as debt of Fannie Mae issued under our CAS series prior to January 1, 2016. Under the fair value option, we elected to carry these instruments at fair value instead of bifurcating the embedded derivative from such instruments.

Interest income for the mortgage loans is recorded in "Interest income—Mortgage loans" and interest expense for the debt instruments is recorded in "Interest expense—Long-term debt" in our consolidated statements of operations and comprehensive income.

The following table displays the fair value and unpaid principal balance of the financial instruments for which we have made fair value elections.

	As of December 31,					
	2020			2019		
	Loans[(1)]	Long-Term Debt of Fannie Mae	Long-Term Debt of Consolidated Trusts	Loans[(1)]	Long-Term Debt of Fannie Mae	Long-Term Debt of Consolidated Trusts
	(Dollars in millions)					
Fair value	**$ 6,490**	**$ 3,728**	**$ 24,586**	$ 7,825	$ 5,687	$ 21,880
Unpaid principal balance	**6,046**	**3,518**	**21,408**	7,514	5,200	19,653

(1) Includes nonaccrual loans with a fair value of $139 million and $129 million as of December 31, 2020 and 2019, respectively. The difference between unpaid principal balance and the fair value of these nonaccrual loans as of December 31, 2020 and 2019 is $8 million and $11 million, respectively. Includes loans that are 90 days or more past due with a fair value of $257 million and $80 million as of December 31, 2020 and 2019, respectively. The difference between unpaid principal balance and the fair value of these 90 or more days past due loans as of December 31, 2020 and 2019 is $14 million and $10 million, respectively.

Changes in Fair Value under the Fair Value Option Election

We recorded gains of $263 million and $357 million and losses of $128 million for the years ended December 31, 2020, 2019 and 2018, respectively, from changes in the fair value of loans recorded at fair value in “Fair value gains (losses), net” in our consolidated statements of operations and comprehensive income.

We recorded losses of $432 million and $765 million and gains of $688 million for the years ended December 31, 2020, 2019 and 2018, respectively, from changes in the fair value of long-term debt recorded at fair value in “Fair value gains (losses), net” in our consolidated statements of operations and comprehensive income.

16. Commitments and Contingencies

We are party to various types of legal actions and proceedings, including actions brought on behalf of various classes of claimants. We also are subject to regulatory examinations, inquiries and investigations, and other information gathering requests. In some of the matters, indeterminate amounts are sought. Modern pleading practice in the U.S. permits considerable variation in the assertion of monetary damages or other relief. Jurisdictions may permit claimants not to specify the monetary damages sought or may permit claimants to state only that the amount sought is sufficient to invoke the jurisdiction of the trial court. This variability in pleadings, together with our and our counsel’s actual experience in litigating or settling claims, leads us to conclude that the monetary relief that may be sought by plaintiffs bears little relevance to the merits or disposition value of claims.

We have substantial and valid defenses to the claims in the proceedings described below and intend to defend these matters vigorously. However, legal actions and proceedings of all types are subject to many uncertain factors that generally cannot be predicted with assurance. Accordingly, the outcome of any given matter and the amount or range of potential loss at particular points in time is frequently difficult to ascertain. Uncertainties can include how fact finders will evaluate documentary evidence and the credibility and effectiveness of witness testimony, and how courts will apply the law. Disposition valuations are also subject to the uncertainty of how opposing parties and their counsel may view the evidence and applicable law.

On a quarterly basis, we review relevant information about all pending legal actions and proceedings for the purpose of evaluating and revising our contingencies, accruals and disclosures. We establish an accrual only for matters when a loss is probable and we can reasonably estimate the amount of such loss. We are often unable to estimate the possible losses or ranges of losses, particularly for proceedings that are in their early stages of development, where plaintiffs seek indeterminate or unspecified damages, where there may be novel or unsettled legal questions relevant to the proceedings, or where settlement negotiations have not occurred or progressed. Given the uncertainties involved in any action or proceeding, regardless of whether we have established an accrual, the ultimate resolution of certain of these matters may be material to our operating results for a particular period, depending on, among other factors, the size of the loss or liability imposed and the level of our net income or loss for that period.

In addition to the matters specifically described below, we are involved in a number of legal and regulatory proceedings that arise in the ordinary course of business that we do not expect will have a material impact on our business or financial condition. We have also advanced fees and expenses of certain current and former officers and directors in connection with various legal proceedings pursuant to our bylaws and indemnification agreements.

Senior Preferred Stock Purchase Agreements Litigation

A consolidated putative class action ("*In re Fannie Mae/Freddie Mac Senior Preferred Stock Purchase Agreement Class Action Litigations*") and two non-class action lawsuits, *Arrowood Indemnity Company v. Fannie Mae and Fairholme Funds v. FHFA*, filed by Fannie Mae and Freddie Mac shareholders against us, FHFA as our conservator, and Freddie Mac are pending in the U.S. District Court for the District of Columbia. The lawsuits challenge the August 2012 amendment to each company's senior preferred stock purchase agreement with Treasury.

Plaintiffs filed amended complaints in all three lawsuits on November 1, 2017 alleging that the net worth sweep dividend provisions of the senior preferred stock that were implemented pursuant to the August 2012 amendments nullified certain of the shareholders' rights, particularly the right to receive dividends. Plaintiffs seek unspecified damages, equitable and injunctive relief, and costs and expenses, including attorneys' fees. Plaintiffs in the class action seek to represent several classes of preferred and/or common shareholders of Fannie Mae and/or Freddie Mac who held stock as of the public announcement of the August 2012 amendments. On September 28, 2018, the court dismissed all of the plaintiffs' claims except for their claims for breach of an implied covenant of good faith and fair dealing.

Given the stage of these lawsuits, the substantial and novel legal questions that remain, and our substantial defenses, we are currently unable to estimate the reasonably possible loss or range of loss arising from this litigation.

Unconditional Purchase and Lease Commitments

We have unconditional commitments related to the purchase of loans and mortgage-related securities. These include both on- and off-balance sheet commitments. A portion of these have been recorded as derivatives in our consolidated balance sheets.

We lease certain premises and equipment under agreements that expire at various dates through August 31, 2037. Some of these leases provide for payment by the lessee of property taxes, insurance premiums, cost of maintenance and other costs. Rental expenses for operating leases were $94 million, $95 million and $100 million for the years ended December 31, 2020, 2019 and 2018, respectively.

The following table summarizes by remaining maturity, non-cancelable future commitments related to loan and mortgage purchases, operating leases and other agreements.

	As of December 31, 2020		
	Loans and Mortgage-Related Securities(1)	Operating Leases(2)	Other(3)
	(Dollars in millions)		
2021	$ 189,259	$ 55	$ 130
2022	—	66	83
2023	—	79	85
2024	—	81	5
2025	—	82	—
Thereafter	—	876	—
Total	$ 189,259	$ 1,239	$ 303

(1) Primarily includes mortgage commitment derivatives.

(2) Includes amounts related to office buildings and equipment leases.

(3) Includes purchase commitments for certain telecommunications services, computer software and services, and other agreements and commitments.

17. Selected Quarterly Financial Information (Unaudited)

The consolidated statements of operations for the quarterly periods in 2020 and 2019 are unaudited and in the opinion of management include all adjustments, consisting of normal recurring adjustments, necessary for a fair presentation of our consolidated statements of operations. Certain prior-period amounts have been reclassified to conform to the current-period presentation. The operating results for the interim periods are not necessarily indicative of the operating results to be expected for a full year or for other interim periods.

	For the 2020 Quarter Ended			
	March 31	June 30	September 30	December 31
	(Dollars and shares in millions, except per share amounts)			
Interest income:				
Trading securities	$ 316	$ 219	$ 177	$ 162
Available-for-sale securities	31	26	19	22
Mortgage loans	28,938	27,007	25,810	24,561
Federal funds sold and securities purchased under agreements to resell or similar arrangements	107	14	14	11
Other	34	25	33	43
Total interest income	29,426	27,291	26,053	24,799
Interest expense:				
Short-term debt	(102)	(54)	(19)	(7)
Long-term debt	(23,977)	(21,460)	(19,378)	(17,706)
Total interest expense	(24,079)	(21,514)	(19,397)	(17,713)
Net interest income	5,347	5,777	6,656	7,086
Benefit (provision) for credit losses	(2,583)	(12)	501	1,416
Net interest income after benefit for credit losses	2,764	5,765	7,157	8,502
Investment gains (losses) , net	(158)	149	653	263
Fair value losses, net	(276)	(1,018)	(327)	(880)
Fee and other income	120	90	93	159
Non-interest income (loss)	(314)	(779)	419	(458)
Administrative expenses:				
Salaries and employee benefits	(393)	(382)	(386)	(393)
Professional services	(212)	(231)	(230)	(248)
Other administrative expenses	(144)	(141)	(146)	(162)
Total administrative expenses	(749)	(754)	(762)	(803)
Foreclosed property expense	(80)	(10)	(71)	(16)
Temporary Payroll Tax Cut Continuation Act of 2011 (“TCCA”) fees	(637)	(660)	(679)	(697)
Credit enhancement expense	(376)	(360)	(325)	(300)
Change in expected credit enhancement recoveries	188	273	(48)	(180)
Other expenses, net	(218)	(261)	(313)	(339)
Total expenses	(1,872)	(1,772)	(2,198)	(2,335)
Income before federal income taxes	578	3,214	5,378	5,709
Provision for federal income taxes	(117)	(669)	(1,149)	(1,139)
Net income	461	2,545	4,229	4,570
Dividends distributed or amounts attributable to senior preferred stock	(476)	(2,532)	(4,216)	(4,566)
Net income (loss) attributable to common stockholders	$ (15)	$ 13	$ 13	$ 4
Earnings per share:				
Basic	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Diluted	0.00	0.00	0.00	0.00
Weighted-average common shares outstanding:				
Basic	5,867	5,867	5,867	5,867
Diluted	5,867	5,893	5,893	5,893

	For the 2019 Quarter Ended			
	March 31	June 30	September 30	December 31
	(Dollars and shares in millions, except per share amounts)			
Interest income:				
Trading securities	$ 427	$ 432	$ 418	$ 350
Available-for-sale securities	53	45	40	37
Mortgage loans	29,862	29,511	29,072	28,929
Federal funds sold and securities purchased under agreements to resell or similar arrangements	263	257	178	145
Other	32	41	47	43
Total interest income	30,637	30,286	29,755	29,504
Interest expense:				
Short-term debt	(125)	(119)	(125)	(132)
Long-term debt	(25,716)	(24,940)	(24,282)	(23,450)
Total interest expense	(25,841)	(25,059)	(24,407)	(23,582)
Net interest income	4,796	5,227	5,348	5,922
Benefit for credit losses	650	1,225	1,857	279
Net interest income after benefit for credit losses	5,446	6,452	7,205	6,201
Investment gains, net	133	461	253	923
Fair value gains (losses), net	(831)	(754)	(713)	84
Fee and other income	134	113	188	131
Non-interest income (loss)	(564)	(180)	(272)	1,138
Administrative expenses:				
Salaries and employee benefits	(386)	(376)	(361)	(363)
Professional services	(225)	(233)	(241)	(268)
Other administrative expenses	(133)	(135)	(147)	(155)
Total administrative expenses	(744)	(744)	(749)	(786)
Foreclosed property expense	(140)	(128)	(96)	(151)
TCCA fees	(593)	(600)	(613)	(626)
Credit enhancement expense	(216)	(276)	(290)	(352)
Other expenses, net	(162)	(203)	(186)	(194)
Total expenses	(1,855)	(1,951)	(1,934)	(2,109)
Income before federal income taxes	3,027	4,321	4,999	5,230
Provision for federal income taxes	(627)	(889)	(1,036)	(865)
Net income	2,400	3,432	3,963	4,365
Dividends distributed or amounts attributable to senior preferred stock	(2,361)	(3,365)	(3,977)	(4,266)
Net income (loss) attributable to common stockholders	$ 39	$ 67	$ (14)	$ 99
Earnings per share:				
Basic	$ 0.01	$ 0.01	$ 0.00	$ 0.02
Diluted	0.01	0.01	0.00	0.02
Weighted-average common shares outstanding:				
Basic	5,762	5,762	5,762	5,762
Diluted	5,893	5,893	5,762	5,893

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