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

FORM 10-K

(Mark One)

☑ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the fiscal year ended December 31, 2019 OR □ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the transition period from Commission File Number: 1-13991 MFA FINANCIAL, INC. (Exact name of registrant as specified in its charter) 13-3974868 Maryland (State or other jurisdiction of (I.R.S. Employer Identification No.) incorporation or organization) 350 Park Avenue, 20th Floor 10022 New York New York (Address of principal executive offices) (Zip Code) (212) 207-6400 (Registrant's telephone number, including area code) Not Applicable (Former name, former address and former fiscal year, if changed since last period) Securities registered pursuant to Section 12(b) of the Act: **Title of Each Class** Trading Symbol(s) Name of Each Exchange on Which Registered Common Stock, par value \$0.01 per share MFA New York Stock Exchange 7.50% Series B Cumulative Redeemable New York Stock Exchange Preferred Stock, par value \$0.01 per share MFA/PB MFO 8.00% Senior Notes due 2042 New York Stock Exchange Securities registered pursuant to Section 12(g) of the Act: None Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes 🗵 No 🗖 Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes 🗆 No 🗵 Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ⊠ No □ Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T 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. (Check one): Large accelerated filer X Accelerated filer Non-accelerated filer Smaller reporting company П 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. \square

DOCUMENTS INCORPORATED BY REFERENCE

price of our common stock on such date as reported on the New York Stock Exchange.

On February 14, 2020, the registrant had a total of 453,114,714 shares of Common Stock outstanding.

Portions of the registrant's proxy statement to be filed with the Securities and Exchange Commission in connection with the Annual Meeting of Stockholders scheduled to be held on or about May 19, 2020, are incorporated by reference into Part III of this Annual Report on Form 10-K.

On June 28, 2019, the aggregate market value of the registrant's common stock held by non-affiliates of the registrant was \$3.2 billion based on the closing sales

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

MFA FINANCIAL, INC.

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In this Annual Report on Form 10-K, references to "we," "us," "our" or "the Company" refer to MFA Financial, Inc. and its subsidiaries unless specifically stated otherwise or the context otherwise indicates. The following defines certain of the commonly used terms in this Annual Report on Form 10-K: MBS generally refers to mortgage-backed securities secured by pools of residential mortgage loans; Agency MBS refers to MBS that are issued or guaranteed by a federally chartered corporation, such as the Federal National Mortgage Association ("Fannie Mae") or the Federal Home Loan Mortgage Corporation ("Freddie Mac"), or an agency of the U.S. Government, such as the Government National Mortgage Association ("Ginnie Mae"); Non-Agency MBS refers to MBS that are not guaranteed by any agency of the U.S. Government or any federally chartered corporation and include (i) Legacy Non-Agency MBS, which are MBS issued prior to 2008, and (ii) RPL/NPL MBS, which refers to MBS backed primarily by securitized re-performing and non-performing loans and are generally structured such that the coupon increases from 300 - 400 basis points at 36 - 48 months from issuance or sooner. Hybrids refer to hybrid mortgage loans that have interest rates that are fixed for a specified period of time and, thereafter, generally adjust annually to an increment over a specified interest rate index; ARMs refer to adjustable-rate mortgage loans which have interest rates that reset annually or more frequently; CRT securities refer to credit risk transfer securities, that are debt obligations issued by or sponsored by Fannie Mae and Freddie Mac; and MSR-related assets refer to certain term notes backed directly or indirectly by mortgage servicing rights or loans to certain entities that are generally secured by cash flows generated by mortgage servicing rights and other unencumbered assets owned by the borrower.

CAUTIONARY NOTE REGARDING FORWARD LOOKING STATEMENTS

This Annual Report on Form 10-K includes forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, which are subject to risks and uncertainties. The forward-looking statements contain words such as "will," "believe," "expect," "anticipate," "estimate," "plan," "continue," "intend," "should," "could," "would," "may" or similar expressions.

These forward-looking statements include information about possible or assumed future results with respect to our business, financial condition, liquidity, results of operations, plans and objectives. Statements regarding the following subjects, among others, may be forward-looking: changes in interest rates and the market (i.e., fair) value of our MBS, residential whole loans, CRT securities and other assets; changes in the prepayment rates on residential mortgage assets, an increase of which could result in a reduction of the yield on certain investments in its portfolio and could require MFA to reinvest the proceeds received by it as a result of such prepayments in investments with lower coupons, while a decrease in which could result in an increase in the interest rate duration of certain investments in MFA's portfolio making their valuation more sensitive to changes in interest rates and could result in lower forecasted cash flows or, in certain circumstances, impairment on certain Legacy Non-Agency MBS purchased at a discount; credit risks underlying our assets, including changes in the default rates and management's assumptions regarding default rates on the mortgage loans securing our Non-Agency MBS and relating to our residential whole loan portfolio; our ability to borrow to finance our assets and the terms, including the cost, maturity and other terms, of any such borrowings; implementation of or changes in government regulations or programs affecting our business; our estimates regarding taxable income the actual amount of which is dependent on a number of factors, including, but not limited to, changes in the amount of interest income and financing costs, the method elected by us to accrete the market discount on Non-Agency MBS and residential whole loans and the extent of prepayments, realized losses and changes in the composition of our Agency MBS, Non-Agency MBS and residential whole loan portfolios that may occur during the applicable tax period, including gain or loss on any MBS disposals and whole loan modifications, foreclosures and liquidations; the timing and amount of distributions to stockholders, which are declared and paid at the discretion of our Board and will depend on, among other things, our taxable income, our financial results and overall financial condition and liquidity, maintenance of our REIT qualification and such other factors as the Board deems relevant; our ability to maintain our qualification as a REIT for federal income tax purposes; our ability to maintain our exemption from registration under the Investment Company Act of 1940, as amended (or the Investment Company Act), including statements regarding the concept release issued by the SEC relating to interpretive issues under the Investment Company Act with respect to the status under the Investment Company Act of certain companies that are engaged in the business of acquiring mortgages and mortgage-related interests; our ability to continue growing our residential whole loan portfolio, which is dependent on, among other things, the supply of loans offered for sale in the market; expected returns on MFA's investments in nonperforming residential whole loans (or NPLs), which are affected by, among other things, the length of time required to foreclose upon, sell, liquidate or otherwise reach a resolution of the property underlying the NPL, home price values, amounts advanced to carry the asset (e.g., taxes, insurance, maintenance expenses, etc. on the underlying property) and the amount ultimately realized upon resolution of the asset; targeted or expected returns on our investments in Purchased Performing Loans, the performance of which is, similar to our other mortgage loan investments, subject to, among other things, differences in prepayment risk, credit risk and financing cost associated with such investments; risks associated with MFA's investments in MSR-related assets, including servicing, regulatory and economic risks, risks associated with our investments in loan originators and risks associated with investing in real estate assets, including changes in business conditions and the general economy. These and other risks, uncertainties and factors, including those described in the annual, quarterly and current reports that we file with the SEC, could cause our actual results to differ materially from those projected in any forward-looking statements we make. All forward-looking statements are based on beliefs, assumptions and expectations of our future performance, taking into account all information currently available. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date on which they are made. New risks and uncertainties arise over time and it is not possible to predict those events or how they may affect us. Except as required by law, we are not obligated to, and do not intend to, update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. (See Part I, Item 1A. "Risk Factors" of this Annual Report on Form 10-K)

Item 1. Business.

GENERAL

We are an internally-managed real estate investment trust (or REIT) primarily engaged in the business of investing, on a leveraged basis, in residential mortgage assets. Our investments include principally the following;

- Residential whole loans, including Purchased Performing Loans, Purchased Credit Impaired and non-performing loans.
 We also own residential real estate (or REO) that is typically acquired in connection with our loan investment activities;
- Residential mortgage securities including Non-Agency MBS, Agency MBS and CRT securities; and
- MSR-related assets, which include term notes backed directly or indirectly by MSRs and loans to provide financing to
 entities that originate residential mortgage loans and own the related MSRs.

Our principal business objective is to deliver shareholder value through the generation of distributable income and through asset performance linked to residential mortgage credit fundamentals. We selectively invest in residential mortgage assets with a focus on credit analysis, projected prepayment rates, interest rate sensitivity and expected return.

We were incorporated in Maryland on July 24, 1997 and began operations on April 10, 1998. We have elected to be treated as a REIT for U.S. federal income tax purposes. In order to maintain our qualification as a REIT, we must comply with a number of requirements under federal tax law, including that we must distribute at least 90% of our annual REIT taxable income to our stockholders. We have elected to treat certain of our subsidiaries as taxable REIT subsidiaries (or TRS). In general, a TRS may hold assets and engage in activities that a REIT or qualified REIT subsidiary (or QRS) cannot hold or engage in directly and generally may engage in any real estate or non-real estate related business.

We are a holding company and conduct our real estate finance businesses primarily through wholly-owned subsidiaries, so as to maintain an exemption from registration under the Investment Company Act of 1940, as amended (or the Investment Company Act) by ensuring that less than 40% of the value of our total assets, exclusive of U.S. Government securities and cash items (which we refer to as our adjusted total assets for Investment Company Act purposes), on an unconsolidated basis, consist of "investment securities" as defined by the Investment Company Act. We refer to this test as the "40% Test."

INVESTMENT STRATEGY

We primarily invest, through our various subsidiaries, in residential mortgage assets. While we continue to selectively acquire residential mortgage securities, these investments comprised less than 40% of our total assets at the end of 2019 (down from over 50% at December 31, 2018). This is primarily the result of our increased investments in residential whole loans in recent years, as proceeds received from portfolio run-off from Agency and Non-Agency MBS and capital raised in the market have been deployed primarily in loan investments. Consequently, at the end of 2019, residential whole loan investments comprised approximately 55% of our assets and more than 60% of our allocated net equity. During 2020, we expect to continue to seek investment opportunities primarily focused on residential whole loans and selectively in residential mortgage securities and MSR-related assets as market opportunities arise. We expect that we will moderately increase leverage to support further asset growth in 2020, both through repurchase agreement financing and securitization.

Residential Whole Loans

During 2019, we significantly increased our residential whole loan portfolio primarily through acquisitions or commitments to acquire Purchased Performing Loans. Such loans include: (i) loans to finance (or refinance) one-to four-family residential properties that are not considered to meet the definition of a "Qualified Mortgage" in accordance with guidelines adopted by the Consumer Financial Protection Bureau (or Non-QM loans), (ii) short-term business purpose loans collateralized by residential properties made to non-occupant borrowers who intend to rehabilitate and sell the property for a profit (or Rehabilitation loans or Fix and Flip loans), (iii) loans to finance (or refinance) non-owner occupied one-to four-family residential properties that are rented to one or more tenants (or Single-family rental loans), and (iv) previously originated loans secured by residential real estate that is generally owner occupied (or Seasoned performing loans). The majority of our Purchased Performing Loans are Hybrids or, in the case of Rehabilitation loans, are expected to have relatively short duration. Consequently, we believe that our Purchased Performing Loans acquired to date will exhibit relatively lower interest rate sensitivity than conventional fixed-rate residential whole loans. Approximately 80% of our Purchased Performing Loans at December 31, 2019 were acquired on a servicing retained basis (i.e., the sellers of such loans retained the right to service the loans sold).

In addition, during 2019, we continued to purchase packages of non-performing residential whole loans and also maintained our portfolio of Purchased Credit Impaired Loans. Purchased Credit Impaired Loans are typically characterized by borrowers who have previously experienced payment delinquencies and the amount owed may exceed the value of the property pledged as collateral. The majority of these loans are acquired at purchase prices that are discounted (often substantially so) to their contractual loan balance to reflect the impaired credit history of the borrower, the loan-to-value ratio (or LTV) of the loan and the coupon rate. Non-performing loans are typically characterized by borrowers who have defaulted on their obligations and/or have payment delinquencies of 60 days or more at the time we acquire the loan. The majority of these loans are also acquired at purchase prices that are discounted (often substantially so) to the contractual loan balance that reflects primarily the non-performing nature of the loan. Typically, this purchase price is a discount to the expected value of the collateral securing the loan, such value to be realized after foreclosure and liquidation of the property. The majority of our non-performing and Purchased Credit Impaired Loans were purchased on a servicing-released basis (i.e., the sellers of such loans transferred the right to service the loans as part of the sale). We do not directly service any of these loans and have contracted with loan servicing companies to perform this function on our behalf. These companies were selected to leverage their expertise in working with delinquent borrowers in an effort to cure delinquencies through, among other things, loan modification and third-party refinancing. To the extent these efforts are successful, we believe our investments in Purchased Credit Impaired and non-performing loans will yield attractive returns. In addition, to the extent that it is not possible to achieve a successful outcome for a particular borrower and the real property collateral must be foreclosed on and liquidated, we believe that the discounted purchase price at which the asset was acquired provides us with a level of protection against financial loss. Given the nature of the increase in the size of our residential whole loan investments, the balances of REO property also increased during 2019, and this may continue going forward as we continue to manage nonperforming loans in our portfolio.

Residential Mortgage Securities

Our Legacy Non-Agency MBS have been acquired primarily at discounts to face/par value, which we believe serves to mitigate our exposure to credit risk. A portion of the purchase discount on substantially all of our Legacy Non-Agency MBS is designated as a non-accretable purchase discount (also referred to hereafter as Credit Reserve), which effectively mitigates our risk of loss on the mortgages collateralizing such MBS, and is not expected to be accreted into interest income. The portion of the purchase discount that is designated as accretable discount is accreted into interest income over the life of the security. The mortgages collateralizing our Legacy Non-Agency MBS consist primarily of ARMs, 30-year fixed-rate mortgages and Hybrids. Legacy Non-Agency ARMs and Hybrids typically exhibit reduced interest rate sensitivity (as compared to fixed-rate Legacy Non-Agency MBS) due to their interest rate adjustments (similar to Agency ARMs and Hybrids). However, yields on Legacy Non-Agency MBS, unlike Agency MBS, also exhibit sensitivity to changes in credit performance. If credit performance improves, the Credit Reserve may be decreased (and accretable discount increased), resulting in a higher yield over the remaining life of the security. Similarly, deteriorating credit performance could increase the Credit Reserve and decrease the yield over the remaining life of the security, or impairment could result. To the extent that higher interest rates in the future are indicative of an improving economy, better employment data and/or higher home prices, it is possible that these factors will improve the credit performance of Legacy Non-Agency MBS and therefore mitigate the interest rate sensitivity of these securities. Due to their strong performance over the past several years, and resulting increased demand for these investments, returns available on Legacy Non-Agency MBS have been lower than for other residential mortgage assets. Consequently, in recent years we have managed this portfolio through opportunistic sales of certain Legacy Non-Agency MBS based on an assessment of expected future cash flows and prevailing market pricing.

Our RPL/NPL MBS were purchased primarily at prices around par and represent the senior and mezzanine tranches of the related securitizations. These securities are generally structured with significant credit enhancement (typically approximately 50% for the most senior tranches and approximately 25-35% for mezzanine tranches) and the subordinate tranches absorb all credit losses (until those tranches are extinguished) and typically receive no cash flow (interest or principal) until the senior tranches are paid off. Prior to purchase, we analyze the deal structure and the credit risk of the underlying loans. Subsequent to purchase, the ongoing credit risk associated with the deal is evaluated by analyzing the extent to which actual credit losses occur that result in a reduction in the amount of subordination supporting our bond. Based on the recent performance of the collateral underlying our RPL/NPL MBS and current subordination levels, we do not believe that we are currently exposed to significant risk of credit loss on these investments. In addition, the structures of these investments generally contain a contractual coupon step-up feature where the coupon increases from 300 - 400 basis points at 36 - 48 months or sooner. We expect that the combination of the priority cash flow and the step-up feature associated with these investments will result in their exhibiting short average lives and, accordingly, reduced interest rate sensitivity.

The mortgages collateralizing our Agency MBS portfolio are predominantly Hybrids, 15 and 30-year fixed-rate mortgages and ARMs. Our Agency MBS were selected to generate attractive returns relative to interest rate and prepayment risks. The Hybrid loans collateralizing our MBS typically have initial fixed-rate periods at origination of three, five, seven or ten years. At the end of this fixed-rate period, these mortgages become adjustable and their interest rates adjust based on the London Interbank

Offered Rate (or LIBOR) or in some cases the one-year constant maturity treasury rate (or CMT). These interest rate adjustments are typically limited by periodic caps (which limit the amount of the interest rate change from the prior rate) and lifetime caps (which are maximum interest rates permitted for the life of the mortgage). As coupons earned on Agency Hybrids and ARMs adjust over time as interest rates change, the fair values of these assets are generally less sensitive to changes in interest rates than are fixed-rate MBS. In general, Hybrid loans and ARMs have 30-year final maturities and they amortize over this 30-year period. While the coupons on 15-year fixed-rate mortgages do not adjust, they amortize according to a 15-year amortization schedule and have a 15-year final maturity. Due to their accelerated amortization and shorter final maturity, these assets are generally less sensitive to changes in long-term interest rates as compared to fixed-rate mortgages with a longer final maturity, such as 30-year mortgages. During 2019, our Hybrid and 15-year Agency MBS continued to run off. We also sold approximately \$54 million of lower yielding 15-year Agency MBS and \$307 million of 30-Year Agency MBS during the year.

CRT securities are debt obligations issued by or sponsored by Fannie Mae and Freddie Mac. The coupon payments on CRT securities are paid by the issuer and the principal payments received are dependent on the performance of loans in either a reference pool or an actual pool of loans. As an investor in a CRT security, we may incur a principal loss if the performance of the actual or reference pool loans results in either an actual or calculated loss that exceeds the credit enhancement on the security owned by us. We assess the credit risk associated with our investments in CRT securities by assessing the current and expected future performance of the associated loan pool. During 2019, we have reduced our portfolio by taking advantage of market opportunities to rotate out of seasoned higher dollar priced securities, resulting in realized gains, and reinvesting the sales proceeds in newer issue securities at prices close to par.

MSR-Related Assets

Although we do not own or otherwise invest directly in MSRs, we have made investments in term notes backed directly or indirectly by MSRs and loans to finance entities that originate residential mortgage loans and own the related MSRs. In the case of term notes backed by MSR-related collateral, we believe the credit risk on these investments is mitigated by structural credit support in the form of over-collateralization as well as a corporate guarantee from the ultimate parent or sponsor of the related special purpose vehicle issuing the note, that is intended to provide for payment of interest and principal to the holders of the term notes should cash flows generated by the underlying MSRs be insufficient. Credit risk on MSR-related corporate loans is mitigated as the loans are secured by MSRs as well as certain other unencumbered assets owned by the borrower.

FINANCING STRATEGY

Our financing strategy is designed to increase the size of our investment portfolio by borrowing against a substantial portion of the market value of the assets in our portfolio. We primarily use repurchase agreements to finance our holdings of residential mortgage assets. We enter into interest rate derivatives to hedge the interest rate risk associated with a portion of our repurchase agreement borrowings. We have also securitized both re-performing and non-performing residential whole loans as part of our financing strategy. Going forward, in connection with our current and any future investment in residential whole loans, we expect that our financing strategy will include the use of additional loan securitization transactions or the use of other forms of structured financing.

Repurchase agreements, although legally structured as sale and repurchase transactions, are financing contracts (i.e., borrowings) under which we pledge our residential mortgage assets as collateral to secure loans with repurchase agreement counterparties (i.e., lenders). Repurchase agreements involve the transfer of the pledged collateral to a lender at an agreed upon price in exchange for such lender's simultaneous agreement to return the same asset back to the borrower at a future date (i.e., the maturity of the borrowing) at a price that is higher than the original sales price. The difference between the sale price that we receive and the repurchase price that we pay represents interest paid to the lender. Our cost of borrowings under repurchase agreements is generally LIBOR based. Under our repurchase agreements, we pledge our assets as collateral to secure the borrowing, in an amount equal to a specified percentage of the fair value of the pledged collateral, while we retain beneficial ownership of the pledged collateral. At the maturity of a repurchase financing, unless the repurchase financing is renewed with the same counterparty, we are required to repay the loan including any accrued interest and concurrently receive back our pledged collateral from the lender. With the consent of the lender, we may renew a repurchase financing at the then prevailing financing terms. Margin calls, whereby a lender requires that we pledge additional assets or cash as collateral to secure borrowings under our repurchase financing with such lender, are routinely experienced by us when the value of the assets pledged as collateral declines as a result of principal amortization and prepayments or due to changes in market interest rates, spreads or other market conditions. We also may make margin calls on counterparties when collateral values increase.

In order to reduce our exposure to counterparty-related risk, we generally seek to enter into repurchase agreements and other financing arrangements, and derivatives, with a diversified group of financial institutions. At December 31, 2019, we had outstanding balances under repurchase agreements with 28 separate lenders.

In addition to repurchase agreements, we may also use other sources of funding in the future to finance our residential mortgage assets, including, but not limited to, loan securitization and other types of collateralized borrowings, loan agreements, lines of credit or the issuance of debt and/or equity securities.

COMPETITION

We believe that our principal competitors in the business of acquiring and holding residential mortgage assets of the types in which we invest are financial institutions, such as banks, specialty finance companies, insurance companies, institutional investors, including mutual funds and pension funds, hedge funds and other mortgage REITs, as well as the U.S. Federal Reserve (or Federal Reserve) as part of its monetary policy activities. Some of these entities may not be subject to the same regulatory constraints (i.e., REIT compliance or maintaining an exemption under the Investment Company Act) as we are. In addition, many of these entities have greater financial resources and access to capital than we have. The existence of these entities, as well as the possibility of additional entities forming in the future, may increase the competition for the acquisition of residential mortgage assets, resulting in higher prices and lower yields on such assets.

EMPLOYEES

At December 31, 2019, we had 65 full-time and one part-time employee.

AVAILABLE INFORMATION

We maintain a website at www.mfafinancial.com. We make available, free of charge, on our website our (a) Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K (including any amendments thereto), proxy statements and other information (or, collectively, the Company Documents) filed with, or furnished to, the Securities and Exchange Commission (or SEC), as soon as reasonably practicable after such documents are so filed or furnished, (b) Corporate Governance Guidelines, (c) Code of Business Conduct and Ethics and (d) written charters of the Audit Committee, Compensation Committee and Nominating and Corporate Governance Committee of our Board of Directors (or our Board). Our Company Documents filed with, or furnished to, the SEC are also available at the SEC's website at www.sec.gov. We also provide copies of the foregoing materials, free of charge, to stockholders who request them. Requests should be directed to the attention of our General Counsel at MFA Financial, Inc., 350 Park Avenue, 20th Floor, New York, New York 10022.

Item 1A. Risk Factors.

This section highlights specific risks that could affect our Company and its business. Readers should carefully consider each of the following risks and all of the other information set forth in this Annual Report on Form 10-K. Based on the information currently known to us, we believe the following information identifies the most significant risk factors affecting our Company. However, the risks and uncertainties we face are not limited to those described below. Additional risks and uncertainties not presently known to us or that we currently believe to be immaterial may also adversely affect our business.

If any of the following risks and uncertainties develops into actual events or if the circumstances described in the risks and uncertainties occur or continue to occur, these events or circumstances could have a material adverse effect on our business, prospects, financial condition, results of operations, cash flows or liquidity. These events could also have a negative effect on the trading price of our securities.

General

The results of our business operations are affected by a number of factors, many of which are beyond our control, and primarily depend on, among other things, the level of our net interest income, the market value of our assets and collateral, which is driven by numerous factors, including the supply and demand for residential mortgage assets in the marketplace, our ability to source new investments at appropriate yields, the terms and availability of adequate financing, general economic and real estate conditions (both on a national and local level), the impact of government actions, especially in the real estate and mortgage sector, our competition, and the credit performance of our credit sensitive residential mortgage assets. Our net interest income varies primarily as a result of changes in interest rates, the slope of the yield curve (i.e., the differential between long-term and short-term interest rates), market credit spreads, borrowing costs (i.e., our interest expense), delinquencies, defaults and prepayment speeds on our investments, the behavior of which involves various risks and uncertainties. Interest rates and conditional prepayment rates (or CPRs) (which are a measure the amount of unscheduled principal prepayment on a loan or security) vary according to the type of investment, conditions in the financial markets, competition and other factors, none of which can be predicted with any certainty. Our operating results also depend upon our ability to effectively manage the risks associated with our business operations, including interest rate, prepayment, financing, liquidity, and credit risks, while maintaining our qualification as a REIT.

We may change our investment strategy, operating policies and/or asset allocations without stockholder consent, which could materially adversely affect our results of operations.

We may change our investment strategy, operating policies and/or asset allocation with respect to investments, acquisitions, leverage, growth, operations, indebtedness, capitalization and distributions at any time without the consent of our stockholders which would result in an investment portfolio with a different risk profile. A change in our investment strategy may increase our exposure to various risks, including but not limited to: interest rate risk, credit risk, default risk, liquidity risk, financing risk, legal or regulatory risk, and/or real estate market fluctuations. Furthermore, a change in our asset allocation could result in our making investments in asset categories different from those of our historical investments. For example, in recent years, we have made new investments principally in residential whole loans, RPL/NPL MBS, CRT securities, MSR-related assets and fixed rate 30-Year Agency MBS. These changes could materially adversely affect our financial condition, results of operations, the market price of our common stock or our ability to pay dividends or make distributions.

Credit and Other Risks Related to Our Investments

Our investments in residential whole loans, residential mortgage securities and MSR-related assets involve credit risk, which could materially adversely affect our results of operations.

Investors in residential mortgage assets assume the risk that the related borrowers may default on their obligations to make full and timely payments of principal and interest. Under our investment policy, we may invest in residential whole loans, residential mortgage securities, MSR-related assets and other investment assets of that may be considered to be lower credit quality. In general, these investments are less exposed to credit risk than Agency MBS because the former are not guaranteed as to principal or interest by the U.S. Government, any federal agency or any federally chartered corporation. Higher-than-expected rates of default and/or higher-than-expected loss severities on the mortgages underlying these investments could adversely affect the value of these assets. Accordingly, defaults in the payment of principal and/or interest on our residential whole loans, residential mortgage securities, MSR-related assets and other investment assets of less-than-high credit quality could result in our incurring losses of income from, and/or losses in market value relating to, these assets, which could materially adversely affect our results of operations.

Our investments in residential whole loans involve credit risks, some of which are different from those of our Non-Agency MBS, which could materially adversely affect our results of operations.

Our portfolio of residential whole loans is our largest asset class as of the end of 2019, and represented approximately 55% of our total assets as of December 31, 2019. We expect that our investment portfolio in residential whole loans will continue to increase during 2020. As a holder of residential whole loans, we are subject to the risk that the related borrowers may default or have defaulted on their obligations to make full and timely payments of principal and interest. A number of factors impact a borrower's ability to repay including, among other things, changes in employment status, changes in interest rates or the availability of credit, and changes in real estate values. In addition to the credit risk associated with these assets, residential whole loans are less liquid than certain of our other credit sensitive assets, such as Non-Agency MBS, which may make them more difficult to dispose of if the need or desire arises. If actual results are different from our assumptions in determining the prices paid to acquire such loans, particularly if the market value of the underlying properties decreases significantly subsequent to purchase, we may incur significant losses, which could materially adversely affect our results of operations.

Our investments are subject to changes in credit spreads and other risks.

Credit spreads, which at times can be very volatile and react to various macro-economic events or conditions, measure the additional yield demanded on securities by the market based on their perceived credit relative to a specific benchmark. Fixed rate securities are valued based on a market credit spread over the rate payable on fixed rate U.S. Treasuries of like maturity. Floating rate securities are generally valued based on a market credit spread over LIBOR (which is under reform and may be replaced). Excessive supply of these securities combined with reduced demand will generally cause the market to require a higher yield on these securities, resulting in the use of a higher, or "wider," spread over the benchmark rate to value such securities. Under such conditions, the value of our MBS portfolio would tend to decline. Conversely, if the spread used to value such securities were to decrease, or "tighten," the value of our MBS portfolio would tend to increase. In addition, MBS valuations are subject to other financial risks, including mortgage basis spread risk. In periods of market volatility, changes in credit spreads and mortgage basis may result in changes in the value of MBS not being equally offset by changes in the value of derivative contracts used to manage portfolio valuation risks arising due to changes in interest rates. Such changes in the market value of our investments may affect our net equity, net income or cash flow directly through their impact on portfolio unrealized gains or losses, and therefore our ability to realize gains on such investments, or indirectly through their impact on our ability to borrow and access capital.

A significant portion of our residential whole loans and residential mortgage securities are secured by properties in a small number of geographic areas and may be disproportionately affected by economic or housing downturns, our competition, natural disasters, terrorist events, regulatory changes, adverse climate changes or other adverse events specific to those markets.

A significant number of the mortgages underlying our residential whole loans and residential mortgage securities are concentrated in certain geographic areas. For example, we have significant exposure in California, New York, Florida, New Jersey and Maryland. (For a discussion of the percentage of these assets in these states, see "Credit Risk" included under Part II, Item 7A "Quantitative and Qualitative Disclosures About Market Risk" in this Annual Report on Form 10-K.) Certain markets within these states (particularly in California and Florida) have experienced significant decreases in residential home values from time to time. Any event that adversely affects the economy or real estate market in any of these states could have a disproportionately adverse effect on our residential whole loan and residential mortgage securities. In general, any material decline in the economy or significant problems in a particular real estate market would likely cause a decline in the value of residential properties securing the mortgages in that market, thereby increasing the risk of delinquency, default and foreclosure of residential whole loans and the loans underlying our residential mortgage securities and the risk of loss upon liquidation of these assets. This could, in turn, have a material adverse effect on our credit loss experience on residential mortgage investments in the affected market if higher-than-expected rates of default and/or higher-than-expected loss severities on our investments in residential whole loans and residential mortgage securities were to occur.

In addition, the occurrence of a natural disaster (such as an earthquake, tornado, hurricane, flood, mudslide or wildfires), terrorist attack or a significant adverse climate change, including potential rises in sea-levels, may cause a sudden decrease in the value of real estate in the area or areas affected and would likely reduce the value of the properties securing the mortgages collateralizing our residential whole loans or residential mortgage securities. Because certain natural disasters are not typically covered by the standard hazard insurance policies maintained by borrowers (such as hurricanes, earthquakes or certain flooding), or the proceeds payable for losses covered by any such policy are not sufficient to make the related repairs, the affected borrowers may have to pay for any repairs themselves. Under these circumstances, borrowers may decide not to repair the damaged property or may stop paying the mortgage, either of which could cause defaults and credit loss severities to increase.

Changes in governmental laws and regulations, fiscal policies, property taxes and zoning ordinances can also have a negative impact on property values, which could result in borrowers' deciding to stop paying their mortgages. This circumstance could cause defaults and loss severities to increase, thereby adversely impacting our results of operations.

We have investments in Non-Agency MBS collateralized by Alt A loans and may also have investments collateralized by subprime mortgage loans, which, due to lower underwriting standards, are subject to increased risk of losses.

We have certain investments in Non-Agency MBS backed by collateral pools containing mortgage loans that were originated under underwriting standards that were less strict than those used in underwriting "prime" mortgage loans. These lower standards permitted mortgage loans, often with LTV ratios in excess of 80%, to be made to borrowers having impaired credit histories, lower credit scores, higher debt-to-income ratios and/or unverified income. Difficult economic conditions, including increased interest rates and lower home prices, can result in Alt A and subprime mortgage loans having increased rates of delinquency, foreclosure, bankruptcy and loss, and are likely to otherwise experience delinquency, foreclosure, bankruptcy and loss rates that are higher, and that may be substantially higher, than those experienced by mortgage loans underwritten in a more traditional manner. Thus, because of higher delinquency rates and losses associated with Alt A and subprime mortgage loans, the performance of our Non-Agency MBS that are backed by these types of loans could be correspondingly adversely affected, which could materially adversely impact our results of operations, financial condition and business.

We are subject to counterparty risk and may be unable to seek indemnity or require counterparties to repurchase residential whole loans if they breach representations and warranties, which could cause us to suffer losses.

In connection with our residential whole loan investments, we typically enter into a loan purchase agreement, as buyer, of the loans from a seller. When we invest in certain mortgage loans, sellers may make representations and warranties about such loans that are very limited both in scope and duration. Residential mortgage loan purchase agreements may entitle the purchaser of the loans to seek indemnity or demand repurchase or substitution of the loans in the event the seller of the loans breaches a representation or warranty given to the purchaser. However, there can be no assurance that a mortgage loan purchase agreement will contain appropriate representations and warranties, that we or the trust that purchases the mortgage loans would be able to enforce a contractual right to repurchase or substitution, or that the seller of the loans will remain solvent or otherwise be able to honor its obligations under its mortgage loan purchase agreements. The inability to obtain or enforce an indemnity or require repurchase of a significant number of loans could require us to absorb the associated losses, and adversely affect our results of operations, financial condition and business.

The due diligence we undertake on potential investments may be limited and/or not reveal all of the risks associated with such investments and may not reveal other weaknesses in such assets, which could lead to losses.

Before making an investment, we typically conduct (either directly or using third parties) certain due diligence. There can be no assurance that we will conduct any specific level of due diligence, or that, among other things, our due diligence processes will uncover all relevant facts, which could result in losses on these assets to the extent we ultimately acquire them, which, in turn, could adversely affect our results of operations, financial condition and business.

We have experienced and may experience in the future increased volatility in our GAAP results of operations due in part to the increasing contribution to financial results of assets accounted for under the fair value option.

We have elected the fair value option accounting model for certain of our investments. Changes in the fair value of assets accounted for using the fair value option are recorded in our consolidated statements of operations each period, which may result in volatility in our financial results. There can be no assurance that such volatility in periodic financial results will not occur during 2020 or in future periods.

We have experienced, and may in the future experience, declines in the market value of certain of our investment securities resulting in our recording impairments, which have had, and may in the future have, an adverse effect on our results of operations and financial condition.

A decline in the market value of our residential mortgage securities that are accounted for as available-for-sale (or AFS) may require us to recognize impairment against such assets under GAAP. When the fair value of an AFS security is less than its amortized cost at the balance sheet date, the security is considered impaired. If we intend to sell an impaired security, or it is more likely than not that we will be required to sell the impaired security before any anticipated recovery, then we must recognize charges to earnings equal to the entire difference between the investment's amortized cost and its fair value at the balance sheet date. If we do not expect to sell an impaired security, only the portion of the impairment related to credit losses is recognized through charges to earnings with the remainder recognized through accumulated other comprehensive income/(loss) (or AOCI)

on our consolidated balance sheets. Impairments recognized through other comprehensive income/(loss) (or OCI) do not impact earnings. Following the recognition of an impairment through earnings, a valuation allowance will be established for the security. The determination as to the amount of credit impairment recognized in earnings is subjective, as such determination is based on factual information available at the time of assessment as well as on our estimates of the future performance and cash flow projections. As a result, the timing and amount of impairments recognized in earnings constitute material estimates that are susceptible to significant change.

The use of models in connection with the valuation of our assets subjects us to potential risks in the event that such models are incorrect, misleading or based on incomplete information.

As part of our risk management process, models may be used to evaluate, depending on the asset class, house price appreciation and depreciation by county or region, prepayment speeds and frequency, cost and timing of foreclosures, as well as other factors. Certain assumptions used as inputs to the models may be based on historical trends. These trends may not be indicative of future results. Furthermore, the assumptions underlying the models may prove to be inaccurate, causing the model output also to be incorrect. In the event models and data prove to be incorrect, misleading or incomplete, any decisions made in reliance thereon expose us to potential risks. For example, by relying on incorrect models and data, we may buy certain assets at prices that are too high, sell certain assets at prices that are too low or miss favorable opportunities altogether, which could have a material adverse impact on our business and growth prospects.

Valuations of some of our assets are subject to inherent uncertainty, may be based on estimates, may fluctuate over short periods of time and may differ from the values that would have been used if a ready market for these assets existed.

While the determination of the fair value of our investment assets generally takes into consideration valuations provided by third-party dealers and pricing services, the final determination of exit price fair values for our investment assets is based on our judgment, and such valuations may differ from those provided by third-party dealers and pricing services. Valuations of certain assets may be difficult to obtain or may not be reliable (particularly as related to residential whole loans, as discussed below). In general, dealers and pricing services heavily disclaim their valuations as such valuations are not intended to be binding bid prices. Additionally, dealers may claim to furnish valuations only as an accommodation and without special compensation, and so they may disclaim any and all liability arising out of any inaccuracy or incompleteness in valuations. Depending on the complexity and illiquidity of an asset, valuations of the same asset can vary substantially from one dealer or pricing service to another.

Our results of operations, financial condition and business could be materially adversely affected if our fair value determinations of these assets are materially higher than could actually be realized in the market.

Our investments in residential whole loans are difficult to value and are dependent upon the borrower's ability to service or refinance their debt. The inability of the borrower to do so could materially and adversely affect our liquidity and results of operations.

The difficulty in valuation is particularly significant with respect to our less liquid investments such as our re-performing loans (or RPLs) and non-performing loans (or NPLs). RPLs are loans on which a borrower was previously delinquent but has resumed repaying. Our ability to sell RPLs for a profit depends on the borrower continuing to make payments. An RPL could become a NPL, which could reduce our earnings. Our investments in residential whole loans may require us to engage in workout negotiations, restructuring and/or the possibility of foreclosure. These processes may be lengthy and expensive. If loans become REO, we, through a designated servicer that we retain, will have to manage these properties and may not be able to sell them. See the risk factor captioned "Our ability to sell REO on terms acceptable to us or at all may be limited."

We may work with our third-party servicers and seek to help a borrower to refinance an NPL or RPL to realize greater value from such loan. However, there may be impediments to executing a refinancing strategy for NPLs and RPLs. For example, many mortgage lenders have adjusted their loan programs and underwriting standards, which has reduced the availability of mortgage credit to prospective borrowers. This has resulted in reduced availability of financing alternatives for borrowers seeking to refinance their mortgage loans. In addition, the value of some borrowers' homes may have declined below the amount of the mortgage loans on such homes resulting in higher loan-to-value ratios, which has left the borrowers with insufficient equity in their homes to permit them to refinance. To the extent prevailing mortgage interest rates rise from their current low levels, these risks would be exacerbated. The effect of the above would likely serve to make the refinancing of NPLs and RPLs potentially more difficult and less profitable for us.

Mortgage loan modification and refinancing programs and future legislative action may materially adversely affect the value of, and the returns on, our MBS and residential whole loan investments.

The U.S. Government, through the Federal Reserve, the U.S. Treasury Department, the Federal Housing Administration (or the FHA), the Consumer Financial Protection Bureau (or CFPB), and other agencies have in the past implemented, and may in the future implement, a number of federal programs designed to assist homeowners and help them avoid residential mortgage loan foreclosures, reduce or forgive certain mortgage payments, or otherwise mitigate losses for homeowners. In addition, Fannie Mae and Freddie Mac implemented their Flex Modification foreclosure prevention program, developed at the direction of the Federal Housing Finance Agency (or FHFA). Federal loss mitigation programs, as well as proprietary loss mitigation programs offered by investors and servicers, may involve, among other things, the modification of mortgage loans to reduce the principal amount of the loans (through forbearance and/or forgiveness) and/or the rate of interest payable on the loans, or to extend the payment terms of the loans. Especially with respect to our Non-Agency MBS and residential whole loan investments, loan modifications with respect to a given underlying loan, including, but not limited to, those related to principal forgiveness and coupon reduction, could negatively impact the realized yields and cash flows on such investments. These loan modification programs, future legislative or regulatory actions, including possible amendments to the bankruptcy laws, that result in the modification of outstanding residential mortgage loans, as well as changes in the requirements necessary to qualify for refinancing mortgage loans with Fannie Mae, Freddie Mac or Ginnie Mae, may materially adversely affect the value of, and the returns on, these assets.

We may be adversely affected by risks affecting borrowers or the asset or property types in which certain of our investments may be concentrated at any given time, as well as from unfavorable changes in the related geographic regions.

We are not required to limit our assets in terms of geographic location, diversification or concentration, except that we concentrate in residential mortgage-related investments. Accordingly, our investment portfolio may be concentrated by geography, asset type, property type and/or borrower, increasing the risk of loss to us if the particular concentration in our portfolio is subject to greater risks or is undergoing adverse developments. In addition, adverse conditions in the areas where the properties securing or otherwise underlying our investments are located (including business layoffs or downsizing, industry slowdowns, changing demographics and other factors) and local real estate conditions (such as oversupply or reduced demand) may have an adverse effect on the value of our investments. A material decline in the demand for real estate in these areas may materially and adversely affect us. Lack of diversification can increase the correlation of non-performance and foreclosure risks to these investments.

Our investments in residential whole loans subject us to servicing-related risks, including those associated with foreclosure and liquidation.

We rely on third-party servicers to service and manage the mortgages underlying our residential whole loans. The ultimate returns generated by these investments may depend on the quality of the servicer. If a servicer is not vigilant in seeing that borrowers make their required monthly payments, borrowers may be less likely to make these payments, resulting in a higher frequency of default. If a servicer takes longer to liquidate non-performing mortgages, our losses related to those loans may be higher than originally anticipated. Any failure by servicers to service these mortgages and/or to competently manage and dispose of REO properties could negatively impact the value of these investments and our financial performance. In addition, while we have contracted with third-party servicers to carry out the actual servicing of the loans (including all direct interface with the borrowers), for loans that we purchase together with the related servicing rights, we are nevertheless ultimately responsible, *vis-à-vis* the borrowers and state and federal regulators, for ensuring that the loans are serviced in accordance with the terms of the related notes and mortgages and applicable law and regulation. (See the risk factor captioned "Regulatory Risk and Risks Related to the Investment Company Act of 1940 - Our business is subject to extensive regulation") In light of the current regulatory environment, such exposure could be significant even though we might have contractual claims against our servicers for any failure to service the loans to the required standard.

The foreclosure process, especially in judicial foreclosure states such as New York, Florida and New Jersey (in which states we have significant exposure), can be lengthy and expensive, and the delays and costs involved in completing a foreclosure, and then subsequently liquidating the REO property through sale, may materially increase any related loss. In addition, at such time as title is taken to a foreclosed property, it may require more extensive rehabilitation than we estimated at acquisition. Thus, a material amount of foreclosed residential mortgage loans, particularly in the states mentioned above, could result in significant losses in our residential whole loan portfolio and could materially adversely affect our results of operations.

The expanding body of federal, state and local regulations and investigations of originators and servicers may increase costs of compliance and the risks of noncompliance, and may adversely affect servicers' ability to perform their servicing obligations.

We work with and rely on third-party servicers to service the residential mortgage loans that we acquire through consolidated trusts. The mortgages underlying the MBS that we acquire are also serviced by third-party servicers that have been hired by the bond issuers. The mortgage servicing business is subject to extensive regulation by federal, state and local governmental authorities and is subject to various laws and judicial and administrative decisions imposing requirements and restrictions and increased compliance costs on a substantial portion of their operations. The volume of new or modified laws and regulations has increased in recent years. Some jurisdictions and municipalities have enacted laws that restrict loan servicing activities, including delaying or preventing foreclosures or forcing the modification of certain mortgages.

Federal laws and regulations have also been proposed or adopted which, among other things, could hinder the ability of a servicer to foreclose promptly on defaulted residential loans, and which could result in assignees being held responsible for violations in the residential loan origination process. In addition, certain mortgage lenders and third-party servicers have voluntarily, or as part of settlements with law enforcement authorities, established loan modification programs relating to loans they hold or service. These federal, state and local legislative or regulatory actions that result in modifications of our outstanding mortgages, or interests in mortgages acquired by us either directly through consolidated trusts or through our investments in residential MBS, may adversely affect the value of, and returns on, such investments. Mortgage servicers may be incented by the federal government to pursue such loan modifications, as well as forbearance plans and other actions intended to prevent foreclosure, even if such loan modifications and other actions are not in the best interests of the beneficial owners of the mortgages. As a consequence of the foregoing matters, our business, financial condition, results of operations and ability to pay dividends, if any, to our stockholders may be adversely affected.

The federal conservatorship of Fannie Mae and Freddie Mac and related efforts, along with any changes in laws and regulations affecting the relationship between Fannie Mae and Freddie Mac and the U.S. Government, may materially adversely affect our business.

The payments of principal and interest we receive on our Agency MBS, which depend directly upon payments on the mortgages underlying such securities, are guaranteed by Fannie Mae, Freddie Mac or Ginnie Mae. Fannie Mae and Freddie Mac are U.S. Government-sponsored entities (or GSEs), but their guarantees are not backed by the full faith and credit of the United States (although the FHFA largely controls their actions through its conservatorship of the two GSEs, which occurred in the wake of the 2007-2008 financial crisis). Ginnie Mae is part of a U.S. Government agency and its guarantees are backed by the full faith and credit of the United States.

Although the U.S. Government has undertaken several measures to support the positive net worth of Fannie Mae and Freddie Mac since the financial crisis of 2007-2008, there is no guarantee of continuing capital support if such support were to become necessary. These uncertainties lead to questions about the availability of, and trading market for, Agency MBS. Despite the steps taken by the U.S. Government, Fannie Mae and Freddie Mac could default on their guarantee obligations which would materially and adversely affect the value of our Agency MBS. Accordingly, if these government actions are inadequate in the future and the GSEs were to suffer losses, be significantly reformed, or cease to exist (as discussed below), our business, operations and financial condition could be materially and adversely affected.

A number of legislative proposals have been introduced in recent years that would wind down or phase out the GSEs, including a March 2019 memorandum signed by President Trump calling for an end of the conservatorship of Fannie Mae and Freddie Mac and a Housing Reform Plan issued in September 2019 by the U.S. Department of the Treasury, which includes legislative and administrative reforms to achieve the goals set forth in the presidential memorandum. The future roles of Fannie Mae and Freddie Mac may be reduced (perhaps significantly) and the nature of their guarantee obligations could be limited relative to historical measurements. Alternatively, it is still possible that Fannie Mae and Freddie Mac could be dissolved entirely or privatized, and, as mentioned above, the U.S. Government could determine to stop providing liquidity support of any kind to the mortgage market. Any changes to the nature of the GSEs or their guarantee obligations could redefine what constitutes an Agency MBS and could have broad adverse implications for the market and our business, operations and financial condition. If Fannie Mae or Freddie Mac were to be eliminated, or their structures were to change radically (in particular a limitation or removal of the guarantee obligation), we could be unable to acquire additional Agency MBS and our existing Agency MBS could be materially and adversely impacted.

We could be negatively affected in a number of ways depending on the manner in which events unfold for Fannie Mae and Freddie Mac. We rely on our Agency MBS as collateral for a significant portion of our financings under our repurchase agreements.

Any decline in their value, or perceived market uncertainty about their value, would make it more difficult for us to obtain financing on our Agency MBS on acceptable terms or at all, or to maintain our compliance with the terms of any financing transactions.

As indicated above, future legislation could, among other things, reform the GSEs and their functions, or nationalize, privatize, or eliminate them entirely. Any law affecting the GSEs may create market uncertainty and have the effect of reducing the actual or perceived credit quality of securities issued or guaranteed by Fannie Mae or Freddie Mac. As a result, such laws could increase the risk of loss on our investments in Agency MBS guaranteed by Fannie Mae and/or Freddie Mac. It also is possible that such laws could adversely impact the market for such securities and the spreads at which they trade. All of the foregoing could materially and adversely affect our business, operations and financial condition.

Rapid changes in the values of our residential mortgage investments and other assets may make it more difficult for us to maintain our qualification as a REIT or exemption from registration under the Investment Company Act.

If the market value or income potential of our MBS, residential mortgage investments and other assets declines as a result of changes in interest rates, prepayment rates or other factors, we may need to increase certain real estate investments and income and/or liquidate our non-qualifying assets in order to maintain our REIT qualification or exemption from registration under the Investment Company Act. If the decline in real estate asset values and/or income occurs quickly, this may be especially difficult to accomplish. This difficulty could be exacerbated by the illiquid nature of certain investments. We might have to make investment decisions that we otherwise would not make absent our REIT qualification and Investment Company Act considerations. (See risk factor captioned "Regulatory Risk and Risks Related to the Investment Company Act of 1940" and "Risks Related to Our Taxation as a REIT and the Taxation of Our Assets.")

Our ability to sell REO on terms acceptable to us or at all may be limited.

REO properties are illiquid relative to other assets we own. Furthermore, real estate markets are affected by many factors that are beyond our control, such as general and local economic conditions, availability of financing, interest rates and supply and demand. We cannot predict whether we will be able to sell any REO for the price or on the terms set by us or whether any price or other terms offered by a prospective purchaser would be acceptable to us. We also cannot predict the length of time needed to find a willing purchaser and to close the sale of an REO. In certain circumstances, we may be required to expend cash to correct defects, pay expenses or to make improvements before a property can be sold, and we cannot assure that we will have cash available to make these payments. As a result, our ownership of REOs could materially and adversely affect our liquidity and results of operations.

Our investments in MSR-related assets expose us to additional risks.

As of December 31, 2019, we had approximately \$1.2 billion of investments in financial instruments whose cash flows are considered to be largely dependent on underlying MSRs that either directly or indirectly act as collateral for the investment. Generally, we have the right to receive certain cash flows from the owner of the MSRs that are generated from the servicing fees and/or excess servicing spread associated with the MSRs. While we do not directly own MSRs, our investments in MSR-related assets indirectly expose us to risks associated with MSRs, such as the illiquidity of MSRs, the risks associated with servicing MSRs (that include, for example, significant regulatory risks and costs) and the ability of the owner to successfully manage its MSR portfolio. Furthermore, the value of MSRs is highly sensitive to changes in prepayment rates. Decreasing market interest rates are generally associated with increases in prepayment rates as borrowers are able to refinance their loans at lower costs. Prepayments result in the partial or complete loss of the cash flows from the related MSR. If these or other MSR-related risks come to fruition, the value of our MSR-related assets could decline significantly.

Our investments in mortgage loan originators expose us to additional risks.

As of December 31, 2019, we had approximately \$148 million of investments in certain loan originators from whom we acquire mortgage loans for investment on a periodic basis. These investments have taken the form of common equity, preferred equity and/or unsecured debt. Unlike our investments in residential mortgage loans and mortgage-backed securities, our investments in loan originators are unsecured and not collateralized by any property of the originators. In addition, we do not manage any of the loan originators in which we have made investments, and because none of our investments give us a controlling stake in any of the loan originators, our ability to influence the business and operations of the originators is limited, in some instances significantly so. Also, because these loan originators are private closely-held enterprises, there are significant restrictions on our ability to sell or otherwise transfer our investments (which are generally illiquid). In the event one or more of the loan originators in which we have made investments should experience a significant decline in its business and operations or otherwise not be able to respond adequately to managerial, compliance or operational challenges that it may encounter, we may be required to write-down all or a portion of the applicable investment, which could have a material adverse impact on our results of operations.

Prepayment and Reinvestment Risk

Prepayment rates on the mortgage loans underlying certain of our residential mortgage assets may materially adversely affect our profitability or result in liquidity shortfalls that could require us to sell assets in unfavorable market conditions.

In general, the mortgages collateralizing certain of our residential mortgage assets may be prepaid at any time without penalty. Prepayments result when borrowers satisfy (i.e., pay off) the mortgage upon selling or refinancing their mortgaged property. When we acquire assets collateralized by residential mortgage loans, we anticipate that the underlying mortgage loans will prepay at a projected rate which, together with expected coupon income, provides us with an expected yield on that asset. If we purchase an asset at a premium to par value, and borrowers then prepay the underlying mortgage loans at a faster rate than we expected, the increased prepayments would result in a yield lower than expected on such assets because we would be required to amortize the related premium on an accelerated basis. Conversely, if we purchase residential mortgage assets at a discount to par value, and borrowers then prepay the underlying mortgage loans at a slower rate than we expected, the decreased prepayments would result in a lower yield than expected on the asset and/or may result in a decline in the fair value of the asset, which would result in losses if the asset is accounted for at fair value or impairment for an AFS security if the fair value of the security is less than its amortized cost.

Prepayment rates on mortgage loans are influenced by changes in mortgage and market interest rates and a variety of economic, geographic, governmental and other factors beyond our control. Consequently, prepayment rates cannot be predicted with certainty and no strategy can completely insulate us from prepayment risks. In periods of declining interest rates, prepayment rates on mortgage loans generally increase. Because of prepayment risk, the market value of certain of our assets (in particular our longer duration Agency MBS) may benefit less than other fixed income securities from a decline in interest rates. If general interest rates decline at the same time, we would likely not be able to reinvest the proceeds of the prepayments that we receive in assets yielding as much as those yields on the assets that were prepaid.

With respect to certain residential mortgage assets, we have, at times, purchased assets that have a higher coupon rate than the prevailing market interest rates. In exchange for a higher coupon rate, we typically pay a premium over par value to acquire such assets. In accordance with GAAP, we amortize premiums over the life of the related asset. If the underlying mortgage loans securing these assets prepay at a more rapid rate than anticipated, we will be required to amortize the related premiums on an accelerated basis, which could adversely affect our profitability.

Prepayments, which are the primary feature of MBS that distinguishes them from other types of bonds, are difficult to predict and can vary significantly over time. As the holder of MBS, we receive a monthly payment equal to a portion of our investment principal in a particular MBS as the underlying mortgages are prepaid. With respect to Agency MBS, we typically receive notice of monthly principal prepayments on the fifth business day of each month (such day is commonly referred to as "factor day") and receive the related scheduled payment on a specified later date, which for (a) our Agency ARM-MBS and fixed-rate Agency MBS guaranteed by Fannie Mae is the 25th day of the month (or next business day thereafter), (b) our Agency ARM-MBS guaranteed by Freddie Mac is the 15th day of the following month (or next business day thereafter), (c) our fixed-rate Agency MBS guaranteed by Freddie Mac is the 15th day of the month (or next business day thereafter), and (d) our Agency ARM-MBS guaranteed by Ginnie Mae is the 20th day of that month (or next business day thereafter). With respect to our Non-Agency MBS, we typically receive notice of monthly principal prepayments and the related scheduled payment on the 25th day of each month (or next business day thereafter). In general, on the date each month that principal prepayments are announced (i.e., factor day for Agency MBS), the value of our MBS pledged as collateral under our repurchase agreements is reduced by the amount of the prepaid principal and, as a result, our lenders will typically initiate a margin call that requires us to pledge additional collateral in the form of cash or additional MBS, in an amount equal to the prepaying principal, in order to re-establish the required ratio of borrowing to collateral value under such repurchase agreements. Accordingly, in the case of Agency MBS, the announcement on factor day of principal prepayments occurs prior to our receipt of the related scheduled payment. This timing differential creates a short-term receivable for us in the amount of any such principal prepayments; however, under our repurchase agreements, we may receive a margin call in the amount of the related reduction in value of the Agency MBS and be required to post on or about factor day additional cash or other collateral in the amount of the prepaying principal to be received, which thereby would reduce our liquidity during the period in which the short-term receivable is outstanding. As a result, in order to meet any such margin calls, we might be forced to sell assets in order to maintain adequate liquidity. Forced sales, particularly under adverse market conditions, may result in lower sales prices than sales made under ordinary market conditions in the normal course of business. If our MBS were to be liquidated at prices below our amortized cost (i.e., our cost basis) of such assets, we would incur losses, which could materially adversely affect our earnings. In addition, in order to continue to earn a return on this prepaid principal, we must reinvest it in additional MBS or other assets; however, in a declining interest rate environment, we might earn a lower return on our reinvested funds as compared to the return earned on the MBS that had prepaid.

Prepayments may have a materially negative impact on our financial results, the effects of which depend on, among other things, the timing and amount of the prepayment delay on Agency MBS, the amount of unamortized premium on assets purchased at a premium which are prepaid, the rate at which prepayments are made on our certain assets purchased at a discount, the reinvestment lag and the availability of suitable reinvestment opportunities.

Risks Related to Our Use of Leverage

Our business strategy involves the use of leverage, and we may not achieve what we believe to be optimal levels of leverage or we may become overleveraged, which may materially adversely affect our liquidity, results of operations or financial condition.

Our business strategy involves the use of borrowing or "leverage." Pursuant to our leverage strategy, we borrow against a substantial portion of the market value of our residential mortgage investments and use the borrowed funds to finance our investment portfolio and the acquisition of additional investment assets. Although we are not required to maintain any particular debt-to-equity ratio, certain of our borrowing agreements contain provisions requiring us not to have a debt-to-equity ratio exceeding specified levels. Future increases in the amount by which the collateral value is required to contractually exceed the repurchase transaction loan amount, decreases in the market value of our residential mortgage investments, increases in interest rate volatility and changes in the availability of acceptable financing could cause us to be unable to achieve the amount of leverage we believe to be optimal. The return on our assets and cash available for distribution to our stockholders may be reduced to the extent that changes in market conditions prevent us from achieving the desired amount of leverage on our investments or cause the cost of our financing to increase relative to the income earned on our leveraged assets. If the interest income on the residential mortgage investments that we have purchased with borrowed funds fails to cover the interest expense of the related borrowings, we will experience net interest losses and may experience net losses from operations. Such losses could be significant as a result of our leveraged structure. The use of leverage to finance our residential mortgage investments involves a number of other risks, including, among other things, the following:

- Adverse developments involving major financial institutions or involving one of our lenders could result in a rapid reduction in our ability to borrow and materially adversely affect our business, profitability and liquidity. As of December 31, 2019, we had amounts outstanding under repurchase agreements with 28 separate lenders. A material adverse development involving one or more major financial institutions or the financial markets in general could result in our lenders reducing our access to funds available under our repurchase agreements or terminating such repurchase agreements altogether. Because all of our repurchase agreements are uncommitted and renewable at the discretion of our lenders, our lenders could determine to reduce or terminate our access to future borrowings at virtually any time, which could materially adversely affect our business and profitability. Furthermore, if a number of our lenders became unwilling or unable to continue to provide us with financing, we could be forced to sell assets, including MBS in an unrealized loss position, in order to maintain liquidity. Forced sales, particularly under adverse market conditions may result in lower sales prices than ordinary market sales made in the normal course of business. If our residential mortgage investments were liquidated at prices below our amortized cost (i.e., the cost basis) of such assets, we would incur losses, which could adversely affect our earnings. In addition, any uncertainty in the global finance market or weak economic conditions in Europe could cause the conditions described above to have a more pronounced affect on our European counterparties.
- Our profitability may be materially adversely affected by a reduction in our leverage. As long as we earn a positive spread between interest and other income we earn on our leveraged assets and our borrowing costs, we believe that we can generally increase our profitability by using greater amounts of leverage. There can be no assurance, however, that repurchase financing will remain an efficient source of long-term financing for our assets. The amount of leverage that we use may be limited because our lenders might not make funding available to us at acceptable rates or they may require that we provide additional collateral to secure our borrowings. If our financing strategy is not viable, we will have to find alternative forms of financing for our assets which may not be available to us on acceptable terms or at acceptable rates. In addition, in response to certain interest rate and investment environments or to changes in market liquidity, we could adopt a strategy of reducing our leverage by selling assets or not reinvesting principal payments as assets amortize and/or prepay, thereby decreasing the outstanding amount of our related borrowings. Such an action could reduce interest income, interest expense and net income, the extent of which would be dependent on the level of reduction in assets and liabilities as well as the sale prices for which the assets were sold.
- If we are unable to renew our borrowings at acceptable interest rates, it may force us to sell assets under adverse market conditions, which may materially adversely affect our liquidity and profitability. Since we rely primarily on borrowings under short-term repurchase agreements to finance our generally longer-term residential mortgage investments, our ability to achieve our investment objectives depends on our ability to borrow funds in sufficient amounts

and on acceptable terms, and on our ability to renew or replace maturing borrowings on a continuous basis. Our repurchase agreement credit lines are renewable at the discretion of our lenders and, as such, do not contain guaranteed roll-over terms. Our ability to enter into repurchase transactions in the future will depend on the market value of our residential mortgage investments pledged to secure the specific borrowings, the availability of acceptable financing and market liquidity and other conditions existing in the lending market at that time. If we are not able to renew or replace maturing borrowings, we could be forced to sell assets, including assets in an unrealized loss position, in order to maintain liquidity. Forced sales, particularly under adverse market conditions, could result in lower sales prices than ordinary market sales made in the normal course of business. If our residential mortgage investments were liquidated at prices below our amortized cost (i.e., the cost basis) of such assets, we would incur losses, which could materially adversely affect our earnings.

- A decline in the market value of our assets may result in margin calls that may force us to sell assets under adverse market conditions, which may materially adversely affect our liquidity and profitability. In general, the market value of our residential mortgage investments is impacted by changes in interest rates, prevailing market yields and other market conditions, including general economic conditions, home prices and the real estate market generally. A decline in the market value of our residential mortgage investments may limit our ability to borrow against such assets or result in lenders initiating margin calls, which require a pledge of additional collateral or cash to re-establish the required ratio of borrowing to collateral value, under our repurchase agreements. Posting additional collateral or cash to support our credit will reduce our liquidity and limit our ability to leverage our assets, which could materially adversely affect our business. As a result, we could be forced to sell a portion of our assets, including MBS in an unrealized loss position, in order to maintain liquidity.
- If a counterparty to our repurchase transactions defaults on its obligation to resell the underlying security back to us at the end of the transaction term or if we default on our obligations under the repurchase agreement, we could incur losses. When we engage in repurchase transactions, we generally transfer securities to lenders (i.e., repurchase agreement counterparties) and receive cash from such lenders. Because the cash we receive from the lender when we initially transfer the securities to the lender is less than the value of those securities (this difference is referred to as the "haircut"), if the lender defaults on its obligation to transfer the same securities back to us, we would incur a loss on the transaction equal to the amount of the haircut (assuming there was no change in the value of the securities). See Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" of this Annual Report on Form 10-K, for further discussion regarding risks related to exposure to financial institution counterparties in light of recent market conditions. Our exposure to defaults by counterparties may be more pronounced during periods of significant volatility in the market conditions for mortgages and mortgage-related assets as well as the broader financial markets. At December 31, 2019, we had greater than 5% stockholders' equity at risk to the following repurchase agreement counterparties: Credit Suisse (approximately 12.3%), Barclay's Bank (approximately 11.6%), Goldman Sachs (approximately 7.3%) and Wells Fargo (approximately 6.1%).

In addition, generally, if we default on one of our obligations under a repurchase transaction with a particular lender, that lender can elect to terminate the transaction and cease entering into additional repurchase transactions with us. In addition, some of our repurchase agreements contain cross-default provisions, so that if a default occurs under any one agreement, the lenders under our other repurchase agreements could also declare a default. Any losses we incur on our repurchase transactions could materially adversely affect our earnings and thus our cash available for distribution to our stockholders.

• Our use of repurchase agreements to borrow money may give our lenders greater rights in the event of bankruptcy. Borrowings made under repurchase agreements may qualify for special treatment under the U.S. Bankruptcy Code. If a lender under one of our repurchase agreements defaults on its obligations, it may be difficult for us to recover our assets pledged as collateral to such lender. In the event of the insolvency or bankruptcy of a lender during the term of a repurchase agreement, the lender may be permitted, under applicable insolvency laws, to repudiate the contract, and our claim against the lender for damages may be treated simply as an unsecured creditor. In addition, if the lender is a broker or dealer subject to the Securities Investor Protection Act of 1970, or an insured depository institution subject to the Federal Deposit Insurance Act, our ability to exercise our rights to recover our securities under a repurchase agreement or to be compensated for any damages resulting from the lender's insolvency may be further limited by those statutes. These claims would be subject to significant delay and, if and when received, may be substantially less than the damages we actually incur. In addition, in the event of our insolvency or bankruptcy, certain repurchase agreements may qualify for special treatment under the Bankruptcy Code, the effect of which, among other things, would be to allow the creditor under the agreement to avoid the automatic stay provisions of the Bankruptcy Code and take possession of, and liquidate, our collateral under our repurchase agreements without delay. Our risks associated with the insolvency or bankruptcy of a lender maybe

more pronounced during periods of significant volatility in the market conditions for mortgages and mortgage-related assets as well as the broader financial markets.

An increase in our borrowing costs relative to the interest we receive on our investments may materially adversely affect our profitability.

Our earnings are primarily generated from the difference between the interest income we earn on our investment portfolio, less net amortization of purchase premiums and discounts, and the interest expense we pay on our borrowings. We rely primarily on borrowings under repurchase agreements to finance the acquisition of residential mortgage investments, which have longer-term contractual maturities. Even though the majority of our investments have interest rates that adjust over time based on changes in corresponding interest rate indexes, the interest we pay on our borrowings may increase at a faster pace than the interest we earn on our investments. In general, if the interest expense on our borrowings increases relative to the interest income we earn on our investments, our profitability may be materially adversely affected, including due to the following reasons:

- Changes in interest rates, cyclical or otherwise, may materially adversely affect our profitability. Interest rates are highly sensitive to many factors, including fiscal and monetary policies and domestic and international economic and political conditions, as well as other factors beyond our control. In general, we finance the acquisition of our investments through borrowings in the form of repurchase transactions, which exposes us to interest rate risk on the financed assets. The cost of our borrowings is based on prevailing market interest rates. Because the terms of our repurchase transactions typically range from one to six months at inception, the interest rates on our borrowings generally adjust more frequently (as new repurchase transactions are entered into upon the maturity of existing repurchase transactions) than the interest rates on our investments. During a period of rising interest rates, our borrowing costs generally will increase at a faster pace than our interest earnings on the leveraged portion of our investment portfolio, which could result in a decline in our net interest spread and net interest margin. The severity of any such decline would depend on our asset/liability composition, including the impact of hedging transactions, at the time as well as the magnitude and period over which interest rates increase. Further, an increase in short-term interest rates could also have a negative impact on the market value of our residential mortgage investments. If any of these events happen, we could experience a decrease in net income or incur a net loss during these periods, which may negatively impact our distributions to stockholders.
- Interest rate caps on certain of our loans and the loans collateralizing our MBS may materially adversely affect our profitability if short-term interest rates increase. The coupons earned on adjustable rate and hybrid loans as well as ARM-MBS adjust over time as interest rates change (typically after an initial fixed-rate period for Hybrids). The financial markets primarily determine the interest rates that we pay on the repurchase transactions used to finance the acquisition of our assets; however, the level of adjustment to the interest rates earned on our ARM-MBS and certain of our loans is typically limited by contract (or in certain cases by state or federal law). The interim and lifetime interest rate caps on certain of our loans and the loans collateralizing our MBS limit the amount by which the interest rates on such assets can adjust. Interim interest rate caps limit the amount interest rates on a particular ARM can adjust during the next adjustment period. Lifetime interest rate caps limit the amount interest rates can adjust upward from inception through maturity of a particular ARM. Our repurchase transactions are not subject to similar restrictions. Accordingly, in a sustained period of rising interest rates or a period in which interest rates rise rapidly, we could experience a decrease in net income or a net loss because the interest rates paid by us on our borrowings (excluding the impact of hedging transactions) could increase without limitation (as new repurchase transactions are entered into upon the maturity of existing repurchase transactions) while increases in the interest rates earned on certain of our loans and the loans collateralizing our MBS could be limited due to interim or lifetime interest rate caps.
- Adjustments of interest rates on our borrowings may not be matched to interest rate indexes on our MBS. In general, the interest rates on our repurchase transactions are based on LIBOR, while the interest rates on our ARM-MBS may be indexed to LIBOR or CMT rate. Accordingly, any increase in LIBOR relative to one-year CMT rates will generally result in an increase in our borrowing costs that is not matched by a corresponding increase in the interest earned on our ARM-MBS tied to these other index rates. Any such interest rate index mismatch could adversely affect our profitability, which may negatively impact our distributions to stockholders.
- Aflat or inverted yield curve may adversely affect prepayment rates and supply. Our net interest income varies primarily as a result of changes in interest rates as well as changes in interest rates across the yield curve. When the differential between short-term and long-term benchmark interest rates narrows, the yield curve is said to be "flattening." In addition, a flatter yield curve generally leads to fixed-rate mortgage rates that are closer to the interest rates available on ARMs, potentially decreasing the supply of ARM-MBS. At times, short-term interest rates may increase and exceed long-term interest rates, causing an inverted yield curve. When the yield curve is inverted, fixed-rate mortgage rates may approach or be lower than mortgage rates on ARMs, further increasing related prepayments and further negatively impacting ARM-

MBS supply. Increases in prepayments on our MBS portfolio cause our premium amortization to accelerate, lowering the yield on such assets. In addition, a flatter yield curve would generally reduce the net spread we could earn on new investments. If this happens, we could experience a decrease in net income or incur a net loss during these periods, which may negatively impact our distributions to stockholders.

Changes in inter-bank lending rate reporting practices, the method pursuant to which LIBOR is determined or the establishment of alternative reference rates may adversely affect our profitability.

As discussed above, the interest rates on certain of our investments, our repurchase transactions and our interest rate swap agreements (or Swaps) are generally based on LIBOR. LIBOR and other indices which are deemed "benchmarks" have been the subject of recent national, international and other regulatory guidance and proposals for reform. Some of these reforms are already effective while others are still to be implemented. These reforms may cause such benchmarks to perform differently than in the past, or have other consequences which cannot be predicted. In particular, regulators and law enforcement agencies in the United Kingdom and elsewhere are conducting criminal and civil investigations into whether the banks that contribute information to the British Bankers' Association (or BBA) in connection with the daily calculation of LIBOR may have been under-reporting or otherwise manipulating or attempting to manipulate LIBOR. A number of BBA member banks have reached settlements with their regulators and law enforcement agencies with respect to this alleged manipulation of LIBOR. Actions by the regulators or law enforcement agencies, as well as ICE Benchmark Administration (the current administrator of LIBOR), may result in changes to the manner in which LIBOR is determined or the establishment of alternative reference rates. For example, on July 27, 2017, the United Kingdom Financial Conduct Authority announced that it intends to stop persuading or compelling banks to submit LIBOR rates after 2021. It currently appears that, over time, U.S. Dollar LIBOR may be replaced by the Secured Overnight Financing Rate (or SOFR) published by the Federal Reserve Bank of New York. However, the manner and timing of this shift is currently unknown. Market participants are still considering how various types of financial instruments and securitization vehicles should react to a discontinuation of LIBOR. It is possible that not all of our assets and liabilities will transition away from LIBOR at the same time, and it is possible that not all of our assets and liabilities will transition to the same alternative reference rate, in each case increasing the difficulty of hedging. We and other market participants have less experience understanding and modeling SOFR-based assets and liabilities than LIBOR-based assets and liabilities, increasing the difficulty of investing, hedging, and risk management. The process of transition involves operational risks. It is also possible that no transition will occur for many financial instruments.

At this time, it is not possible to predict the effect of any such changes, any establishment of alternative reference rates or any other reforms to LIBOR that may be implemented in the United Kingdom or elsewhere. Uncertainty as to the nature of such potential changes, alternative reference rates or other reforms may adversely affect our profitability, which may negatively impact our distributions to stockholders.

Certain of our current lenders require, and future lenders may require, that we enter into restrictive covenants relating to our operations.

The various agreements pursuant to which we borrow money to finance our residential mortgage investments generally include customary representations, warranties and covenants, but may also contain more restrictive supplemental terms and conditions. Although specific to each master repurchase or loan agreement, typical supplemental terms include requirements of minimum equity, leverage ratios and performance triggers relating to a decline in equity or net income over a period of time. If we fail to meet or satisfy any covenants, supplemental terms or representations and warranties, we could be in default under the affected agreements and those lenders could elect to declare all amounts outstanding under the agreements to be immediately due and payable, enforce their respective interests against collateral pledged under such agreements and restrict our ability to make additional borrowings. Certain of our financing agreements contain cross-default or cross-acceleration provisions, so that if a default or acceleration of indebtedness occurs under any one agreement, the lenders under our other agreements could also declare a default. Further, under our repurchase agreements, we are typically required to pledge additional assets to our lenders in the event the estimated fair value of the existing pledged collateral under such agreements declines and such lenders demand additional collateral, which may take the form of additional securities, loans or cash.

Future lenders may impose similar or additional restrictions and other covenants on us. If we fail to meet or satisfy any of these covenants, we could be in default under these agreements, and our lenders could elect to declare outstanding amounts due and payable, require the posting of additional collateral and enforce their interests against then-existing collateral. We could also be subject to cross-default and acceleration rights and, with respect to collateralized debt, the posting of additional collateral and foreclosure rights upon default. Further, this could also make it difficult for us to satisfy the qualification requirements necessary to maintain our status as a REIT for U.S. federal income tax purposes.

The use of non-recourse long-term financing structures expose us to risks, which could result in losses to us.

We use securitization financing for certain of our residential whole loan investments. In such structures, our financing sources typically have only a claim against the special purpose vehicle which we sponsor rather than a general claim against us. Prior to any such financing, we generally seek to finance our investments with relatively short-term repurchase agreements until a sufficient portfolio of assets is accumulated. As a result, we are subject to the risk that we would not be able to acquire, during the period that any short-term repurchase agreements are available, sufficient eligible assets or securities to maximize the efficiency of a securitization. We also bear the risk that we would not be able to obtain new short-term repurchase agreements or would not be able to renew any short-term repurchase agreements after they expire should we need more time to seek and acquire sufficient eligible assets or securities for a securitization. In addition, conditions in the capital markets may make the issuance of any such securitization less attractive to us even when we do have sufficient eligible assets or securities. While we would generally intend to retain a portion of the interests issued under such securitizations and, therefore, still have exposure to any investments included in such securitizations, our inability to enter into such securitizations may increase our overall exposure to risks associated with direct ownership of such investments, including the risk of default. If we are unable to obtain and renew short-term repurchase agreements or to consummate securitizations to finance the selected investments on a long-term basis, we may be required to seek other forms of potentially less attractive financing or to liquidate assets at an inopportune time or price.

These financing arrangements require us to make certain representations and warranties regarding the assets that collateralize the borrowings. Although we perform due diligence on the assets that we acquire, certain representations and warranties that we make in respect of such assets may ultimately be determined to be inaccurate. Such representations and warranties may include, but are not limited to, issues such as the validity of the lien; the absence of delinquent taxes or other liens; the loans' compliance with all local, state and federal laws and the delivery of all documents required to perfect title to the lien. In the event of a breach of a representation or warranty, we may be required to repurchase affected loans, make indemnification payments to certain indemnified parties or address any claims associated with such breach. Further, we may have limited or no recourse against the seller from whom we purchased the loans. Such recourse may be limited due to a variety of factors, including the absence of a representation or warranty from the seller corresponding to the representation provided by us or the contractual expiration thereof. A breach of a representation or warranty could adversely affect our results of operations and liquidity.

Certain of our financing arrangements are rated by one or more rating agencies and we may sponsor financing facilities in the future that are rated by credit agencies. The related agency or rating agencies may suspend rating notes at any time. Rating agency delays may result in our inability to obtain timely ratings on new notes, which could adversely impact the availability of borrowings or the interest rates, advance rates or other financing terms and adversely affect our results of operations and liquidity. Further, if we are unable to secure ratings from other agencies, limited investor demand for unrated notes could result in further adverse changes to our liquidity and profitability.

Risks Associated with Adverse Developments in the Mortgage Finance and Credit Markets and Financial Markets Generally

Market conditions for mortgages and mortgage-related assets as well as the broader financial markets may materially adversely affect the value of the assets in which we invest.

Our results of operations are materially affected by conditions in the markets for mortgages and mortgage-related assets, including MBS, as well as the broader financial markets and the economy generally. Significant adverse changes in financial market conditions leading to the forced sale of large quantities of mortgage-related and other financial assets would result in significant volatility in the market for mortgages and mortgage-related assets and potentially significant losses for ourselves and certain other market participants. In addition, concerns over actual or anticipated low economic growth rates, higher levels of unemployment or uncertainty regarding future U.S. monetary policy (particularly in light of the current presidential administration, the upcoming presidential election and related uncertainties) may contribute to increased interest rate volatility. Declines in the value of our investments, or perceived market uncertainty about their value, may make it difficult for us to obtain financing on favorable terms or at all, or maintain our compliance with terms of any financing arrangements already in place. Additionally, increased volatility and/or deterioration in the broader residential mortgage and MBS markets could materially adversely affect the performance and market value of our investments.

A lack of liquidity in our investments may materially adversely affect our business.

The assets that comprise our investment portfolio and that we acquire are not traded on an exchange. A portion of our investments are subject to legal and other restrictions on resale and are otherwise generally less liquid than exchange-traded securities. Any illiquidity of our investments may make it difficult for us to sell such investments if the need or desire arises. In addition, if we are required to liquidate all or a portion of our portfolio quickly, we may realize significantly less than the value

at which we have previously recorded our investments. Further, we may face other restrictions on our ability to liquidate an investment in a business entity to the extent that we have or could be attributed with material, non-public information regarding such business entity. As a result, our ability to vary our portfolio in response to changes in economic and other conditions may be relatively limited, which could adversely affect our results of operations and financial condition.

Actions by the U.S. Government designed to stabilize or reform the financial markets may not achieve their intended effect or otherwise benefit our business, and could materially adversely affect our business.

In July 2010, the U.S. Congress enacted the Dodd-Frank Wall Street Reform and Consumer Protection Act (or the Dodd-Frank Act), in part to impose significant investment restrictions and capital requirements on banking entities and other organizations that are significant to U.S. financial markets. For instance, the Dodd-Frank Act imposes significant restrictions on the proprietary trading activities of certain banking entities and subjects other systemically significant entities and activities regulated by the Federal Reserve to increased capital requirements and quantitative limits for engaging in such activities. The Dodd-Frank Act also seeks to reform the asset-backed securitization market (including the MBS market) by requiring the retention of a portion of the credit risk inherent in the pool of securitized assets and by imposing additional registration and disclosure requirements. The Dodd-Frank Act also imposes significant regulatory restrictions on the origination and servicing of residential mortgage loans. The Dodd-Frank Act's extensive requirements, and implementation by regulatory agencies such as the Commodity Futures Trading Commission (or CFTC), CFPB, Federal Deposit Insurance Corporation (or FDIC), Federal Reserve, and the SEC may have a significant effect on the financial markets, and may affect the availability or terms of financing, derivatives or MBS, each of which could have a material adverse effect on our business.

In addition, the U.S. Government, the Federal Reserve, U.S. Treasury and other governmental and regulatory bodies have increased focus and scrutiny on our industry. New proposals for legislation continue to be introduced in the U.S. Congress that could further substantially increase regulation of our industry, impose restrictions on the operations and general ability of firms within the industry to conduct business consistent with historical practices, including in the areas of compensation, interest rates, financial product offerings and disclosures, and have an effect on bankruptcy proceedings with respect to consumer residential real estate mortgages, among other things. International financial regulators are examining standard setting for systemically significant entities, such as those considered by the Third Basel Accords (Basel III) to be incorporated by domestic entities. We cannot predict whether or when such actions may occur or what effect, if any, such actions could have on our business, results of operations and financial condition.

The Federal Reserve announced in November 2008 a program of large-scale purchases of Agency MBS in an attempt to lower longer-term interest rates and contribute to an overall easing of adverse financial conditions. Subject to specified investment guidelines, the portfolios of Agency MBS purchased through the programs established by the U.S. Treasury and the Federal Reserve may be held to maturity and, based on mortgage market conditions, adjustments may be made to these portfolios. This flexibility may adversely affect the pricing and availability of Agency MBS during the remaining term of these portfolios.

Regulatory Risk and Risks Related to the Investment Company Act of 1940

Our business is subject to extensive regulation.

Our business is subject to extensive regulation by federal and state governmental authorities, self-regulatory organizations and securities exchanges. We are required to comply with numerous federal and state laws. The laws, rules and regulations comprising this regulatory framework change frequently, as can the interpretation and enforcement of existing laws, rules and regulations. Some of the laws, rules and regulations to which we are subject are intended primarily to safeguard and protect consumers, rather than stockholders or creditors. From time to time, we may receive requests from federal and state agencies for records, documents and information regarding our policies, procedures and practices regarding our business activities. We incur significant ongoing costs to comply with these government regulations.

Although we do not originate or directly service residential mortgage loans, we must comply with various federal and state laws, rules and regulations as a result of owning MBS and residential whole loans. These rules generally focus on consumer protection and include, among others, rules promulgated under the Dodd-Frank Act, and the Gramm-Leach-Bliley Financial Modernization Act of 1999 (or Gramm-Leach-Bliley). These requirements can and do change as statutes and regulations are enacted, promulgated, amended and interpreted, and the recent trend among federal and state lawmakers and regulators has been toward increasing laws, regulations and investigative proceedings in relation to the mortgage industry generally. Although we believe that we have structured our operations and investments to comply with existing legal and regulatory requirements and interpretations, changes in regulatory and legal requirements, including changes in their interpretation and enforcement by lawmakers and regulators, could materially and adversely affect our business and our financial condition, liquidity and results of operations.

Maintaining our exemption from registration under the Investment Company Act imposes significant limits on our operations.

We conduct our operations so that neither we nor any of our subsidiaries are required to register as an investment company under the Investment Company Act. Section 3(a)(1)(A) of the Investment Company Act defines an investment company as any issuer that is or holds itself out as being engaged primarily in the business of investing, reinvesting or trading in securities. Section 3(a)(1)(C) of the Investment Company Act defines an investment company as any issuer that is engaged or proposes to engage in the business of investing, reinvesting, owning, holding or trading in securities and owns or proposes to acquire investment securities having a value exceeding 40% of the value of the issuer's total assets (exclusive of U.S. Government securities and cash items) on an unconsolidated basis (i.e., the 40% Test). Excluded from the term "investment securities" are, among other things, U.S. Government securities and securities issued by majority-owned subsidiaries that are not themselves investment companies and are not relying on the exception from the definition of investment company for private funds set forth in Section 3(c)(1) or Section 3(c)(7) of the Investment Company Act.

We are a holding company and conduct our real estate businesses primarily through wholly-owned subsidiaries. We conduct our real estate business so that we do not come within the definition of an investment company because less than 40% of the value of our adjusted total assets on an unconsolidated basis will consist of "investment securities." The securities issued by any wholly-owned or majority-owned subsidiaries that we may form in the future that are excepted from the definition of "investment company" based on Section 3(c)(1) or 3(c)(7) of the Investment Company Act, together with any other investment securities we may own, may not have a value in excess of 40% of the value of our adjusted total assets on an unconsolidated basis. We monitor our holdings to ensure continuing and ongoing compliance with this test. In addition, we believe we will not be considered an investment company under Section 3(a)(1)(A) of the Investment Company Act because we will not engage primarily or hold ourselves out as being engaged primarily in the business of investing, reinvesting or trading in securities. Rather, through our wholly-owned subsidiaries, we will be primarily engaged in the non-investment company businesses of these subsidiaries.

If the value of securities issued by our subsidiaries that are excepted from the definition of "investment company" by Section 3(c)(1) or 3(c)(7) of the Investment Company Act, together with any other investment securities we own, exceeds 40% of our adjusted total assets on an unconsolidated basis, or if one or more of such subsidiaries fail to maintain an exception or exemption from the Investment Company Act, we could, among other things, be required either (a) to substantially change the manner in which we conduct our operations to avoid being required to register as an investment company, (b) to effect sales of our assets in a manner that, or at a time when, we would not otherwise choose to do so or (c) to register as an investment company under the Investment Company Act, any of which could have an adverse effect on us and the market price of our securities. If we were required to register as an investment company under the Investment Company Act, we would become subject to substantial regulation with respect to our capital structure (including our ability to use leverage), management, operations, transactions with affiliated persons (as defined in the Investment Company Act), portfolio composition, including restrictions with respect to diversification and industry concentration, and other matters.

We expect that our subsidiaries that invest in residential mortgage loans (whether through a consolidated trust or otherwise) will rely upon the exemption from registration as an investment company under the Investment Company Act pursuant to Section 3(c)(5)(C) of the Investment Company Act, which is available for entities "primarily engaged in the business of purchasing or otherwise acquiring mortgages and other liens on and interests in real estate." This exemption generally requires that at least 55% of each of these subsidiaries' assets be comprised of qualifying real estate assets and at least 80% of each of their portfolios be comprised of qualifying real estate assets under the Investment Company Act. Mortgage loans that were fully and exclusively secured by real property are generally qualifying real estate assets for purposes of the exemption. All or substantially all of our residential mortgage loans are fully and exclusively secured by real property with a loan-to-value ratio of less than 100%. As a result, we believe our residential mortgage loans that are fully and exclusively secured by real property meet the definition of qualifying real estate assets. To the extent we own any residential mortgage loans with a loan-to-value ratio of greater than 100%, we intend to classify, depending on guidance from the SEC staff, only the portion of the value of such loans that does not exceed the value of the real estate collateral as qualifying real estate assets and the excess as real estate-related assets.

In August 2011, the SEC issued a "concept release" pursuant to which they solicited public comments on a wide range of issues relating to companies engaged in the business of acquiring mortgages and mortgage-related instruments and that rely on Section 3(c)(5)(C) of the Investment Company Act. The concept release and the public comments thereto have not yet resulted in SEC rulemaking or interpretative guidance and we cannot predict what form any such rulemaking or interpretive guidance may take. There can be no assurance, however, that the laws and regulations governing the Investment Company Act status of REITs, or guidance from the SEC or its staff regarding the exemption from registration as an investment company on which we rely, will not change in a manner that adversely affects our operations. We expect each of our subsidiaries relying on Section 3(c)(5)(C) to rely on guidance published by the SEC staff or on our analyses of guidance published with respect to other types of assets, if any,

to determine which assets are qualifying real estate assets and real estate-related assets. To the extent that the SEC staff publishes new or different guidance with respect to these matters, we may be required to adjust our strategy accordingly. In addition, we may be limited in our ability to make certain investments and these limitations could result in us holding assets we might wish to sell or selling assets we might wish to hold.

Certain of our subsidiaries may rely on the exemption provided by Section 3(c)(6) to the extent that they hold residential mortgage loans through majority owned subsidiaries that rely on Section 3(c)(5)(C). The SEC staff has issued little interpretive guidance with respect to Section 3(c)(6) and any guidance published by the staff could require us to adjust our strategy accordingly.

To the extent that the SEC staff provides more specific guidance regarding any of the matters bearing upon the exceptions we and our subsidiaries rely on from registration under the Investment Company Act, we may be required to adjust our strategy accordingly. Any additional guidance from the SEC staff could provide additional flexibility to us, or it could further inhibit our ability to pursue the strategies we have chosen.

There can be no assurance that the laws and regulations governing the Investment Company Act status of REITs, including the Division of Investment Management of the SEC providing more specific or different guidance regarding these exemptions, will not change in a manner that adversely affects our operations.

Risks Related to Our Use of Hedging Strategies

Our use of hedging strategies to mitigate our interest rate exposure may not be effective.

In accordance with our operating policies, we pursue various types of hedging strategies, including Swaps, to seek to mitigate or reduce our exposure to losses from adverse changes in interest rates. Our hedging activity will vary in scope based on the level and volatility of interest rates, the type of assets held and financing sources used and other changing market conditions. No hedging strategy, however, can completely insulate us from the interest rate risks to which we are exposed and there is no guarantee that the implementation of any hedging strategy would have the desired impact on our results of operations or financial condition. Certain of the U.S. federal income tax requirements that we must satisfy in order to qualify as a REIT may limit our ability to hedge against such risks. We will not enter into derivative transactions if we believe that they will jeopardize our qualification as a REIT.

Interest rate hedging may fail to protect or could adversely affect us because, among other things:

- interest rate hedging can be expensive, particularly during periods of rising and volatile interest rates;
- available interest rate hedges may not correspond directly with the interest rate risk for which protection is sought;
- the duration of the hedge may not match the duration of the related hedged instrument;
- the credit quality of the party owing money on the hedge may be downgraded to such an extent that it impairs our ability to sell or assign our side of the hedging transaction; and
- the party owing money in the hedging transaction may default on its obligation to pay.

We primarily use Swaps to hedge against future increases in interest rates on our repurchase agreements. Should a Swap counterparty be unable to make required payments pursuant to such Swap, the hedged liability would cease to be hedged for the remaining term of the Swap. In addition, we may be at risk for any collateral held by a hedging counterparty to a Swap, should such counterparty become insolvent or file for bankruptcy. Our hedging transactions, which are intended to limit losses, may actually adversely affect our earnings, which could reduce our cash available for distribution to our stockholders.

We may enter into hedging instruments that could expose us to contingent liabilities in the future, which could materially adversely affect our results of operations.

Subject to maintaining our qualification as a REIT, part of our financing strategy involves entering into hedging instruments that could require us to fund cash payments in certain circumstances (e.g., the early termination of a hedging instrument caused by an event of default or other voluntary or involuntary termination event or the decision by a hedging counterparty to request the posting of collateral that it is contractually owed under the terms of a hedging instrument). With respect to the termination of an existing Swap, the amount due would generally be equal to the unrealized loss of the open Swap position with the hedging counterparty and could also include other fees and charges. These economic losses will be reflected in our financial results of

operations and our ability to fund these obligations will depend on the liquidity of our assets and access to capital at the time. Any losses we incur on our hedging instruments could materially adversely affect our earnings and thus our cash available for distribution to our stockholders.

The characteristics of hedging instruments present various concerns, including illiquidity, enforceability, and counterparty risks, which could adversely affect our business and results of operations.

As indicated above, from time to time we enter into Swaps. Entities entering into Swaps are exposed to credit losses in the event of non-performance by counterparties to these transactions. Rules issued by the CFTC that became effective in October 2012 require the clearing of all Swap transactions through registered derivatives clearing organizations, or swap execution facilities, through standardized documents under which each Swap counterparty transfers its position to another entity whereby the centralized clearinghouse effectively becomes the counterparty to each side of the Swap. It is the intent of the Dodd-Frank Act that the clearing of Swaps in this manner is designed to avoid concentration of swap risk in any single entity by spreading and centralizing the risk in the clearinghouse and its members. In addition to greater initial and periodic margin (collateral) requirements and additional transaction fees both by the swap execution facility and the clearinghouse, the Swap transactions are now subjected to greater regulation by both the CFTC and the SEC. These additional fees, costs, margin requirements, documentation requirements, and regulations could adversely affect our business and results of operations.

Clearing facilities or exchanges upon which our hedging instruments are traded may increase margin requirements on our hedging instruments in the event of adverse economic developments.

In response to events having or expected to have adverse economic consequences or which create market uncertainty, clearing facilities or exchanges upon which some of our hedging instruments (i.e., interest rate swaps) are traded may require us to post additional collateral against our hedging instruments. For example, in response to the U.S. approaching its debt ceiling without resolution and the federal government shutdown, in October 2013, the Chicago Mercantile Exchange announced that it would increase margin requirements by 12% for all over-the-counter interest rate swap portfolios that its clearinghouse guaranteed. This increase was subsequently rolled back shortly thereafter upon the news that Congress passed legislation to temporarily suspend the national debt ceiling and reopen the federal government, and provide a time period for broader negotiations concerning federal budgetary issues. In the event that future adverse economic developments or market uncertainty (including those due to governmental, regulatory, or legislative action or inaction) result in increased margin requirements for our hedging instruments, it could materially adversely affect our liquidity position, business, financial condition and results of operations.

We may fail to qualify for hedge accounting treatment, which could materially adversely affect our results of operations.

We record derivative and hedge transactions in accordance with GAAP, specifically according to the Financial Accounting Standards Board (or FASB) Accounting Standards Codification Topic on Derivatives. Under these standards, we may fail to qualify for hedge accounting treatment for a number of reasons, including if we use instruments that do not meet the definition of a derivative, we fail to satisfy hedge documentation and hedge effectiveness assessment requirements or our instruments are not highly effective. If we fail to qualify for hedge accounting treatment, though the fundamental economic performance of our business would be unaffected, our operating results for financial reporting purposes may be materially adversely affected because losses on the derivatives we enter into would be recorded in net income, rather than AOCI, a component of stockholders' equity.

Risks Related to Our Taxation as a REIT and the Taxation of Our Assets

If we fail to remain qualified as a REIT, we will be subject to tax as a regular corporation and could face a substantial tax liability, which would reduce the amount of cash available for distribution to our stockholders.

We have elected to qualify as a REIT and intend to comply with the provisions of the Internal Revenue Code of 1986, as amended (or the Code), related to REIT qualification. Accordingly, we will not be subject to U.S. federal income tax to the extent we distribute 100% of our REIT taxable income (which is generally our taxable income, computed without regard to the dividends paid deduction, any net income from prohibited transactions, and any net income from foreclosure property) to stockholders within the timeframe permitted under the Code and provided that we comply with certain income, asset ownership and other tests applicable to REITs. We believe that we currently meet all of the REIT requirements and intend to continue to qualify as a REIT under the provisions of the Code. Many of the REIT requirements, however, are highly technical and complex. The determination of whether we are a REIT requires an analysis of various factual matters and circumstances, some of which may not be totally within our control and some of which involve interpretation. For example, if we are to qualify as a REIT, annually at least 75% of our gross income must come from, among other sources, interest on obligations secured by mortgages on real property or interests in real property, gain from the disposition of real property, including mortgages or interests in real property (other than sales or dispositions of real property, including mortgages on real property, that we hold

primarily for sale to customers in the ordinary course of a trade or business (i.e., prohibited transactions)), dividends or other distributions on, and gains from the disposition of shares in other REITs, commitment fees received for agreements to make real estate loans and certain temporary investment income. In addition, the composition of our assets must meet certain requirements at the close of each quarter. We are also required to distribute to stockholders at least 90% of our REIT taxable income (determined without regard to the deduction for dividends paid and by excluding net capital gain). There can be no assurance that we will be able to satisfy these or other requirements or that the Internal Revenue Service (or IRS) or a court would agree with any conclusions or positions we have taken in interpreting the REIT requirements.

Even a technical or inadvertent mistake could jeopardize our REIT qualification unless we meet certain statutory relief provisions. If we were to fail to qualify as a REIT in any taxable year for any reason, we would be subject to U.S. federal income tax on our taxable income, and dividends paid to our stockholders would not be deductible by us in computing our taxable income. Any resulting corporate tax liability could be substantial and would reduce the amount of cash available for distribution to our stockholders, which in turn could have an adverse impact on the value of our common stock. Unless we were entitled to relief under certain Code provisions, we also would be disqualified from taxation as a REIT for the four taxable years following the year in which we failed to qualify as a REIT.

Our failure to maintain our qualification as a REIT would cause our stock to be delisted from the NYSE.

The New York Stock Exchange (or NYSE) requires, as a condition to the listing of our shares, that we maintain our REIT status. Consequently, if we fail to maintain our REIT status, our shares would promptly be delisted from the NYSE, which would decrease the trading activity of such shares. This could make it difficult to sell shares and would likely cause the market volume of the shares trading to decline.

If we were delisted as a result of losing our REIT status and desired to relist our shares on the NYSE, we would have to reapply to the NYSE to be listed as a domestic corporation. As the NYSE's listing standards for REITs are less onerous than its standards for domestic corporations, it would be more difficult for us to become a listed company under these heightened standards. We might not be able to satisfy the NYSE's listing standards for a domestic corporation. As a result, if we were delisted from the NYSE, we might not be able to relist as a domestic corporation, in which case our shares could not trade on the NYSE.

REIT distribution requirements could adversely affect our ability to execute our business plan.

To maintain our qualification as a REIT, we must distribute at least 90% of our REIT taxable income (determined without regard to the dividends paid deduction and excluding any net capital gain) to our stockholders within the timeframe permitted under the Code. We generally must make these distributions in the taxable year to which they relate, or in the following taxable year if declared before we timely (including extensions) file our tax return for the year and if paid with or before the first regular dividend payment after such declaration. To the extent that we satisfy this distribution requirement, but distribute less than 100% of our taxable income, we will be subject to U.S. federal income tax on our undistributed taxable income at regular corporate income tax rates. In addition, if we should fail to distribute during each calendar year at least the sum of (a) 85% of our REIT ordinary income for such year, (b) 95% of our REIT capital gain net income for such year, and (c) any undistributed taxable income from prior periods, we would be subject to a non-deductible 4% excise tax on the excess of such required distribution over the sum of (x) the amounts actually distributed, plus (y) the amounts of income we retained and on which we have paid corporate income tax.

The dividend distribution requirement limits the amount of cash we have available for other business purposes, including amounts to fund our growth. Also, it is possible that because of differences in timing between the recognition of taxable income and the actual receipt of cash, we may have to borrow funds on unfavorable terms, sell investments at disadvantageous prices, distribute amounts that would otherwise be invested in future acquisitions or make a taxable distribution of our stock to make distributions sufficient to maintain our qualification as a REIT or avoid corporate income tax in a particular year. These alternatives could increase our costs or reduce our stockholders' equity. Thus, compliance with the REIT requirements may hinder our ability to grow, which could adversely affect the value of our common stock.

Even if we remain qualified as a REIT, we may face other tax liabilities that reduce our cash flow.

Even if we qualify as a REIT for U.S. federal income tax purposes, we may be required to pay certain U.S. federal, state and local taxes on our income and assets, including taxes on any undistributed income, tax on income from some activities conducted as a result of a foreclosure, excise taxes, state or local income, property and transfer taxes, such as mortgage recording taxes, and other taxes. In addition, in order to meet the REIT qualification requirements, to prevent the recognition of certain types of non-cash income, or to avert the imposition of a 100% tax that applies to certain gains derived by a REIT from dealer property or inventory (i.e., prohibited transactions tax) we may hold some of our assets through TRSs or other subsidiary corporations that

will be subject to corporate level income tax at regular rates. In addition, if we lend money to a TRS, the TRS may be unable to deduct all or a portion of the interest paid to us, which could result in an even higher corporate level tax liability. Furthermore, the Code imposes a 100% excise tax on certain transactions between a TRS and a REIT that are not conducted at an arm's-length basis. We intend to structure any transaction with a TRS on terms that we believe are arm's-length to avoid incurring this 100% excise tax. There can be no assurances, however, that we will be able to avoid application of the 100% excise tax. Any of these taxes would reduce our operating cash flow and thus our cash available for distribution to our stockholders.

If our foreign TRS is subject to U.S. federal income tax at the entity level, it would greatly reduce the amounts those entities would have available to pay its creditors and distribute to us.

There is a specific exemption from regular U.S. federal income tax for non-U.S. corporations that restrict their activities in the United States to trading stock and securities (or any activity closely related thereto) for their own account, whether such trading (or such other activity) is conducted by the corporation or its employees through a resident broker, commission agent, custodian or other agent. We intend that our foreign TRS will rely on that exemption or otherwise operate in a manner so that it will not be subject to regular U.S. federal income tax on its net income at the entity level. If the IRS succeeded in challenging that tax treatment, it would greatly reduce the amount that the foreign TRS would have available to pay to its creditors and to distribute to us. In addition, even if our foreign TRS qualifies for that exemption, it may nevertheless be subject to U.S. federal withholding tax on certain types of income.

Complying with REIT requirements may cause us to forgo otherwise attractive opportunities.

To remain qualified as a REIT for U.S. federal income tax purposes, we must continually satisfy tests concerning, among other things, the sources of our income, the nature and diversification of our assets, the amounts that we distribute to our stockholders and the ownership of our stock. We may be required to make distributions to stockholders at disadvantageous times or when we do not have funds readily available for distribution, and may be unable to pursue investments that would be otherwise advantageous to us in order to satisfy the source-of-income or asset-diversification requirements for qualifying as a REIT. In addition, in certain cases, the modification of a debt instrument could result in the conversion of the instrument from a qualifying real estate asset to a wholly or partially non-qualifying asset that must be contributed to a TRS or disposed of in order for us to maintain our qualification as a REIT. Thus, compliance with the REIT requirements may hinder our ability to make and, in certain cases, to maintain ownership of, certain attractive investments.

Our use of TRSs may cause us to fail to qualify as a REIT

The net income of our TRSs is not required to be distributed to us, and such undistributed TRS income is generally not subject to our REIT distribution requirements. However, if the accumulation of cash or reinvestment of significant earnings in our TRSs causes the fair market value of our securities in those entities, taken together with other non-qualifying assets, to exceed 25% of the fair market value of our assets, in each case as determined for REIT asset testing purposes, we would, absent timely responsive action, fail to maintain our qualification as a REIT. Additionally, if the accumulation of cash or reinvestment of significant earnings in our TRSs causes the fair market value of our securities in those entities to exceed 20% of the fair market value of our assets, in each case as determined for REIT asset testing purposes, we would, absent timely responsive action, similarly fail to maintain our qualification as a REIT.

We may generate taxable income that differs from our GAAP income on our Non-Agency MBS and residential whole loan investments purchased at a discount to par value, which may result in significant timing variances in the recognition of income and losses.

We have acquired and intend to continue to acquire Non-Agency MBS and residential whole loans at prices that reflect significant market discounts on their unpaid principal balances. For financial statement reporting purposes, we generally establish a portion of the purchase discount on Non-Agency MBS as a Credit Reserve. This Credit Reserve is generally not accreted into income for financial statement reporting purposes. For tax purposes, however, we are not permitted to anticipate, or establish a reserve for, credit losses prior to their occurrence. As a result, discount on securities acquired in the primary or secondary market is included in the determination of taxable income and is not impacted by losses until such losses are incurred. Such differences in accounting for tax and GAAP can lead to significant timing variances in the recognition of income and losses. Taxable income on Non-Agency MBS purchased at a discount to their par value may be higher than GAAP earnings in early periods (before losses are actually incurred) and lower than GAAP earnings in periods during and subsequent to when realized credit losses are incurred. Dividends will be declared and paid at the discretion of our Board and will depend on REIT taxable earnings, our financial results and overall financial condition, maintenance of our REIT qualification and such other factors as our Board may deem relevant from time to time.

The tax on prohibited transactions may limit our ability to engage in transactions, including certain methods of securitizing mortgage loans, that would be treated as sales for U.S. federal income tax purposes.

A REIT's net income from prohibited transactions is subject to a 100% tax. In general, prohibited transactions are sales or other dispositions of property, other than foreclosure property, but including mortgage loans, held primarily for sale to customers in the ordinary course of business. We might be subject to this tax if we were to dispose of or securitize loans or MBS securities in a manner that was treated as a sale of the loans or MBS for U.S. federal income tax purposes. Therefore, to avoid the prohibited transactions tax, we may choose to engage in certain sales of loans through a TRS and not at the REIT level, and we may be limited as to the structures we are able to utilize for our securitization transactions, even though the sales or structures might otherwise be beneficial to us. We do not believe that our securitizations to date have been subject to this tax, but there can be no assurances that the IRS would agree with such treatment. If the IRS successfully challenged such treatment, our results of operations could be materially adversely affected.

The "taxable mortgage pool" rules may increase the taxes that we or our stockholders may incur and may limit the manner in which we effect future securitizations.

Securitizations by us or our subsidiaries could result in the creation of taxable mortgage pools for U.S. federal income tax purposes. The real estate mortgage investment conduit (or REMIC) provisions of the Code generally provide that REMICs are the only form of pass-through entity permitted to issue debt obligations with two or more maturities if the payments on those obligations bear a relationship to the mortgage obligations held by such entity. If we engage in a non-REMIC securitization transaction, directly or indirectly through a QRS, in which the assets held by the securitization vehicle consist largely of mortgage loans or MBS, in which the securitization vehicle issues to investors two or more classes of debt instruments that have different maturities, and in which the timing and amount of payments on the debt instruments is determined in large part by the amounts received on the mortgage loans or MBS held by the securitization vehicle, the securitization vehicle will be a taxable mortgage pool. As long as we or another REIT holds a 100% interest in the equity interests in a taxable mortgage pool, either directly or through a QRS, the taxable mortgage pool will not be subject to tax. A portion of the income that we realize with respect to the equity interest we hold in a taxable mortgage pool will, however, be considered to be excess inclusion income and, as a result, a portion of the dividends that we pay to our stockholders will be considered to consist of excess inclusion income. Such excess inclusion income is treated as unrelated business taxable income (or UBTI) for tax-exempt stockholders, is subject to withholding for foreign stockholders (without the benefit of any treaty reduction), and is not subject to reduction by net operating loss carryovers. In addition to the extent that our stock is owned by tax-exempt "disqualified organizations," such as certain government-related entities and charitable remainder trusts that are not subject to tax on unrelated business income, we may incur a corporate level tax on a portion of our income from the taxable mortgage pool. In that case, we may reduce the amount of our distributions to any disqualified organization whose stock ownership gave rise to the tax. Historically, we have not generated excess inclusion income; however, despite our efforts, we may not be able to avoid creating or distributing excess inclusion income to our stockholders in the future. In addition, we could face limitations in selling equity interests to outside investors in securitization transactions that are taxable mortgage pools or selling any debt securities issued in connection with these securitizations that might be considered to be equity interests for tax purposes. These limitations may prevent us from using certain techniques to maximize our returns from securitization transactions.

We have not established a minimum dividend payment level, and there is no guarantee that we will maintain current dividend payment levels or pay dividends in the future.

In order to maintain our qualification as a REIT, we must comply with a number of requirements under U.S. federal tax law, including that we distribute at least 90% of our REIT taxable income within the timeframe permitted under the Code, which is calculated generally before the dividends paid deduction and excluding net capital gain. Dividends will be declared and paid at the discretion of our Board and will depend on our REIT taxable earnings, our financial results and overall condition, maintenance of our REIT qualification and such other factors as our Board may deem relevant from time to time. We have not established a minimum dividend payment level for our common stock and our ability to pay dividends may be negatively impacted by adverse changes in our operating results. Therefore, our dividend payment level may fluctuate significantly, and, under some circumstances, we may not pay dividends at all.

Our reported GAAP net income may differ from the amount of REIT taxable income and dividend distribution requirements and, therefore, our GAAP results may not be an accurate indicator of future taxable income and dividend distributions.

Generally, the cumulative net income we report over the life of an asset will be the same for GAAP and tax purposes, although the timing of this income recognition over the life of the asset could be materially different. Differences exist in the accounting for GAAP net income and REIT taxable income which can lead to significant variances in the amount and timing of when income and losses are recognized under these two measures. Due to these differences, our reported GAAP financial results could materially differ from our determination of REIT taxable income and our dividend distribution requirements, and, therefore, our GAAP results may not be an accurate indicator of future taxable income and dividend distributions.

Over time, accounting principles, conventions, rules, and interpretations may change, which could affect our reported GAAP and taxable earnings, and stockholders' equity.

Accounting rules for the various aspects of our business change from time to time. Changes in GAAP, or the accepted interpretation of these accounting principles, can affect our reported income, earnings, and stockholders' equity. In addition, changes in tax accounting rules or the interpretations thereof could affect our REIT taxable income and our dividend distribution requirements. These changes may materially adversely affect our results of operations.

The failure of assets subject to repurchase agreements to qualify as real estate assets could adversely affect our ability to remain qualified as a REIT.

We enter into certain financing arrangements that are structured as sale and repurchase agreements pursuant to which we nominally sell certain of our assets to a counterparty and simultaneously enter into an agreement to repurchase these assets at a later date in exchange for a purchase price. Economically, these agreements are financings that are secured by the assets sold pursuant thereto. We generally believe that we would be treated for REIT asset and income test purposes as the owner of the assets that are the subject of any such sale and repurchase agreement notwithstanding that such agreement may transfer record ownership of the assets to the counterparty during the term of the agreement. It is possible, however, that the IRS could assert that we did not own the assets during the term of the sale and repurchase agreement, in which case we could fail to remain qualified as a REIT.

Complying with REIT requirements may limit our ability to hedge effectively and may cause us to incur tax liabilities.

The REIT provisions of the Code could substantially limit our ability to hedge our business. Any income from a properly designated hedging transaction we enter into to manage the risk of interest rate changes with respect to borrowings made or to be made, or ordinary obligations incurred or to be incurred, to acquire or carry real estate assets, or from certain other limited types of hedging transactions, generally does not constitute "gross income" for purposes of the 75% or 95% gross income tests. To the extent that we enter into other types of hedging transactions, the income from those transactions is likely to be treated as non-qualifying income for purposes of both of the gross income tests. As a result of these rules, we may have to limit our use of advantageous hedging techniques or implement those hedges through a TRS. This could increase the cost of our hedging activities because a TRS would be subject to tax on gains or expose us to greater risks associated with changes in interest rates than we would otherwise want to bear. In addition, losses in a TRS will generally not provide any tax benefit, except for being carried forward against future taxable income in the TRS.

We may be required to report taxable income for certain investments in excess of the economic income we ultimately realize from them.

We may acquire debt instruments in the secondary market for less than their face amount. The discount at which such debt instruments are acquired may reflect doubts about their ultimate collectability rather than current market interest rates. The amount of such discount will nevertheless generally be treated as "market discount" for U.S. federal income tax purposes, which we are required to include in our taxable income either over time or as principal payments are received, as applicable. If we collect less on the debt instrument than our purchase price plus the market discount we had previously reported as income, we may not be able to benefit from any offsetting loss deductions.

Some of the debt instruments that we acquire may have been issued with original issue discount. We will be required to report such original issue discount based on a constant yield method and will be taxed based on the assumption that all future projected payments due on such debt instruments will be made. If such debt instruments turn out not to be fully collectible, an offsetting loss deduction will become available only in the later year that uncollectability is provable.

In addition, we may acquire debt instruments that are subsequently modified by agreement with the borrower. If the amendments to the outstanding instrument are "significant modifications" under the applicable U.S. Treasury regulations, the

modified instrument will be considered to have been reissued to us in a debt-for-debt exchange with the borrower. In that event, we may be required to recognize taxable gain to the extent the principal amount of the modified instrument exceeds our adjusted tax basis in the unmodified instrument, even if the value of the instrument or the payment expectations have not changed. Following such a taxable modification, we would hold the modified loan with a cost basis equal to its principal amount for U.S. federal income tax purposes.

Finally, in the event that any debt instruments acquired by us are delinquent as to mandatory principal and interest payments, or in the event payments with respect to a particular instrument are not made when due, we may nonetheless be required to continue to recognize the unpaid interest as taxable income as it accrues, despite doubt as to its ultimate collectability. Similarly, we may be required to accrue interest income with respect to debt instruments at its stated rate regardless of whether corresponding cash payments are received or are ultimately collectible. In each case, while we would in general ultimately have an offsetting loss deduction available to us when such interest was determined to be uncollectible, the utility of that deduction could depend on our having taxable income in that later year or thereafter.

For these and other reasons, we may have difficulty making distributions sufficient to maintain our qualification as a REIT or avoid corporate income tax and the 4% excise tax in a particular year.

The interest apportionment rules may affect our ability to comply with the REIT asset and gross income tests.

Most of the purchased credit impaired and non-performing loans that we have acquired were acquired by us at a discount from their outstanding principal amount, because our pricing was generally based on the value of the underlying real estate that secures those mortgage loans. Treasury Regulation Section 1.856-5(c) (the "interest apportionment regulation") provides that if a mortgage is secured by both real property and other property, a REIT is required to apportion its annual interest income to the real property security based on a fraction, the numerator of which is the value of the real property securing the loan, determined when the REIT commits to acquire the loan, and the denominator of which is the highest "principal amount" of the loan during the year. If a mortgage is secured by both real property and personal property and the value of the personal property does not exceed 15% of the aggregate value of the property securing the mortgage, the mortgage is treated as secured solely by real property for this purpose. Revenue Procedure 2014-51 interprets the "principal amount" of the loan to be the face amount of the loan, despite the Code requiring taxpayers to treat any market discount, that is the difference between the purchase price of the loan and its face amount, for all purposes (other than certain withholding and information reporting purposes) as interest rather than principal.

The interest apportionment regulation applies only if the debt in question is secured both by real property and personal property. We believe that all of the mortgage loans that we acquire at a discount under the circumstances contemplated by Revenue Procedure 2014-51 are secured only by real property, and no other property value is taken into account in our underwriting and pricing. Accordingly, we believe that the interest apportionment regulation does not apply to our portfolio.

Nevertheless, if the IRS were to assert successfully that our mortgage loans were secured by property other than real estate, that the interest apportionment regulation applied for purposes of our REIT testing, and that the position taken in Revenue Procedure 2014-51 should be applied to our portfolio, then depending upon the value of the real property securing our loans and their face amount, and the sources of our gross income generally, we might not be able to meet the REIT 75% gross income test, and possibly the asset tests applicable to REITs. If we did not meet these tests, we could potentially either lose our REIT status or be required to pay a tax penalty to the IRS. With respect to the REIT 75% asset test, Revenue Procedure 2014-51 provides a safe harbor under which the IRS will not challenge a REIT's treatment of a loan as being a real estate asset in an amount equal to the lesser of (1) the greater of (a) the current value of the real property securing the loan or (b) the fair market value of the real property securing the loan determined as of the date the REIT committed to acquire the loan or (2) the fair market value of the loan on the date of the relevant quarterly REIT asset testing date. This safe harbor, if it applied to us, would help us comply with the REIT asset tests following the acquisition of distressed debt if the value of the real property securing the loan were to subsequently decline. If we did not meet one or more of the REIT asset tests, then we could potentially either lose our REIT status or be required to pay a tax penalty to the IRS.

Dividends paid by REITs do not qualify for the reduced tax rates available for "qualified dividend income."

The maximum regular U.S. federal income tax rate for qualified dividend income paid to domestic stockholders that are individuals, trusts and estates is currently 20%. Dividends paid by REITs, however, are generally not eligible for the reduced qualified dividend rates. For taxable years beginning before January 1, 2026, non-corporate taxpayers may deduct up to 20% of certain pass-through business income, including "qualified REIT dividends" (generally, dividends received by a REIT stockholder that are not designated as capital gain dividends or qualified dividend income), subject to certain limitations, resulting in an effective maximum U.S. federal income tax rate of 29.6% on such income. Although the reduced U.S. federal income tax rate applicable to qualified dividend income does not adversely affect the taxation of REITs or dividends payable by REITs, the more favorable rates applicable to regular corporate qualified dividends and the reduced corporate tax rate could cause certain non-corporate investors to perceive investments in REITs to be relatively less attractive than investments in the stocks of non-REIT corporations that pay dividends, which could adversely affect the value of the shares of REITs, including our common stock.

We may in the future choose to make distributions in our own stock, in which case you could be required to pay income taxes in excess of any cash distributions you receive.

We may in the future make taxable distributions that are payable in cash and shares of our common stock at the election of each stockholder. Taxable stockholders receiving such distributions will be required to include the full amount of the distribution as ordinary income to the extent of our current and accumulated earnings and profits for federal income tax purposes. As a result, stockholders may be required to pay income taxes with respect to such distributions in excess of the cash distributions received. If a U.S. stockholder sells the stock that it receives as a distribution in order to pay this tax, the sale proceeds may be less than the amount included in income with respect to the distribution, depending on the market price of our stock at the time of the sale. Furthermore, with respect to certain non-U.S. stockholders, we may be required to withhold U.S. tax with respect to such distributions, including in respect of all or a portion of such distribution that is payable in stock. In addition, if a significant number of our stockholders determine to sell shares of our common stock in order to pay taxes owed on distributions, it may put downward pressure on the market price of our common stock.

The IRS has issued guidance authorizing elective cash/stock dividends to be made by public REITs where there is a minimum (of at least 20%) amount of cash that must be paid as part of the dividend, provided that certain requirements are met. It is unclear whether and to what extent we would be able to or choose to pay taxable distributions in cash and stock. In addition, no assurance can be given that the IRS will not impose additional requirements in the future with respect to taxable cash/stock distributions, including on a retroactive basis, or assert that the requirements for such taxable cash/stock distributions have not been met.

New legislation or administrative or judicial action, in each instance potentially with retroactive effect, could make it more difficult or impossible for us to remain qualified as a REIT.

The present U.S. federal income tax treatment of REITs and their shareholders may be modified, possibly with retroactive effect, by legislative, judicial or administrative action at any time, which could affect the U.S. federal income tax treatment of an investment in us. Revisions in U.S. federal income tax laws and interpretations thereof, including those dealing with REITs, are constantly under review by persons involved in the legislative process, the IRS and the U.S. Treasury Department, which results in statutory changes as well as frequent revisions to regulations. Such changes could affect or cause us to change our investments and commitments and affect the tax considerations of an investment in us. We cannot predict the long-term effect of any future law changes on REITs and their stockholders. Any such changes could have an adverse effect on an investment in our stock or on the market value or the resale potential of our assets.

Risks Related to Our Corporate Structure

Our ownership limitations may restrict business combination opportunities.

To qualify as a REIT under the Code, no more than 50% of the value of our outstanding shares of capital stock may be owned, directly or under applicable attribution rules, by five or fewer individuals (as defined by the Code to include certain entities) during the last half of each taxable year. To preserve our REIT qualification, among other things, our charter generally prohibits direct or indirect ownership by any person of more than 9.8% of the number or value of the outstanding shares of our capital stock or more than 9.8% of the number or value, whichever is more restrictive, of the outstanding shares of our preferred stock. Generally, shares owned by affiliated owners will be aggregated for purposes of the ownership limit. Any transfer of shares of our capital stock or other event that, if effective, would violate the ownership limit will be void as to that number of shares of capital stock in excess of the ownership limit and the intended transferee will acquire no rights in such shares. Shares issued or transferred that would cause any stockholder to own more than the ownership limit or cause us to become "closely held" under Section 856(h) of the Code will automatically be converted into an equal number of shares of excess stock. All excess stock will be automatically

transferred, without action by the prohibited owner, to a trust for the exclusive benefit of one or more charitable beneficiaries that we select, and the prohibited owner will not acquire any rights in the shares of excess stock. The restrictions on ownership and transfer contained in our charter could have the effect of delaying, deferring or preventing a change in control or other transaction in which holders of shares of common stock might receive a premium for their shares of common stock over the then current market price or that such holders might believe to be otherwise in their best interests. The ownership limit provisions also may make our shares of common stock an unsuitable investment vehicle for any person seeking to obtain, either alone or with others as a group, ownership of more than 9.8% of the number or value of our outstanding shares of capital stock.

Provisions of Maryland law and other provisions of our organizational documents may limit the ability of a third party to acquire control of the Company.

Certain provisions of the Maryland General Corporation Law (or MGCL) may have the effect of delaying, deferring or preventing a transaction or a change in control of our company that might involve a premium price for holders of our common stock or otherwise be in their best interests, including:

- "business combination" provisions that, subject to limitations, prohibit certain business combinations between us and an "interested stockholder" (defined generally as any person who beneficially owns 10% or more of the voting power of our outstanding voting stock or an affiliate or associate of ours who, at any time within the two-year period immediately prior to the date in question, was the beneficial owner of 10% or more of the voting power of our then outstanding stock) or an affiliate of an interested stockholder for five years after the most recent date on which the stockholder becomes an interested stockholder, and thereafter impose two supermajority stockholder voting requirements to approve these combinations (unless our common stockholders receive a minimum price, as defined under Maryland law, for their shares in the form of cash or other consideration in the same form as previously paid by the interested stockholder for its shares); and
- "control share" provisions that provide that holders of "control shares" of our company (defined as voting shares of stock which, when aggregated with all other shares controlled by the acquiring stockholder, entitle the stockholder to exercise one of three increasing ranges of voting power in electing directors) acquired in a "control share acquisition" (defined as the direct or indirect acquisition of ownership or control of "control shares") have no voting rights except to the extent approved by our stockholders by the affirmative vote of at least two-thirds of all the votes entitled to be cast on the matter, excluding all interested shares.

Our bylaws provide that we are not subject to the "control share" provisions of the MGCL. However, our Board may elect to make the "control share" statute applicable to us at any time, and may do so without stockholder approval.

Title 3, Subtitle 8 of the MGCL permits our Board, without stockholder approval and regardless of what is currently provided in our charter or bylaws, to elect on behalf of our company to be subject to statutory provisions that may have the effect of delaying, deferring or preventing a transaction or a change in control of our company that might involve a premium price for holders of our common stock or otherwise be in their best interest. Our Board may elect to opt in to any or all of the provisions of Title 3, Subtitle 8 of the MGCL without stockholder approval at any time. In addition, without our having elected to be subject to Subtitle 8, our charter and bylaws already (1) provide for a classified board, (2) require the affirmative vote of the holders of at least 80% of the votes entitled to be cast in the election of directors for the removal of any director from our Board, which removal will be allowed only for cause, (3) vest in our Board the exclusive power to fix the number of directorships and (4) require, unless called by our Chairman of the Board, Chief Executive Officer or President or our Board, the written request of stockholders entitled to cast not less than a majority of all votes entitled to be cast at such a meeting to call a special meeting. These provisions may delay or prevent a change of control of our company.

Future offerings of debt securities, which would rank senior to our common stock upon liquidation, and future offerings of equity securities, which would dilute our existing stockholders and may be senior to our common stock for the purposes of dividend and liquidating distributions, may adversely affect the market price of our common stock.

In the future, we may attempt to increase our capital resources by making offerings of debt or additional offerings of equity securities, including commercial paper, senior or subordinated notes and series or classes of preferred stock or common stock. Upon liquidation, holders of our debt securities and shares of preferred stock, if any, and lenders with respect to other borrowings will receive a distribution of our available assets prior to the holders of our common stock. Additional equity offerings may dilute the holdings of our existing stockholders or reduce the market price of our common stock, or both. Preferred stock could have a preference on liquidating distributions or a preference on dividend payments or both that could limit our ability to make a dividend distribution to the holders of our common stock. Because our decision to issue securities in any future offering will depend on market conditions and other factors beyond our control, we cannot predict or estimate the amount, timing or nature of our future

offerings. Thus, holders of our common stock bear the risk of our future offerings reducing the market price of our common stock and diluting their stock holdings in us.

Our Board may approve the issuance of capital stock with terms that may discourage a third party from acquiring the Company.

Our charter permits our Board to issue shares of preferred stock, issuable in one or more classes or series. We may issue a class of preferred stock to individual investors in order to comply with the various REIT requirements or to finance our operations. Our charter further permits our Board to classify or reclassify any unissued shares of preferred or common stock and establish the preferences and rights (including, among others, voting, dividend and conversion rights) of any such shares of stock, which rights may be superior to those of shares of our common stock. Thus, our Board could authorize the issuance of shares of preferred or common stock with terms and conditions that could have the effect of discouraging a takeover or other transaction in which holders of the outstanding shares of our common stock might receive a premium for their shares over the then current market price of our common stock.

Future issuances or sales of shares could cause our share price to decline.

Sales of substantial numbers of shares of our common stock in the public market, or the perception that such sales might occur, could adversely affect the market price of our common stock. In addition, the sale of these shares could impair our ability to raise capital through a sale of additional equity securities. Other issuances of our common stock, such as through equity awards to our employees, could have an adverse effect on the market price of our common stock. In addition, future issuances of our common stock may be dilutive to existing stockholders.

Other Business Risks

We are dependent on our executive officers and other key personnel for our success, the loss of any of whom may materially adversely affect our business.

Our success is dependent upon the efforts, experience, diligence, skill and network of business contacts of our executive officers and other key personnel. The departure of any of our executive officers and/or key personnel could have a material adverse effect on our operations and performance.

We are dependent on information systems and their failure (including in connection with cyber attacks) could significantly disrupt our business.

Our business is highly dependent on our information and communications systems. Any failure or interruption of our systems or cyber attacks or security breaches of our networks or systems could cause delays or other problems in our securities trading activities, which could have a material adverse effect on operating results, the market price of our common stock and other securities and our ability to pay dividends to our stockholders. In addition, we also face the risk of operational failure, termination or capacity constraints of any of the third parties with which we do business or that facilitate our business activities, including clearing agents or other financial intermediaries we use to facilitate our securities transactions as well as the servicers of our loans.

Computer malware, viruses, and computer hacking and phishing and cyber attacks have become more prevalent in our industry and may occur on our systems in the future. Although we have not detected a material cybersecurity breach to date, we nonetheless are regularly working to install new, and upgrade our existing, information technology systems and provide employee awareness training around computer malware, phishing, and other cyber risks. However, there can be no assurance that we are or will be fully protected against cyber risks and security breaches and not be vulnerable to new and evolving threats to our information technology systems. We rely heavily on financial, accounting and other data processing systems. It is difficult to determine what, if any, negative impact may directly result from any specific interruption or cyber attacks or security breaches of our networks or systems (or networks or systems of, among other third parties, our lenders and servicers) or any failure to maintain performance, reliability and security of our technical infrastructure. As a result, any such computer malware, viruses, and computer hacking and phishing attacks may negatively affect our operations.

We operate in a highly competitive market for investment opportunities and competition may limit our ability to acquire desirable investments, which could materially adversely affect our results of operations.

We operate in a highly competitive market for investment opportunities. Our profitability depends, in large part, on our ability to acquire residential mortgage assets or other investments at favorable prices. In acquiring our investments, we compete with a variety of institutional investors, including other REITs, public and private funds, commercial and investment banks,

commercial finance and insurance companies and other financial institutions. Many of our competitors are substantially larger and have considerably greater financial, technical, marketing and other resources than we do. Some competitors may have a lower cost of funds and access to funding sources that are not available to us. Many of our competitors are not subject to the operating constraints associated with REIT compliance or maintenance of an exemption from the Investment Company Act similar to ours. In addition, some of our competitors may have higher risk tolerances or different risk assessments, which could allow them to consider a wider variety of investments, establish business relationships that we would not be willing to enter into, or compete aggressively against us to acquire residential mortgage assets from our existing asset sellers or financing counterparties. Furthermore, government or regulatory action and competition for investment securities of the types and classes which we acquire may lead to the price of such assets increasing, which may further limit our ability to generate desired returns. We cannot assure you that the competitive pressures we face will not have a material adverse effect on our business, financial condition and results of operations. Also, as a result of this competition, desirable investments may be limited in the future and we may not be able to take advantage of attractive investment opportunities from time to time, as we can provide no assurance that we will be able to identify and make investments that are consistent with our investment objectives.

Deterioration in the condition of European banks and financial institutions could have a material adverse effect on our business.

In the years following the financial and credit crisis of 2007-2008, certain of our repurchase agreement counterparties in the United States and Europe experienced financial difficulty and were either rescued by government assistance or otherwise benefited from accommodative monetary policy of central banks. Several European governments implemented measures to attempt to shore up their financial sectors through loans, credit guarantees, capital infusions, promises of continued liquidity funding and interest rate cuts. Additionally, other governments of the world's largest economic countries also implemented interest rate cuts. Although economic and credit conditions have stabilized in the past few years, there is no assurance that these and other plans and programs will be successful in the longer term, and, in particular, when governments and central banks begin to significantly unwind or otherwise reverse these programs and policies. If unsuccessful, this could materially adversely affect our financing and operations as well as those of the entire mortgage sector in general.

Several of our financing counterparties are European banks (or their U.S. based subsidiaries) that have provided financing to us, particularly repurchase agreement financing for the acquisition of residential mortgage assets. If European banks and financial institutions experience a deterioration in financial condition, there is the possibility that this would also negatively affect the operations of their U.S. banking subsidiaries. This risk could be more pronounced in light of Brexit. This could adversely affect our financing and operations as well as those of the entire mortgage sector in general.

Any downgrade, or perceived potential of a downgrade, of U.S. sovereign credit ratings or the credit ratings of the GSEs by the various credit rating agencies may materially adversely affect our the value of our Agency MBS and our business more generally.

During the summer of 2011, Standard & Poor's Ratings Services (or S&P), one of the major credit rating agencies, downgraded the U.S. sovereign credit rating in response to the protracted debate over the "U.S. debt ceiling limit" and S&P's perception of the U.S. Government's ability to address its long-term budget deficit. At the same time, S&P also lowered the credit ratings of the GSEs in response to the downgrade in the U.S. sovereign credit rating, as the value of the Agency MBS issued by the GSEs and their ability to meet their obligations under such Agency MBS are largely determined by the support provided to them by the U.S. Government and market perceptions of the strength of such support and the likelihood of its continuity.

We could be adversely affected in a number of ways in the event of a default by the U.S. Government, a further downgrade by S&P or a downgrade of the U.S. sovereign credit rating by another credit rating agency. Such adverse effects could include higher financing costs and/or a reduction in the amount of financing provided based on the market value of collateral posted under our repurchase agreements and other financing arrangements. In addition, although the rating agencies have more recently determined that the GSEs' outlook is generally stable, to the extent that the credit rating of any of the GSEs were to be downgraded in the future, the value of our Agency MBS could be adversely affected. These outcomes could in turn materially adversely affect our operations and financial condition in a number of ways, including a reduction in the net interest spread between our assets and associated repurchase agreement borrowings or a decrease in our ability to obtain repurchase agreement financing on acceptable terms, or at all.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

Office Leases

We currently pay monthly rent pursuant to three office leases. In November 2018, we amended the lease for our corporate headquarters in New York, New York, under the same terms and conditions, to extend the expiration date for the lease by up to one year, through June 30, 2021, with a mutual option to terminate in February 2021. For the year ended December 31, 2019, we recorded an expense of approximately \$2.6 million in connection with the lease for our current corporate headquarters.

In addition, in November 2018, we executed a lease agreement on new office space in New York, New York. We plan to relocate our corporate headquarters to this new office space upon the substantial completion of the building. The lease term specified in the agreement is fifteen years with an option to renew for an additional five years. Our current estimate of annual lease rental expense under the new lease, excluding escalation charges which at this point are unknown, is approximately \$4.6 million. We currently expect to relocate to the space in the fourth quarter of 2020, but this timing as well as when we are required to begin making payments and recognize rental and other expenses under the new lease, is dependent on when the building is actually available for use.

Item 3. Legal Proceedings.

There are no material legal proceedings to which we are a party or to which any of our assets are subject.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

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

Market Information

Our common stock is listed on the New York Stock Exchange, under the symbol "MFA", and our preferred stock is also listed on the NYSE, under the symbol "MFA/PB."

Holders

As of February 14, 2020, we had 532 registered holders of our common stock. Such information was obtained through our registrar and transfer agent, based on the results of a broker search.

Dividends

No dividends may be paid on our common stock unless full cumulative dividends have been paid on our preferred stock. We have paid full cumulative dividends on our preferred stock on a quarterly basis through December 31,2019. We have historically declared cash dividends on our common stock on a quarterly basis. During 2019 and 2018, we declared total cash dividends to holders of our common stock of \$361.0 million (\$0.80 per share) and \$339.2 million (\$0.80 per share), respectively. In general, our common stock dividends have been characterized as ordinary income to our stockholders for income tax purposes. However, a portion of our common stock dividends may, from time to time, be characterized as capital gains or return of capital. For the years ended December 31, 2019, 2018 and 2017 the portions of our common stock dividends that were deemed to be capital gains were \$0.1672, \$0.1290 and \$0.0831 per share of common stock, respectively. (For additional dividend information, see Notes 11(a) and 11(b) to the consolidated financial statements, included under Item 8 of this Annual Report on Form 10-K.)

We elected to be taxed as a REIT for U.S. federal income tax purposes commencing with our taxable year ended December 31, 1998 and, as such, anticipate distributing at least 90% of our REIT taxable income within the timeframe permitted by the Code. Although we may borrow funds to make distributions, cash for such distributions has generally been, and is expected to continue to be, largely generated from our results of our operations.

We declared and paid the following dividends on our common stock during the years 2019 and 2018:

Year	Declaration Date	Record Date	Payment Date	Dividend per Share
2019	December 12, 2019	December 30, 2019	January 31, 2020	\$ 0.20 (1)
	September 12, 2019	September 30, 2019	October 31, 2019	0.20
	June 12, 2019	July 1, 2019	July 31, 2019	0.20
	March 6, 2019	March 29, 2019	April 30, 2019	0.20
2018	December 12, 2018	December 28, 2018	January 31, 2019	\$ 0.20
	September 13, 2018	October 1, 2018	October 31, 2018	0.20
	June 7, 2018	June 29, 2018	July 31, 2018	0.20
	March 7, 2018	March 29, 2018	April 30, 2018	0.20

⁽¹⁾ At December 31, 2019, we had accrued dividends and dividend equivalents payable of \$90.7 million related to the common stock dividend declared on December 12, 2019.

We have not established a minimum payout level for our common stock. Dividends are declared and paid at the discretion of our Board and depend on our cash available for distribution, financial condition, ability to maintain our qualification as a REIT, and such other factors that our Board may deem relevant. (See Part I, Item 1A., "Risk Factors" and Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" of this Annual Report on Form 10-K, for information regarding the sources of funds used for dividends and for a discussion of factors, if any, which may adversely affect our ability to pay dividends.)

Purchases of Equity Securities

As previously disclosed, in August 2005, our Board authorized a stock repurchase program (or Repurchase Program), to repurchase up to 4.0 million shares of our outstanding common stock under the Repurchase Program. The Board reaffirmed such authorization in May 2010. In December 2013, our Board increased the number of shares authorized under the Repurchase Program to an aggregate of 10.0 million shares (under which approximately 6.6 million shares remain available for repurchase). Such authorization does not have an expiration date and, at present, there is no intention to modify or otherwise rescind such authorization. Subject to applicable securities laws, repurchases of common stock under the Repurchase Program are made at times and in amounts as we deem appropriate (including, in our discretion, through the use of one or more plans adopted under Rule 10b5-1 promulgated under the Securities Exchange Act of 1934, as amended (or 1934 Act)), using available cash resources. Shares of common stock repurchased by us under the Repurchase Program are cancelled and, until reissued by us, are deemed to be authorized but unissued shares of our common stock. The Repurchase Program may be suspended or discontinued by us at any time and without prior notice.

We did not repurchase any shares of our common stock under the Repurchase Program during the years ended December 31, 2019 and 2018.

We engaged in no share repurchase activity during the fourth quarter of 2019 pursuant to the Repurchase Program. We did, however, withhold restricted shares (under the terms of grants under our Equity Compensation Plan (or Equity Plan)) to offset tax withholding obligations that occur upon the vesting and release of restricted stock awards and/or restricted stock units (or RSUs). The following table presents information with respect to (i) such withheld restricted shares, and (ii) eligible shares remaining for repurchase under the Repurchase Program:

Month	Total Number of Shares Purchased	Aver Pa	eighted rage Price aid Per are (1)	Total Number of Shares Repurchased as Part of Publicly Announced Repurchase Program or Employee Plan	Maximum Number of Shares that May Yet be Purchased Under the Repurchase Program or Employee Plan
October 1-31, 2019:					
Repurchase Program (2)		\$		_	6,616,355
Employee Transactions (3)	_		_	N/A	N/A
November 1-30, 2019:					
Repurchase Program (2)	_		_	_	6,616,355
Employee Transactions (3)	_		_	N/A	N/A
December 1-31, 2019:					
Repurchase Program (2)	_		_	_	6,616,355
Employee Transactions (3)	192,571	\$	7.83	N/A	N/A
Total Repurchase Program (2)		\$			6,616,355
Total Employee Transactions (3)	192,571	\$	7.83	N/A	N/A

⁽¹⁾ Includes brokerage commissions.

⁽²⁾ As of December 31, 2019, we had repurchased an aggregate of 3,383,645 shares under the Repurchase Program.

⁽³⁾ Our Equity Plan provides that the value of the shares delivered or withheld be based on the price of our common stock on the date the relevant transaction occurs.

Discount Waiver, Direct Stock Purchase and Dividend Reinvestment Plan

In September 2003, we initiated a Discount Waiver, Direct Stock Purchase and Dividend Reinvestment Plan (or the DRSPP) to provide existing stockholders and new investors with a convenient and economical way to purchase shares of our common stock. Under the DRSPP, existing stockholders may elect to automatically reinvest all or a portion of their cash dividends in additional shares of our common stock and existing stockholders and new investors may make optional cash purchases of shares of our common stock in amounts ranging from \$50 (or \$1,000 for new investors) to \$10,000 on a monthly basis and, with our prior approval, in excess of \$10,000. At our discretion, we may issue shares of our common stock under the DRSPP at discounts of up to 5% from the prevailing market price at the time of purchase. Computershare Shareowner Services LLC is the administrator of the DRSPP (or the Plan Agent). Stockholders who own common stock that is registered in their own name and who want to participate in the DRSPP must deliver a completed enrollment form to the Plan Agent. Stockholders who own common stock that is registered in a name other than their own (e.g., broker, bank or other nominee) and who want to participate in the DRSPP must either request such nominee holder to participate on their behalf or request that such nominee holder re-register our common stock in the stockholder's name and deliver a completed enrollment form to the Plan Agent. During the years ended 2019 and 2018, we issued 322,888 and 379,903 shares of common stock through the DRSPP generating net proceeds of approximately \$2.4 million and \$2.8 million, respectively.

At-the-Market Offering Program

On August 16, 2019 we entered into a distribution agreement under the terms of which we may offer and sell shares of our common stock having an aggregate gross sales price of up to \$400.0 million (or the ATM Shares), from time to time, through various sales agents, pursuant to an at-the-market equity offering program (or ATM Program). Sales of the ATM Shares, if any, may be made in negotiated transactions or by transactions that are deemed to be "at-the-market" offerings, as defined in Rule 415 under the Securities Act of 1933 (or the 1933 Act), including sales made directly on the NYSE or sales made to or through a market maker other than an exchange. The sales agents are entitled to compensation of up to two percent of the gross sales price per share for any shares of common stock sold under the distribution agreement.

During the year ended December 31, 2019, we sold 1,357,526 shares of common stock through the ATM Program at a weighted average price of \$7.40, raising proceeds of approximately \$9.9 million, net of fees and commissions paid to sales agents of approximately \$100,000. At December 31, 2019, approximately \$390.0 million remained outstanding for future offerings under this program.

Securities Authorized For Issuance Under Equity Compensation Plans

During 2015, we adopted the Equity Plan, as approved by our stockholders. The Equity Plan amended and restated our 2010 Equity Compensation Plan. (For a description of the Equity Plan, see Note 13(a) to the consolidated financial statements included under Item 8 of this Annual Report on Form 10-K.)

The following table presents certain information with respect to our equity compensation plans as of December 31, 2019:

Award <i>(1)</i>	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights		Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in the first column of this table)	
RSUs	2,680,931				
Total	2,680,931		(2)	3,440,471	(3)

⁽¹⁾ All equity based compensation is granted pursuant to plans that have been approved by our stockholders.

⁽²⁾ A weighted average exercise price is not applicable for our RSUs, as such equity awards result in the issuance of shares of our common stock provided that such awards vest and, as such, do not have an exercise price. At December 31, 2019, 1,250,931 RSUs were vested, 570,000 RSUs were subject to time based vesting and 860,000 RSUs will vest subject to achieving a market condition.

⁽³⁾ Number of securities remaining available for future issuance under equity compensation plans excludes RSUs presented in the table which were issued and outstanding at December 31, 2019.

Item 6. Selected Financial Data.

Our selected financial data set forth below is derived from our audited financial statements and should be read in conjunction with our consolidated financial statements and the accompanying notes, included under Item 8 of this Annual Report on Form 10-K

	At or/For the Year Ended December 31,									
(Dollars in Thousands, Except per Share Amounts)		2019		2018		2017		2016		2015
Operating Data:										
Interest income	\$	581,726	\$	455,675	\$	443,448	\$	457,450	\$	492,143
Interest expense		(332,356)		(232,186)		(197,141)		(193,355)		(176,948)
Net gain on residential whole loans measured at fair value through earnings		158,330		137,619		90,045		62,605		19,575
Net realized gain on sales of residential mortgage securities (1)		62,002		61,307		39,577		35,837		34,900
Other income/(loss), net		5,525		(40,951)		28,365		10,115		(4,015)
Operating and other expense		97,110		79,663		(71,901)		(59,984)		(52,429)
Net income	\$	378,117	\$	301,801	\$	322,393	\$	312,668	\$	313,226
Preferred stock dividends		15,000		15,000		15,000		15,000		15,000
Net income available to common stock and participating securities	\$	363,117	\$	286,801	\$	307,393	\$	297,668	\$	298,226
Earnings per share — basic	\$	0.80	\$	0.68	\$	0.79	\$	0.80	\$	0.80
Earnings per share — diluted	\$	0.79	\$	0.68	\$	0.79	\$	0.80	\$	0.80
Dividends declared per share of common stock	\$	0.80	\$	0.80	\$	0.80	\$	0.80	\$	0.80
Dividends declared per share of preferred stock	\$	1.875	\$	1.875	\$	1.875	\$	1.875	\$	1.875
Balance Sheet Data:										
Residential mortgage securities and MSR-related assets	\$	5,200,521	\$	7,121,140	\$	7,515,130	\$	10,054,963	\$1	1,356,643
Residential whole loans, at carrying value		6,066,345		3,016,715		908,516		590,540		271,845
Residential whole loans, at fair value		1,381,583		1,665,978		1,325,115		814,682		623,276
Cash and cash equivalents		70,629		51,965		449,757		260,112		165,007
Total assets		13,567,364		12,420,327		10,954,734		12,484,022	1	3,162,551
Repurchase agreements and other advances		9,139,821		7,879,087		6,614,701		8,687,268		9,387,622
Securitized debt (2)		570,952		684,420		363,944		_		21,868
Total liabilities		10,183,412		9,004,226		7,693,098		9,450,120	1	0,195,290
Preferred stock, liquidation preference		200,000		200,000		2,000		200,000		200,000
Total stockholders' equity		3,383,952		3,416,101		3,261,636		3,033,902		2,967,261
Other Data:										
Average total assets	\$	13,077,021	\$	11,186,845	\$	11,619,174	\$	12,836,580	\$1	3,669,055
Average total stockholders' equity	\$	3,402,077	\$	3,346,980	\$	3,203,814	\$	2,965,570	\$	3,129,461
Return on average total assets (3)		2.78%		2.56%		2.65%		2.32%		2.18%
Return on average total stockholders' equity (4)		11.11%		9.02%		10.06%		10.54%		10.01%
Total average stockholders' equity to total average assets (5)		26.02%		29.92%		27.57%		23.10%		22.89%
Dividend payout ratio (6)		1.00		1.18		1.01		1.00		1.00
Book value per share of common stock (7)	\$	7.04	\$	7.15	\$	7.70	\$	7.62	\$	7.47

- (1) 2019: We sold Agency MBS for \$360.6 million, realizing gains of \$499,000, sold CRT securities for \$256.7 million, realizing gains of \$11.1 million, sold Non-Agency MBS for \$291.4 million, realizing gains of \$50.4 million. 2018: We sold Agency MBS for \$122.0 million, realizing losses of \$6.8 million, sold CRT securities for \$299.9 million, realizing gains of \$31.4 million, sold Non-Agency MBS for \$117.1 million, realizing gains of \$36.7 million. 2017: We sold Non-Agency MBS for \$104.0 million, realizing gains of \$39.9 million and sold U.S. Treasury securities for \$139.1 million, realizing losses of approximately \$309,000. 2016: We sold Non-Agency MBS for \$85.6 million, realizing gains of \$35.8 million. 2015: We sold Non-Agency MBS for \$70.7 million, realizing gains of \$34.9 million.
- (2) 2019, 2018 and 2017: Reflects securitized debt from our loan securitization transactions. 2015: Reflects securitized debt from our MBS resecuritization transactions.
- (3) Reflects net income available to common stock and participating securities divided by average total assets.
- (4) Reflects net income divided by average total stockholders' equity.
- (5) Reflects total average stockholders' equity divided by total average assets.
- (6) Reflects dividends declared per share of common stock (excluding special dividends) divided by earnings per share.
- (7) Reflects total stockholders' equity less the preferred stock liquidation preference divided by total shares of common stock outstanding.

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

The following discussion should be read in conjunction with our financial statements and accompanying notes included in Item 8 of this Annual Report on Form 10-K.

GENERAL

We are an internally-managed REIT primarily engaged in the business of investing, on a leveraged basis, in residential mortgage assets, including residential whole loans, residential mortgage securities and MSR-related assets. Our principal business objective is to deliver shareholder value through the generation of distributable income and through asset performance linked to residential mortgage credit fundamentals. We selectively invest in residential mortgage assets with a focus on credit analysis, projected prepayment rates, interest rate sensitivity and expected return.

At December 31, 2019, we had total assets of approximately \$13.6 billion, of which \$7.4 billion, or 55%, represent residential whole loans acquired through interests in certain trusts established to acquire the loans. During 2019, our residential whole loan portfolio continued to grow due to acquisitions of Purchased Performing Loans. Our Purchased Performing Loans, which as of December 31, 2019 comprised approximately 72% of our residential whole loans, include: (i) loans to finance (or refinance) oneto four-family residential properties that are not considered to meet the definition of a "Qualified Mortgage" in accordance with guidelines adopted by the Consumer Financial Protection Bureau (or Non-QM loans), (ii) short-term business purpose loans collateralized by residential properties made to non-occupant borrowers who intend to rehabilitate and sell the property for a profit (or Rehabilitation loans or Fix and Flip loans), (iii) loans to finance (or refinance) non-owner occupied one-to four-family residential properties that are rented to one or more tenants (or Single-family rental loans), and (iv) previously originated loans secured by residential real estate that is generally owner occupied (or Seasoned performing loans). In addition, at December 31, 2019, we had approximately \$4.0 billion in investments in residential mortgage securities, which represented approximately 29% of our total assets. At such date, our portfolio included \$1.7 billion of Agency MBS, \$2.1 billion of Non-Agency MBS and \$255.4 million of CRT securities. Non-Agency MBS is comprised of \$1.4 billion of Legacy Non-Agency MBS and \$635.0 million of RPL/NPL MBS. These RPL/NPL MBS are backed by securitized re-performing and non-performing loans and are generally structured with a contractual coupon step-up feature where the coupon increases from 300 - 400 basis points at 36 - 48 months from issuance or sooner. At December 31, 2019, our investments in MSR-related assets were \$1.2 billion, or 9% of our total assets. Our MSRrelated assets include term notes whose cash flows are considered to be largely dependent on MSR collateral and loan participations to provide financing to mortgage originators that own MSRs. Our remaining investment-related assets, which represent approximately 5% of our total assets at December 31, 2019, were primarily comprised of REO, capital contributions made to loan origination partners, other interest-earning assets and MBS and loan-related receivables.

The results of our business operations are affected by a number of factors, many of which are beyond our control, and primarily depend on, among other things, the level of our net interest income and the market value of our assets, which is driven by numerous factors, including the supply and demand for residential mortgage assets in the marketplace, the terms and availability of adequate financing, general economic and real estate conditions (both on a national and local level), the impact of government actions in the real estate and mortgage sector, and the credit performance of our credit sensitive residential mortgage assets. In addition, our GAAP results may be impacted by market volatility, resulting in changes in market values of certain financial instruments for which changes in fair value are recorded in net income each period, such as CRT securities, certain residential whole loans, Agency MBS, and Swaps not designated as hedges. Our net interest income varies primarily as a result of changes in interest rates, the slope of the yield curve (i.e., the differential between long-term and short-term interest rates), borrowing costs (i.e., our interest expense) and prepayment speeds, the behavior of which involves various risks and uncertainties. Interest rates and conditional prepayment rates (or CPRs) (which measure the amount of unscheduled principal prepayment on an asset as a percentage of the asset balance), vary according to the type of investment, conditions in the financial markets, competition and other factors, none of which can be predicted with any certainty. With the adoption in January 2020 of new accounting standards for the measurement and recognition of credit losses, and given the extent of current and anticipated future investments in residential whole loans, our financial results going forward are likely to be impacted by estimates of credit losses that are required to be recorded when loans that are not accounted for at fair value through net income are acquired or originated, as well as changes in these credit loss estimates that will be required to be made periodically.

With respect to our business operations, increases in interest rates, in general, may over time cause: (i) the interest expense associated with our borrowings to increase; (ii) the value of certain of our residential mortgage assets and, correspondingly, our stockholders' equity to decline; (iii) coupons on our adjustable-rate assets to reset, on a delayed basis, to higher interest rates; (iv) prepayments on our assets to decline, thereby slowing the amortization of purchase premiums and the accretion of our purchase discounts, and slowing our ability to redeploy capital to generally higher yielding investments; and (v) the value of our derivative hedging instruments and, correspondingly, our stockholders' equity to increase. Conversely, decreases in interest rates, in general, may over time cause: (i) the interest expense associated with our borrowings to decrease; (ii) the value of certain of our residential

mortgage assets and, correspondingly, our stockholders' equity to increase; (iii) coupons on our adjustable-rate assets, on a delayed basis, to lower interest rates; (iv) prepayments on our assets to increase, thereby accelerating the amortization of purchase premiums and the accretion of our purchase discounts, and accelerating the redeployment of our capital to generally lower yielding investments; and (v) the value of our derivative hedging instruments and, correspondingly, our stockholders' equity to decrease. In addition, our borrowing costs and credit lines are further affected by the type of collateral we pledge and general conditions in the credit market.

Our investments in residential mortgage assets, particularly investments in residential mortgage loans and Non-Agency MBS, expose us to credit risk, meaning that we are generally subject to credit losses due to the risk of delinquency, default and foreclosure on the underlying real estate collateral. Our investment process for credit sensitive assets focuses primarily on quantifying and pricing credit risk. With respect to investments in Purchased Performing Loans, we believe that sound underwriting standards, including low LTVs at origination, significantly mitigate our risk of loss. Further, we believe the discounted purchase prices paid on certain non performing and Purchased Credit Impaired Loans mitigate our risk of loss in the event that, as we expect on most such investments, we receive less than 100% of the par value of these investments. (See Part I, Item 1A., "Risk Factors - Credit and Other Risks Related to our Investments" and Item 7A., "Quantitative and Qualitative Disclosures About Market Risk" of this Annual Report on Form 10-K.)

Premiums arise when we acquire an MBS at a price in excess of the aggregate principal balance of the mortgages securing the MBS (i.e., par value) or when we acquire residential whole loans at a price in excess of their aggregate principal balance. Conversely, discounts arise when we acquire an MBS at a price below the aggregate principal balance of the mortgages securing the MBS or when we acquire residential whole loans at a price below their aggregate principal balance. Accretable purchase discounts on these investments are accreted to interest income. Purchase premiums, which are primarily carried on our Agency MBS, certain CRT securities and Non-QM loans, are amortized against interest income over the life of the investment using the effective yield method, adjusted for actual prepayment activity. An increase in the prepayment rate, as measured by the CPR, will typically accelerate the amortization of purchase premiums, thereby reducing the interest income earned on these assets.

CPR levels are impacted by, among other things, conditions in the housing market, new regulations, government and private sector initiatives, interest rates, availability of credit to home borrowers, underwriting standards and the economy in general. In particular, CPR reflects the conditional repayment rate (or CRR), which measures voluntary prepayments of a loan, and the conditional default rate (or CDR), which measures involuntary prepayments resulting from defaults. CPRs on our residential mortgage securities and whole loans may differ significantly. For the year ended December 31, 2019, our Agency MBS portfolio experienced a weighted average CPR of 18.1%, and our Legacy Non-Agency MBS portfolio experienced a weighted average CPR of 16.4%. For the year ended December 31, 2018, our Agency MBS portfolio experienced a weighted average CPR of 14.4%, and our Legacy Non-Agency MBS portfolio experienced a weighted average CPR of 15.5%. Over the last consecutive eight quarters, ending with December 31, 2019, the monthly weighted average CPR on our Agency and Legacy Non-Agency MBS portfolios ranged from a high of 18.6% experienced during the month ended September 30, 2019 to a low of 12.2%, experienced during the month ended January 31, 2019, with an average CPR over such quarters of 15.4%. In addition, for the year ended December 31, 2019, the weighted average CPR on our Non-QM loan portfolio was 21.4%.

Our method of accounting for Non-Agency MBS purchased at significant discounts to par value, requires us to make assumptions with respect to each security. These assumptions include, but are not limited to, future interest rates, voluntary prepayment rates, default rates, mortgage modifications and loss severities. As part of our Non-Agency MBS surveillance process, we track and compare each security's actual performance over time to the performance expected at the time of purchase or, if we have modified our original purchase assumptions, to our revised performance expectations. To the extent that actual performance or our expectation of future performance of our Non-Agency MBS deviates materially from our expected performance parameters, we may revise our performance expectations, so that the amount of purchase discount designated as credit discount may be increased or decreased over time. Nevertheless, credit losses greater than those anticipated or in excess of the recorded purchase discount could occur, which could materially adversely impact our operating results.

It is generally our business strategy to hold our residential mortgage assets as long-term investments. On at least a quarterly basis, excluding investments for which the fair value option has been elected or for which specialized loan accounting is otherwise applied, we assess our ability and intent to continue to hold each asset and, as part of this process, we monitor our residential mortgage securities and MSR-related assets that are designated as AFS for impairment. A change in our ability and/or intent to continue to hold any of these securities that are in an unrealized loss position, or a deterioration in the underlying characteristics of these securities, could result in our recognizing future impairment charges or a loss upon the sale of any such security. At December 31, 2019, we had net unrealized gains on our Non-Agency MBS of \$395.4 million, comprised of gross unrealized losses of \$18,000 and net unrealized losses of \$3.4 million on our Agency MBS, comprised of gross unrealized losses of \$18.7 million and gross unrealized gains of \$15.3 million. At December 31, 2019, we did not intend to sell any securities in our portfolio that are designated as AFS and that were in an unrealized loss position, and we believe it is

more likely than not that we will not be required to sell those securities before recovery of their amortized cost basis, which may be at their maturity.

We rely primarily on borrowings under repurchase agreements to finance our residential mortgage assets. Our residential mortgage investments have longer-term contractual maturities than our borrowings under repurchase agreements. Even though the majority of our investments have interest rates that adjust over time based on short-term changes in corresponding interest rate indices (typically following an initial fixed-rate period for our Hybrids), the interest rates we pay on our borrowings will typically change at a faster pace than the interest rates we earn on our investments. In order to reduce this interest rate risk exposure, we may enter into derivative instruments, which at December 31, 2019 were comprised of Swaps. Going forward, in connection with our current and any future investment in residential whole loans, we expect that our financing strategy will include the use of additional loan securitization transactions or the use of other forms of structured financing.

The majority of our Swap derivative instruments are designated as cash-flow hedges against a portion of our current and forecasted LIBOR-based repurchase agreements. While these Swaps do not extend the maturities of the associated repurchase agreements being hedged; they do, however, lock in a fixed rate of interest over their term for the notional amount of the Swap corresponding to the hedged item.

Recent Market Conditions and Our Strategy

At December 31, 2019, our residential mortgage asset portfolio, which includes residential whole loans and REO, residential mortgage securities and MSR-related assets, was approximately \$13.1 billion compared to \$12.1 billion at December 31, 2018. During 2019, we continued to successfully execute on our investment strategy, adding \$4.3 billion of residential whole loans and growing our overall investment portfolio in excess of \$1 billion. In addition, we made approximately \$125.8 million of capital contributions to select loan origination partners. In 2020, we expect to continue to seek investment opportunities primarily focused on residential whole loans and selectively in residential mortgage securities and MSR-related assets as market opportunities arise.

The following table presents the activity for our residential mortgage asset portfolio for the year ended December 31, 2019:

(In Millions)	Dec	cember 31, 2018	R	Runoff (1)	Ac	quisitions (2)	Other (3)	D	ecember 31, 2019	Change
Residential whole loans and REO	\$	4,932	\$	(1,472)	\$	4,296	\$ 104	\$	7,860	\$ 2,928
RPL/NPL MBS		1,377		(948)		321	(115)		635	(742)
MSR-related assets		612		(74)		674	5		1,217	605
CRT securities		493		_		11	(249)		255	(238)
Legacy Non-Agency MBS		1,941		(421)		4	(95)		1,429	(512)
Agency MBS		2,698		(679)		_	(354)		1,665	(1,033)
Totals	\$	12,053	\$	(3,594)	\$	5,306	\$ (704)	\$	13,061	\$ 1,008

- (1) Primarily includes principal repayments, cash collections on Purchased Credit Impaired Loans and sales of REO.
- (2) Amounts presented exclude capital contributions made to select loan origination partners, which at December 31, 2019 totaled \$148.0 million. During the year ended December 31, 2019, we made approximately \$125.8 million in capital contributions to select loan origination partners.
- (3) Primarily includes sales, changes in fair value, net premium amortization/discount accretion and adjustments to record lower of cost or estimated fair value adjustments on REO. During the year ended December 31, 2019 we sold CRT securities for \$256.7 million, realizing gains of \$11.1 million, Non-Agency MBS for \$291.4 million, realizing gains of \$50.4 million and Agency MBS for \$360.6 million, realizing gains of \$499,000.

At December 31, 2019, our total recorded investment in residential whole loans and REO was \$7.9 billion, or 60.2% of our residential mortgage asset portfolio. Of this amount, (i) \$6.1 billion is presented as Residential whole loans, at carrying value (of which \$5.4 billion were Purchased Performing Loans and \$698.5 million were Purchased Credit Impaired Loans), and (ii) \$1.4 billion as Residential whole loans, at fair value, in our consolidated balance sheets. For the year ended December 31, 2019, we recognized approximately \$244.0 million of income on Residential whole loans, at carrying value in Interest Income on our consolidated statements of operations, representing an effective yield of 5.58% (excluding servicing costs). In addition, we recorded a net gain on residential whole loans measured at fair value through earnings of \$158.3 million in Other Income, net in our consolidated statements of operations for the year ended December 31, 2019. At December 31, 2019 and 2018, we had REO with an aggregate carrying value \$411.7 million and \$249.4 million, respectively, which is included in Other assets on our consolidated balance sheets.

At the end of 2019, the average coupon on mortgages underlying our Agency MBS was slightly higher compared to the end of 2018, due to upward resets on securities within the portfolio, purchases of higher coupon Agency MBS in 2018 and the impact of sales of lower coupon Agency MBS during 2019 and 2018. As a result, the coupon yield on our Agency MBS portfolio increased to 3.71% for 2019 from 3.26% for 2018, and the net Agency MBS yield increased to 2.52% for 2019, from 2.30% for 2018. The net yield on our Legacy Non-Agency MBS portfolio was 11.58% for 2019 compared to 10.15% for 2018. The increase in the net yield on our Legacy Non-Agency MBS portfolio reflects higher accretion income recognized in 2019 due to the impact of redemptions of certain securities that had been previously purchased at a discount, the improved performance of loans underlying the Legacy Non-Agency MBS portfolio, which has resulted in credit reserve releases, changes in interest rates since 2018, as well as the impact of the cash proceeds received during 2019 and 2018 in connection with the settlement of litigation related to certain residential mortgage backed securitization trusts that were sponsored by JP Morgan Chase & Co. and affiliated entities and Lehman Brothers Holdings Inc. The net yield on our RPL/NPL MBS portfolio was 5.04% for the 2019 compared to 4.69% for 2018. The increase in the net yield primarily reflects an increase in the average coupon yield to 5.01% for 2019 from 4.55% for 2018, and lower accretion income recognized in 2019 as the level of redemptions in 2018 of securities that had been previously purchased at a discount was higher than in 2019.

During 2019, economic conditions continued to be generally favorable for investors in residential mortgage assets. In particular, credit losses experienced on our portfolios of residential whole loans and residential mortgage securities were relatively low, notwithstanding the significant growth in our Purchased Performing Loan portfolio. At December 31, 2019, we have an aggregate allowance for loan losses recorded on our Purchased Performing Loans and Purchased Credit Impaired Loans of \$3.0 million. On transition to the new accounting standard for estimating credit losses in January of 2020, we recorded an additional loss allowance of approximately \$8.3 million, primarily related to the recognition and measurement of credit losses on our Purchased Performing Loans. This increase is primarily driven by estimates of expected losses over the life of these loans compared to our estimate of incurred losses at December 31, 2019.

We believe that our \$436.6 million Credit Reserve and OTTI recorded as of December 31, 2019 appropriately factors in remaining uncertainties regarding underlying mortgage performance and the potential impact on future cash flows of our existing Legacy Non-Agency MBS portfolio. In addition, while the majority of our Legacy Non-Agency MBS will not return their full face value due to loan defaults, we believe that they will deliver attractive loss adjusted yields due to our discounted weighted average amortized cost basis of 66% of face value at December 31, 2019. Home price appreciation and underlying mortgage loan amortization have decreased the LTV for many of the mortgages underlying our Legacy Non-Agency portfolio. Home price appreciation during the past few years has generally been driven by a combination of limited housing supply due partly to low levels of new home construction, low mortgage rates and demographic-driven U.S. household formation. Lower LTVs lessen the likelihood of defaults and simultaneously decrease loss severities. Further, during 2018 and 2019, we have also observed faster voluntary prepayment (i.e. prepayment of loans in full with no loss) speeds than originally projected. The yields on our Legacy Non-Agency MBS that were purchased at a discount are generally positively impacted if prepayment rates on these securities exceed our prepayment assumptions. Based on these current conditions, we have reduced estimated future losses within our Legacy Non-Agency portfolio.

Our GAAP book value per common share was \$7.04 as of December 31, 2019. Book value per common share decreased from \$7.15 as of December 31, 2018 due primarily to a net reduction in unrealized gains on Legacy Non-Agency MBS (including the impact of realization of gains on sales and discount accretion income on Legacy Non-Agency MBS that was recognized as income and declared as dividends during the year). Economic book value per common share, a non-GAAP financial measure of our financial position that adjusts GAAP book value by the amount of unrealized mark to market gains on our residential whole loans held at carrying value, was \$7.44 at December 31, 2019. Economic book value increased from \$7.35 as of December 31, 2018, primarily due to an increase in the amount of unrealized gains on Purchased Credit Impaired and Purchased Performing loan portfolios. For additional information regarding the calculation of Economic book value per share including a reconciliation to GAAP book value per share, refer to page 60 under the heading "Economic Book Value".

Repurchase agreement funding for our residential mortgage investments continued to be available to us from multiple counterparties in 2019. Typically, repurchase agreement funding involving credit-sensitive investments is available at terms requiring higher collateralization and higher interest rates than for repurchase agreement funding involving Agency MBS. At December 31, 2019, our debt consisted of borrowings under repurchase agreements with 28 counterparties, securitized debt, Convertible Senior Notes and Senior Notes outstanding, resulting in a debt-to-equity multiple of 3.0 times. (See table on page 59 under Results of Operations that presents our quarterly leverage multiples since March 31, 2018.)

During the second quarter of 2019, we issued \$230.0 million in aggregate principal amount of our Convertible Senior Notes in an underwritten public offering. The total net proceeds we received from the offering were approximately \$223.3 million, after deducting offering expenses and the underwriting discount. The net proceeds from the offering were used for general working

capital purposes, including investment in additional residential mortgage assets, and the repayment of amounts outstanding under our repurchase agreements.

At December 31, 2019, we have access to various sources of liquidity which we estimate to be in excess of \$114.2 million. This amount includes (i) \$70.6 million of cash and cash equivalents; (ii) \$31.2 million in estimated financing available from unpledged Agency MBS and from other Agency MBS collateral that is currently pledged in excess of contractual requirements; and (iii) \$12.4 million in estimated financing available from unpledged Non-Agency MBS and from other Non-Agency MBS and CRT collateral that is currently pledged in excess of contractual requirements. Our sources of liquidity do not include restricted cash. In addition, we have \$1.1 billion of unencumbered residential whole loans. We continue to evaluate potential opportunities to finance these assets, including loan securitization. With access to multiple sources of liquidity and potential financing opportunities for unencumbered residential whole loans, we believe that we are positioned to continue to take advantage of investment opportunities within the residential mortgage marketplace.

During 2019, both current interest rates and expected future interest rates generally decreased, impacting asset yields and funding costs of our interest earning assets. The net interest spread of our investment portfolio was 1.96% and 2.23% for the years ended December 31, 2019 and 2018, respectively. The change in our net interest spread was primarily driven by the change in our asset allocation over the past two years, as run off and sales of our residential mortgage securities has been reinvested in residential whole loans and MSR-related assets. In addition, rate decreases instituted by the Federal Reserve during 2019 did not start to impact funding cost levels until the fourth quarter.

Our estimated net effective duration remained relatively low at 1.36 as of December 31, 2019, as compared to 0.96 at December 31, 2018. We manage our net duration through our investment selection, as well as through the use of interest rate swaps. In addition, our low leverage limits our sensitivity to changes in interest rates.

During 2019, the U.S. economy continued to expand and was characterized by overall declining levels of unemployment and residential home prices that again trended up. We believe that ongoing improvement in the economy, as demonstrated through such measures, generally supports the value of housing and the ability of borrowers to make payments on their loans, thereby decreasing delinquencies and defaults on residential mortgage loans and securities.

For more information regarding market factors which impact our portfolio, see Part I, Item 1A. "Risk Factors" and Item 7A. "Quantitative and Qualitative Disclosures About Market Risk" of this Annual Report on Form 10-K.

Information About Our Assets

The table below presents certain information about our asset allocation at December 31, 2019:

ASSET ALLOCATION

(Dollars in Millions)		ency IBS	Legacy n-Agency MBS	PL/NPL MBS (1)	Tı	edit Risk ransfer curities	L	esidential Whole coans, at Carrying Value (2)	L	sidential Whole oans, at ir Value]	MSR- Related Assets	ther, et (3)	Total
Fair Value/Carrying Value	\$	1,665	\$ 1,429	\$ 635	\$	255	\$	6,066	\$	1,382	\$	1,217	\$ 767	\$13,416
Less Repurchase Agreements	(1,558)	(1,122)	(495)		(204)		(4,088)		(653)		(963)	(57)	(9,140)
Less Securitized Debt		_	_	_		_		(130)		(441)		_	_	(571)
Less Convertible Senior Notes		_	_	_		_		_		_		_	(224)	(224)
Less Senior Notes		_	_	_		_		_		_		_	(97)	(97)
Net Equity Allocated	\$	107	\$ 307	\$ 140	\$	51	\$	1,848	\$	288	\$	254	\$ 389	\$ 3,384
Debt/Net Equity Ratio (4)		14.6x	3.7x	3.5x		4.0x		2.3x		3.8x		3.8x		3.0x

⁽¹⁾ RPL/NPL MBS are backed primarily by securitized re-performing and non-performing loans. The securities are generally structured such that the coupon increases from 300 - 400 basis points at 36 - 48 months from issuance or sooner. Included with the balance of Non-Agency MBS reported on our consolidated balance sheets.

⁽²⁾ Includes \$3.7 billion of Non-QM loans, \$1.0 billion of Rehabilitation loans, \$460.7 million of Single-family rental loans, \$176.6 million of Seasoned performing loans and \$698.5 million of Purchased Credit Impaired Loans. At December 31, 2019, the total fair value of these loans is estimated to be approximately \$6.2 billion.

⁽³⁾ Includes cash and cash equivalents and restricted cash, other assets and other liabilities.

⁽⁴⁾ Represents the sum of borrowings under repurchase agreements and securitized debt as a multiple of net equity allocated. The numerator of our Total Debt/Net Equity Ratio also includes Convertible Senior Notes and Senior Notes.

Agency MBS

30-Year Fixed Rate:

Total 30-Year Fixed Rate

Generic

Hybrid

CMO/Other

Total Portfolio

The following tables present certain information regarding the composition of our Agency MBS portfolio as of December 31, 2019 and 2018:

December 31, 2019

(Dollars in Thousands)	Current Face	Weighted Average Purchase Price	Weighted Average Market Price	Fair Value <i>(1)</i>	Weighted Average Loan Age (Months) (2)	Weighted Average Coupon (2)	3 Month Average CPR
15-Year Fixed Rate:							
Low Loan Balance (3)	\$ 460,094	104.5%	102.4%	\$ 471,123	93	3.04%	10.5%
Generic	100,886	104.5	103.1	104,060	99	3.45	10.7
Total 15-Year Fixed Rate	\$ 560,980	104.5%	102.5%	\$ 575,183	94	3.11%	10.6%
30-Year Fixed Rate:							
Generic	\$ 264,760	104.2%	105.9%	\$ 280,303	18	4.50%	34.4%
Total 30-Year Fixed Rate	\$ 264,760	104.2%	105.9%	\$ 280,303	18	4.50%	34.4%
Hybrid	\$ 732,968	103.5%	103.8%	\$ 760,836	121	4.11%	18.3%
CMO/Other	\$ 45,875	102.6%	103.9%	\$ 47,646	211	4.23%	11.7%
Total Portfolio	\$ 1,604,583	103.9%	103.7%	\$ 1,663,968	97	3.83%	18.1%
		December	31, 2018				
(Dollars in Thousands)	Current Face	Weighted Average Purchase Price	Weighted Average Market Price	Fair Value <i>(1)</i>	Weighted Average Loan Age (Months) (2)	Weighted Average Coupon (2)	3 Month Average CPR
15-Year Fixed Rate:							
Low Loan Balance (3)	\$ 647,482	104.4%	100.0%	\$ 647,405	80	3.01%	8.2%
Generic	132,713	104.4	101.1	134,220	88	3.50	10.1
Total 15-Year Fixed Rate	\$ 780,195	104.4%	100.2%	\$ 781,625	81	3.09%	8.5%

104.0%

104.0%

103.5%

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103.9%

103.6% \$

102.9% \$

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103.5% \$ 1,118,638

103.6%

736,498

736,498

60,415

\$ 2,697,176

4.50%

4.50%

3.90%

4.05%

3.82%

6

108

206

74

4.7% 4.7%

20.0%

18.7%

12.5%

•			
(1) Does not include principal payments receiva	able of $\$614.000$ and $\$1.0$ mil	lion at Dacambar 31, 2010 and 21	118 rosportivaly
(1) Does not include principal payments receive	<i>ιυι</i> ε ο _ι φυτ 4 ,000 απα φτ.υ πιιι	non ai December 31, 2017 ana 20	110, respectively.

711,158

711,158

58,708

2,630,630

\$ 1,080,569

\$

⁽²⁾ Weighted average is based on MBS current face at December 31, 2019 and 2018, respectively.

⁽³⁾ Low loan balance represents MBS collateralized by mortgages with an original loan balance of less than or equal to \$175,000.

The following tables present certain information regarding our fixed-rate Agency MBS as of December 31, 2019 and 2018:

December 31, 2019

Coupon	,	Current Face	Weighted Average Purchase Price	Weighted Average Market Price	,	Fair Value <i>(1)</i>	Weighted Average Loan Age (Months) (2)	Weighted Average Loan Rate	Low Loan Balance and/or HARP (3)	3 Month Average CPR
(Dollars in Thousands)										
15-Year Fixed Rate:										
2.5%	\$	241,045	104.1%	101.2%	\$	243,946	85	3.06%	100%	9.3%
3.0%		147,665	105.9	102.6		151,470	89	3.49	100	10.0
3.5%		2,761	103.5	103.6		2,862	110	4.19	100	7.5
4.0%		145,910	103.5	104.3		152,234	109	4.40	81	13.0
4.5%		23,599	105.3	104.5		24,671	113	4.89	36	11.2
Total 15-Year Fixed Rate	\$	560,980	104.5%	102.5%	\$	575,183	94	3.60%	92%	10.6%
30-Year Fixed Rate:										
4.5%	\$	264,760	104.2%	105.9%	\$	280,303	18	5.16%	%	34.4%
Total 30-Year Fixed Rate	\$	264,760	104.2%	105.9%	\$	280,303	18	5.16%	_%	34.4%
Total Fixed Rate Portfolio	\$	825,740	104.4%	103.6%	\$	855,486	70	4.10%	63%	18.3%

December 31, 2018

Coupon (Dollars in Thousands)	 Current Face	Weighted Average Purchase Price	Weighted Average Market Price	Fair Value (1)	Weighted Average Loan Age (Months) (2)	Weighted Average Loan Rate	Low Loan Balance and/or HARP (3)	3 Month Average CPR
15-Year Fixed Rate:								
2.5%	\$ 359,252	104.1%	98.6%	\$ 354,252	73	3.03%	100%	6.4%
3.0%	185,912	105.9	100.3	186,548	77	3.49	100	8.4
3.5%	3,798	103.5	101.4	3,853	98	4.18	100	12.8
4.0%	199,352	103.5	102.4	204,055	97	4.40	81	11.9
4.5%	31,881	105.3	103.3	32,917	101	4.88	34	12.7
Total 15-Year Fixed Rate	\$ 780,195	104.4%	100.2%	\$ 781,625	81	3.57%	92%	8.5%
30-Year Fixed Rate:								
4.5%	\$ 711,158	104.0%	103.6%	\$ 736,498	6	5.17%	%	4.7%
Total 30-Year Fixed Rate	\$ 711,158	104.0%	103.6%	\$ 736,498	6	5.17%	<u>%</u>	4.7%
Total Fixed Rate Portfolio	\$ 1,491,353	104.2%	101.8%	\$ 1,518,123	45	4.33%	48%	6.8%

⁽¹⁾ Does not include principal payments receivable of \$614,000 and \$1.0 million at December 31, 2019 and 2018, respectively.

⁽²⁾ Weighted average is based on MBS current face at December 31, 2019 and 2018, respectively.

⁽³⁾ Low Loan Balance represents MBS collateralized by mortgages with an original loan balance less than or equal to \$175,000. Home Affordable Refinance Program (or HARP) MBS are backed by refinanced loans with LTVs greater than or equal to 80% at origination.

The following tables present certain information regarding our Hybrid Agency MBS as of December 31, 2019 and 2018:

December 31, 2019

(Dollars in Thousands)	Current Face	Weighted Average Purchase Price	Weighted Average Market Price	Fair Value <i>(1)</i>	Weighted Average Coupon (2)	Weighted Average Loan Age (Months) (2)	Weighted Average Months to Reset (3)	Interest Only (4)	3 Month Average CPR
Hybrid									
Agency 3/1	\$ 46,530	102.5%	104.6%	\$ 48,686	4.28%	165	6	<u> </u>	16.6%
Agency 5/1	318,843	103.3	104.2	332,234	4.35	131	5	15	20.1
Agency 7/1	232,565	103.5	103.9	241,552	4.29	111	6	20	18.6
Agency 10/1	135,030	104.2	102.5	138,364	3.17	98	25	60	14.2
Total Hybrids	\$ 732,968	103.5%	103.8%	\$ 760,836	4.11%	121	9	24%	18.3%

December 31, 2018

(Dollars in Thousands)	Current Face	Weighted Average Purchase Price	Weighted Average Market Price	Fair Value (1)	Weighted Average Coupon (2)	Weighted Average Loan Age (Months) (2)	Weighted Average Months to Reset (3)	Interest Only (4)	3 Month Average CPR
Hybrid				'					
Agency 3/1	\$ 66,369	102.6%	104.7%	\$ 69,47	8 4.42%	151	6	<u> </u> %	14.7%
Agency 5/1	462,833	103.3	104.2	482,46	6 4.30	118	5	15	20.6
Agency 7/1	389,734	103.7	103.5	403,47	1 3.62	96	6	20	23.7
Agency 10/1	161,633	104.3	101.0	163,22	3 3.20	86	36	59	11.2
Total Hybrids	\$ 1,080,569	103.5%	103.5%	\$ 1,118,63	8 3.90%	108	10	22%	20.0%

⁽¹⁾ Does not include principal payments receivable of \$614,000 and \$1.0 million at December 31, 2019 and 2018, respectively.

Non-Agency MBS

The following table presents information with respect to our Non-Agency MBS at December 31, 2019 and 2018:

	Decem	ber 31,	
(In Thousands)	 2019		2018
Non-Agency MBS	 		
Face/Par	\$ 2,195,303	\$	3,538,804
Fair Value	2,063,529		3,318,299
Amortized Cost	1,668,088		2,867,703
Purchase Discount Designated as Credit Reserve and OTTI	(436,598) (1)	(516,116) (2)
Purchase Discount Designated as Accretable	(90,617)		(155,025)
Purchase Premiums	_		40

⁽¹⁾ Includes discount designated as Credit Reserve of \$426.0 million and OTTI of \$10.6 million.

⁽²⁾ Weighted average is based on MBS current face at December 31, 2019 and 2018, respectively.

⁽³⁾ Weighted average months to reset is the number of months remaining before the coupon interest rate resets. At reset, the MBS coupon will adjust based upon the underlying benchmark interest rate index, margin and periodic or lifetime caps. The months to reset do not reflect scheduled amortization or prepayments.

⁽⁴⁾ Interest only represents MBS backed by mortgages currently in their interest only period. Percentage is based on MBS current face at December 31, 2019 and 2018, respectively.

⁽²⁾ Includes discount designated as Credit Reserve of \$503.3 million and OTTI of \$12.8 million.

Purchase Discounts on Non-Agency MBS

The following table presents the changes in the components of purchase discount on Non-Agency MBS with respect to purchase discount designated as Credit Reserve and OTTI, and accretable purchase discount for the years ended December 31, 2019 and 2018:

		For the Year End	ded December 31,		
	2	2019	20	18	
(In Thousands)	Discount Designated as Credit Reserve and OTTI	Accretable Discount (1)	Discount Designated as Credit Reserve and OTTI	Accretable Discount (1)	
Balance at beginning of period	\$ (516,116	(155,025)	\$ (593,227)	\$ (215,325)	
Impact of RMBS Issuer settlement (2)(3)		(2,077)	_	(14,822)	
Accretion of discount	_	51,696	_	70,750	
Realized credit losses	28,152	_	42,246	_	
Purchases	(624) (4)	(2,512)	1,685	
Sales/Redemptions	34,510	32,453	12,987	28,336	
Net impairment losses recognized in earnings	(180) —	(1,259)	_	
Transfers/release of credit reserve	17,660	(17,660)	25,649	(25,649)	
Balance at end of period	\$ (436,598	\$ (90,617)	\$ (516,116)	\$ (155,025)	

- (1) Together with coupon interest, accretable purchase discount is recognized as interest income over the life of the security.
- (2) Includes the impact of approximately \$2.0 million and \$12.1 million during the years ended December 31, 2019 and 2018, respectively, of cash proceeds (a one-time payment) received by the Company in connection with the settlement of litigation related to certain residential mortgage backed securitization trusts that were sponsored by JP Morgan Chase & Co. and affiliated entities.
- (3) Includes the impact of approximately \$2.7 million of cash proceeds (a one-time payment) received by the Company during the year ended December 31, 2018 in connection with the settlement of litigation related to certain residential mortgage backed securitization trusts that were sponsored by Lehman Brothers Holdings Inc.

The following table presents information with respect to the yield components of our Non-Agency MBS for the periods presented:

	For the Year Ended December 31,										
	20	19	201	18	2017						
	Legacy Non-Agency MBS	RPL/NPL MBS	Legacy Non-Agency MBS	RPL/NPL MBS	Legacy Non-Agency MBS	RPL/NPL MBS					
Non-Agency MBS											
Coupon Yield (1)	6.87%	5.01%	6.23%	4.55%	5.61%	4.05%					
Effective Yield Adjustment (2)	4.71	0.03	3.92	0.14	3.34	0.09					
Net Yield	11.58%	5.04%	10.15%	4.69%	8.95%	4.14%					

⁽¹⁾ Reflects coupon interest income divided by the average amortized cost. The discounted purchase price on Legacy Non-Agency MBS causes the coupon yield to be higher than the pass-through coupon interest rate.

⁽²⁾ The effective yield adjustment is the difference between the net yield, calculated utilizing management's estimates of timing and amount of future cash flows for Legacy Non-Agency MBS and RPL/NPL MBS, less the current coupon yield.

Actual maturities of MBS are generally shorter than stated contractual maturities because actual maturities of MBS are affected by the contractual lives of the underlying mortgage loans, periodic payments of principal and prepayments of principal. The following table presents certain information regarding the amortized costs, weighted average yields and contractual maturities of our MBS at December 31, 2019 and does not reflect the effect of prepayments or scheduled principal amortization on our MBS:

	Within O	ne Year	One to Fi	ive Years	Five to Te	n Years	Over Ten	Years		Total MBS	
(Dollars in Thousands)	Amortized Cost	Weighted Average Yield	Amortized Cost	Weighted Average Yield	Amortized Cost	Weighted Average Yield	Amortized Cost	Weighted Average Yield	Total Amortized Cost	Total Fair Value	Weighted Average Yield
Agency MBS:											
Fannie Mae	\$ —	%	\$ 581	2.66%	\$ 390,773	1.92%	\$ 771,581	2.86%	\$ 1,162,935	\$ 1,157,993	2.54%
Freddie Mac	_	_	_	_	198,705	1.71	302,256	2.82	500,961	502,468	2.38
Ginnie Mae	_	_	_	_	68	3.92	4,001	3.81	4,069	4,121	3.81
Total Agency MBS	\$ —	%	\$ 581	2.66%	\$ 589,546	1.85%	\$1,077,838	2.85%	\$ 1,667,965	\$ 1,664,582	2.50%
Non-Agency MBS	\$ 52,783	4.66%	\$138,712	4.11%	\$ 15,847	4.92%	\$1,460,746	9.11%	\$ 1,668,088	\$ 2,063,529	8.51%
Total MBS	\$ 52,783	4.66%	\$139,293	4.11%	\$ 605,393	1.93%	\$2,538,584	6.45%	\$ 3,336,053	\$ 3,728,111	5.51%

CRT Securities

At December 31, 2019, our total investment in CRT securities was \$255.4 million, with a net unrealized gain of \$6.2 million, a weighted average yield of 4.18% and a weighted average time to maturity of 10.3 years. At December 31, 2018, our total investment in CRT securities was \$492.8 million, with a net unrealized gain of \$6.6 million, a weighted average yield of 5.85% and weighted average time to maturity of 11.1 years.

During 2019 we sold certain CRT securities for \$256.7 million, realizing gains of \$11.1 million. The net income impact of these sales, after reversal of previously unrealized gains on CRT securities on which we had elected the fair value option, was a gain of approximately \$231,000. During 2018, we sold certain CRT securities for \$299.9 million, realizing gains of \$31.4 million. For the year ended December 31, 2018, the net income impact of these sales, after reversal of previously unrealized gains on CRT securities on which we had elected the fair value option, was \$15.6 million.

Residential Whole Loans

The following table presents the contractual maturities of our residential whole loan portfolios at December 31, 2019 and does not reflect estimates of prepayments or scheduled amortization. For Purchased Credit Impaired Loans held at carrying value, amounts presented are estimated based on the underlying loan contractual amounts.

(In Thousands)		chased Performing Loans (1)	Purchased Credit Impaired Loans			Residential Whole Loans, at Fair Value		
Amount due:								
Within one year	\$	774,237	\$	707	\$	5,440		
After one year:								
Over one to five years		289,572		3,530		5,793		
Over five years		4,306,844		694,237		1,370,350		
Total due after one year	\$	4,596,416	\$	697,767	\$	1,376,143		
Total residential whole loans	\$	5,370,653	\$	698,474	\$	1,381,583		

(1) Excludes an allowance for loan losses of \$2.8 million at December 31, 2019.

The following table presents, at December 31, 2019, the dollar amount of certain of our residential whole loans, contractually maturing after one year, and indicates whether the loans have fixed interest rates or adjustable interest rates:

(In Thousands) Interest rates:	 Purchased Performing Loans (1)(2)	Residential Whole Loans at Fair Value (1)		
Fixed	\$ 1,444,742	\$ 1,144,178		
Adjustable	3,151,674	231,965		
Total	\$ 4,596,416	\$ 1,376,143		

- (1) Includes loans on which borrowers have defaulted and are not making payments of principal and/or interest as of December 31, 2019.
- (2) Excludes an allowance for loan losses of \$2.8 million at December 31, 2019.

Information is not presented for Purchased Credit Impaired Loans held at carrying value as income is recognized based on pools of assets with similar risk characteristics using an estimated yield based on cash flows expected to be collected over the lives of the loans in such pools rather than on the contractual coupons of the underlying loans.

For additional information regarding our residential whole loan portfolios, see Note 4 to the consolidated financial statements, included under Item 8 of this Annual Report on Form 10-K.

MSR-Related Assets

At December 31, 2019 and 2018, we had \$1.2 billion and \$538.5 million, respectively, of term notes issued by SPVs that have acquired the rights to receive cash flows representing the servicing fees and/or excess servicing spread associated with certain MSRs. At December 31, 2019, these term notes had an amortized cost of \$1.2 billion, gross unrealized gains of approximately \$5.2 million, a weighted average yield of 4.75% and a weighted average term to maturity of 5.3 years. At December 31, 2018, these term notes had an amortized cost of \$538.5 million, gross unrealized gains of \$7,000, a weighted average yield of 5.32% and a weighted average term to maturity of 4.7 years.

During the year ended December 31, 2019, we participated in a loan where we committed to lend \$100.0 million of which approximately \$59.5 million was drawn at December 31, 2019. At December 31, 2019, the coupon paid by the borrower on the drawn amount is 5.14%, the remaining term associated with the loan is 8 months and the remaining commitment period on any undrawn amount is 8 months.

Exposure to Financial Counterparties

We finance a significant portion of our residential mortgage assets with repurchase agreements. In connection with these financing arrangements, we pledge our assets as collateral to secure the borrowing. The amount of collateral pledged will typically exceed the amount of the financing with the extent of over-collateralization ranging from 3% to 5% of the amount borrowed for Agency MBS collateral, up to 35% for Non-Agency MBS, CRT securities, MSR-related asset and other interest-earning asset collateral, and up to 50% for residential whole loan collateral. Consequently, while repurchase agreement financing results in our recording a liability to the counterparty in our consolidated balance sheets, we are exposed to the counterparty if, during the term of the repurchase agreement financing, a lender should default on its obligation and we are not able to recover our pledged assets. The amount of this exposure is the difference between the amount loaned to us plus interest due to the counterparty and the fair value of the collateral pledged by us to the lender including accrued interest receivable on such collateral.

The table below summarizes our exposure to our counterparties at December 31, 2019, by country:

Country	Number of Counterparties	Repurchase Agreement Financing		Ex	xposure (1)	Exposure as a Percentage of MFA Total Assets
(Dollars in Thousands)						
European Countries: (2)						
Switzerland (3)	3	\$ 1,793,269	:	\$	494,464	3.64%
United Kingdom	2	1,587,351			294,720	2.17
France	2	221,411			58,853	0.43
Holland	1	58,471			6,030	0.04
Total European	8	3,660,502			854,067	6.28%
Other Countries:						
United States	14	\$ 4,093,961	:	\$	992,802	7.32%
Canada (4)	2	648,455			160,898	1.19
Japan <i>(5)</i>	3	590,616			111,499	0.82
South Korea	1	147,410			13,697	0.10
Total Other	20	\$ 5,480,442		\$	1,278,896	9.43%
Total	28	\$ 9,140,944		\$	2,132,963	15.71%

⁽¹⁾ Represents for each counterparty the amount of cash and/or securities pledged as collateral less the aggregate of repurchase agreement financing and net interest receivable/payable on all such instruments.

At December 31, 2019, we did not use credit default swaps or other forms of credit protection to hedge the exposures summarized in the table above.

Uncertainty in the global financial market and weak economic conditions in Europe, including as a result of the United Kingdom's recent withdrawal from the European Union (commonly know as "Brexit"), could potentially impact our major European financial counterparties, with the possibility that this would also impact the operations of their U.S. domiciled subsidiaries. This could adversely affect our financing and operations as well as those of the entire mortgage sector in general. Management monitors our exposure to our repurchase agreement counterparties on a regular basis, using various methods, including review of recent rating agency actions or other developments and by monitoring the amount of cash and securities collateral pledged and the associated loan amount under repurchase agreements with our counterparties. We intend to make reverse margin calls on our counterparties to recover excess collateral as permitted by the agreements governing our financing arrangements, or take other necessary actions to reduce the amount of our exposure to a counterparty when such actions are considered necessary.

Tax Considerations

Current period estimated taxable income

We estimate that for 2019, our taxable income was approximately \$362.6 million. Based on dividends paid or declared during 2019, we have undistributed taxable income of approximately \$22.7 million, or \$0.05 per share. We have until the filing of our 2019 tax return (due not later than October 15, 2020) to declare the distribution of any 2019 REIT taxable income not previously distributed.

Key differences between GAAP net income and REIT Taxable Income for Residential Mortgage Securities and Residential Whole Loans

Our total Non-Agency MBS portfolio for tax differs from our portfolio reported for GAAP primarily due to the fact that for tax purposes: (i) certain of the MBS contributed to the VIEs used to facilitate MBS resecuritization transactions were deemed to be sold; and (ii) the tax basis of underlying MBS considered to be reacquired in connection with the unwind of such transactions became the fair value of such securities at the time of the unwind. For GAAP reporting purposes the underlying MBS that were

⁽²⁾ Includes European-based counterparties as well as U.S.-domiciled subsidiaries of the European parent entity.

⁽³⁾ Includes London branch of one counterparty and Cayman Islands branch of the other counterparty.

⁽⁴⁾ Includes Canada-based counterparties as well as U.S.-domiciled subsidiaries of Canadian parent entities. In the case of one counterparty, also includes exposure of \$156.4 million to a Barbados-based affiliate of the Canadian parent entity.

⁽⁵⁾ Exposure is to U.S.-domiciled subsidiary of the Japanese parent entity.

included in these MBS resecuritization transactions were not considered to be sold. Similarly, for tax purposes the residential whole loans contributed to the VIE used to facilitate our second quarter 2017 loan securitization transaction were deemed to be sold for tax purposes, but not for GAAP reporting purposes. In addition, for our Non-Agency MBS and residential whole loan tax portfolios, potential timing differences arise with respect to the accretion of discount and amortization of premium into income as well as the recognition of realized losses for tax purposes as compared to GAAP. Further, use of fair value accounting for certain residential mortgage securities and residential whole loans for GAAP, but not for tax, also gives rise to potential timing differences. Consequently, our REIT taxable income calculated in a given period may differ significantly from our GAAP net income.

The determination of taxable income attributable to Non-Agency MBS and residential whole loans is dependent on a number of factors, including principal payments, defaults, loss mitigation efforts and loss severities. In estimating taxable income for Non-Agency MBS and residential whole loans during the year, management considers estimates of the amount of discount expected to be accreted. Such estimates require significant judgment and actual results may differ from these estimates. Moreover, the deductibility of realized losses from Non-Agency MBS and residential whole loans and their effect on discount accretion and premium amortization are analyzed on an asset-by-asset basis and, while they will result in a reduction of taxable income, this reduction tends to occur gradually and, primarily for Non-Agency MBS, in periods after the realized losses are reported. In addition, for securitization and resecuritization transactions that were treated as a sale of the underlying MBS or residential whole loans for tax purposes, taxable gain or loss, if any, resulting from the unwind of such transactions is not recognized in GAAP net income.

Securitization transactions result in differences between GAAP net income and REIT Taxable Income

For tax purposes, depending on the transaction structure, a securitization and/or resecuritization transaction may be treated either as a sale or a financing of the underlying collateral. Income recognized from securitization and resecuritization transactions will differ for tax and GAAP purposes. For tax purposes, we own and may in the future acquire interests in securitization and / or resecuritization trusts, in which several of the classes of securities are or will be issued with original issue discount (or OID). As the holder of the retained interests in the trust, we generally will be required to include OID in our current gross interest income over the term of the applicable securities as the OID accrues. The rate at which the OID is recognized into taxable income is calculated using a constant rate of yield to maturity, with realized losses impacting the amount of OID recognized in REIT taxable income once they are actually incurred. For tax purposes, REIT taxable income may be recognized in excess of economic income (i.e., OID) or in advance of the corresponding cash flow from these assets, thereby affecting our dividend distribution requirement to stockholders. In addition, for securitization and/or resecuritization transactions that were treated as a sale of the underlying collateral for tax purposes, the unwinding of any such transaction will likely result in a taxable gain or loss that is likely not recognized in GAAP net income since securitization and resecuritization transactions are typically accounted for as financing transactions for GAAP purposes. The tax basis of underlying residential whole loans or MBS re-acquired in connection with the unwind of such transactions becomes the fair market value of such assets at the time of the unwind.

Taxable income of consolidated TRS subsidiaries is included in GAAP income, but may not be included in REIT Taxable Income

Net income generated by our TRS subsidiaries is included in consolidated GAAP net income, but may not be included in REIT taxable income in the same period. Net income of U.S. domiciled TRS subsidiaries is included in REIT taxable income when distributed by the TRS. Net income of foreign domiciled TRS subsidiaries is included in REIT taxable income as if distributed to the REIT in the taxable year it is earned by the foreign domiciled TRS.

Regulatory Developments

The U.S. Congress, Federal Reserve, U.S. Treasury, FDIC, SEC and other governmental and regulatory bodies have taken and continue to consider additional actions in response to the 2007-2008 financial crisis. In particular, the Dodd-Frank Wall Street Reform and Consumer Protection Act (or the Dodd-Frank Act) created a new regulator, an independent bureau housed within the Federal Reserve System known as the Consumer Financial Protection Bureau (or the CFPB). The CFPB has broad authority over a wide range of consumer financial products and services, including mortgage lending and servicing. One portion of the Dodd-Frank Act, the Mortgage Reform and Anti-Predatory Lending Act (or Mortgage Reform Act), contains underwriting and servicing standards for the mortgage industry, restrictions on compensation for mortgage loan originators, and various other requirements related to mortgage origination and servicing. In addition, the Dodd-Frank Act grants enforcement authority and broad discretionary regulatory authority to the CFPB to prohibit or condition terms, acts or practices relating to residential mortgage loans that the CFPB finds abusive, unfair, deceptive or predatory, as well as to take other actions that the CFPB finds are necessary or proper

to ensure responsible affordable mortgage credit remains available to consumers. The Dodd-Frank Act also affects the securitization of mortgages (and other assets) with requirements for risk retention by securitizers and requirements for regulating rating agencies.

Numerous regulations have been issued pursuant to the Dodd-Frank Act, including regulations regarding mortgage loan servicing, underwriting and loan originator compensation, and others could be issued in the future. As a result, we are unable to fully predict at this time how the Dodd-Frank Act, as well as other laws or regulations that may be adopted in the future, will affect our business, results of operations and financial condition, or the environment for repurchase financing and other forms of borrowing, the investing environment for Agency MBS, Non-Agency MBS and/or residential mortgage loans, the securitization industry, Swaps and other derivatives. We believe that the Dodd-Frank Act and the regulations promulgated thereunder are likely to continue to increase the economic and compliance costs for participants in the mortgage and securitization industries, including us.

In addition to the regulatory actions being implemented under the Dodd-Frank Act, on August 31, 2011, the SEC issued a concept release under which it is reviewing interpretive issues related to Section 3(c)(5)(C) of the Investment Company Act. Section 3(c)(5)(C) excludes from the definition of "investment company" entities that are primarily engaged in, among other things, "purchasing or otherwise acquiring mortgages and other liens on and interests in real estate." Many companies that engage in the business of acquiring mortgages and mortgage-related instruments seek to rely on existing interpretations of the SEC Staff with respect to Section 3(c)(5)(C) so as not to be deemed an investment company for the purpose of regulation under the Investment Company Act. In connection with the concept release, the SEC requested comments on, among other things, whether it should reconsider its existing interpretation of Section 3(c)(5)(C). To date the SEC has not taken or otherwise announced any further action in connection with the concept release. (For additional discussion of the SEC's concept release and its potential impact on us, please see Part I, Item 1A. "Risk Factors" of this Annual Report on Form 10-K.)

The FHFA and both houses of Congress have discussed and considered separate measures intended to restructure the U.S. housing finance system and the operations of Fannie Mae and Freddie Mac. Congress may continue to consider legislation that would significantly reform the country's mortgage finance system, including, among other things, eliminating Freddie Mac and Fannie Mae and replacing them with a single new MBS insurance agency. Many details remain unsettled, including the scope and costs of the agencies' guarantee and their affordable housing mission, some of which could be addressed even in the absence of large-scale reform. On March 27, 2019, President Trump issued a memorandum on federal housing finance reform that directed the Secretary of the Treasury to develop a plan for administrative and legislative reforms as soon as practicable to achieve the following housing reform goals: 1) ending the conservatorships of the Government-sponsored enterprises (or GSEs) upon the completion of specified reforms; 2) facilitating competition in the housing finance market; 3) establishing regulation of the GSEs that safeguards their safety and soundness and minimizes the risks they pose to the financial stability of the United States; and 4) providing that the federal government is properly compensated for any explicit or implicit support it provides to the GSEs or the secondary housing finance market. On September 5, 2019, in response to President Trump's memorandum, the U.S. Department of the Treasury released a plan, developed in conjunction with the FHFA, the Department of Housing and Urban Development, and other government agencies, which includes legislative and administrative reforms to achieve each of these reform goals. At this point, it remains unclear whether any of these legislative or regulatory reforms will be enacted or implemented. The prospects for passage of any of these plans are uncertain, but the proposals underscore the potential for change to Fannie Mae and Freddie Mac. On September 30, 2019, the Treasury Department and FHFA jointly announced an agreement to permit the GSEs to retain capital of up to a combined \$45 billion. In conjunction with this agreement on capital retention, FHFA is also expected to continue work on a proposed rule for GSE capital requirements that would take effect once the GSEs have been released from government conservatorship. The FHFA announced on November 19, 2019 that it plans to re-propose the entire regulation on GSE capital requirements (which was originally proposed in 2018) sometime in 2020.

While the likelihood of enactment of major mortgage finance system reform in the short term remains uncertain, it is possible that the adoption of any such reforms could adversely affect the types of assets we can buy, the costs of these assets and our business operations. As the FHFA and both houses of Congress continue to consider various measures intended to dramatically restructure the U.S. housing finance system and the operations of Fannie Mae and Freddie Mac, we expect debate and discussion on the topic to continue throughout 2020, and we cannot be certain whether alternative plans may be proposed by the Trump Administration or if any housing and/or mortgage-related legislation will emerge from committee, or be approved by Congress, and if so, what the effect would be on our business.

Results of Operations

In this section, we discuss the results of our operations for the year ended December 31, 2019 compared to the year ended December 31, 2018. For a discussion related to our results of operations for the year ended December 31, 2018 compared to the year ended December 31, 2017, please refer to Part II, Item 7., "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report on Form 10-K for the Year Ended December 31, 2018, which was filed with the SEC on February 21, 2019, and is available on the SEC's website at www.sec.gov and on our website at www.mfafinancial.com.

Year Ended December 31, 2019 Compared to the Year Ended December 31, 2018

General

For 2019, we had net income available to our common stock and participating securities of \$363.1 million, or \$0.80 per basic common share and \$0.79 per diluted common share, compared to net income available to common stock and participating securities for 2018 of \$286.8 million, or \$0.68 per basic and diluted common share. The increase in net income available to common stock and participating securities primarily reflects higher net Other income and higher net interest income, partially offset by higher operating and other expenses. Net Other income increased as unrealized losses recorded on residential mortgage securities and related hedges measured at fair value through earnings reversed to unrealized gains in 2019. In addition, higher net gains on residential whole loans measured at fair value through earnings were recorded in 2019, primarily due to higher coupon and other cash income received and higher unrealized gains on this portfolio. Higher net interest income was primarily driven by increased investment in residential whole loans held at carrying value, particularly Purchased Performing Loans. Finally, operating and other expenses were higher for 2019, primarily due to higher costs in connection with managing our residential whole loan and REO portfolios, which have grown significantly compared to the prior year period. General and administrative expenses also increased, primarily due to higher compensation related expenses, reflecting higher overall headcount and increased long term incentive compensation, higher IT systems related costs incurred to support the growth in our business and deferred compensation expense for members of our board of directors, driven by changes in our stock price.

Core earnings was \$0.78 per common share for both 2019 and 2018. Core earnings is a non-GAAP measure of our financial performance and is computed by adjusting GAAP net income available to common and participating securities by excluding the impact of unrealized gains and losses on certain of our investments. For additional information regarding the calculation of Core earnings, including a reconciliation to GAAP net income available to common stock and participating securities, refer to page 60 under the heading "Core Earnings".

Net Interest Income

Net interest income represents the difference between income on interest-earning assets and expense on interest-bearing liabilities. Net interest income depends primarily upon the volume of interest-earning assets and interest-bearing liabilities and the corresponding interest rates earned or paid. Our net interest income varies primarily as a result of changes in interest rates, the slope of the yield curve (i.e., the differential between long-term and short-term interest rates), borrowing costs (i.e., our interest expense) and prepayment speeds on our investments. Interest rates and CPRs (which measure the amount of unscheduled principal prepayment on a bond or loan as a percentage of its unpaid balance) vary according to the type of investment, conditions in the financial markets, and other factors, none of which can be predicted with any certainty.

The changes in average interest-earning assets and average interest-bearing liabilities and their related yields and costs are discussed in greater detail below under "Interest Income" and "Interest Expense."

For 2019, our net interest spread and margin were 1.96% and 2.35%, respectively, compared to a net interest spread and margin of 2.23% and 2.64%, respectively, for 2018. Our net interest income increased by \$25.9 million, or 11.6%, to \$249.4 million from \$223.5 million for 2018. For 2019, net interest income from residential whole loans held at carrying value, MSR-related assets and RPL/NPL MBS increased by approximately \$74.5 million compared to 2018, primarily due to higher average amounts invested in these assets. These increases were offset by lower net interest income for Legacy Non-Agency MBS, CRT securities and Agency MBS compared to 2018 by approximately \$39.2 million, primarily due to lower average amounts invested in these securities and higher funding costs on Agency MBS and CRT securities, partially offset by higher yields earned on our Legacy Non-Agency MBS and Agency MBS portfolios. In addition, net interest income for 2019 also includes \$44.9 million of interest expense associated with residential whole loans held at fair value, reflecting a \$4.5 million increase in borrowing costs related to these investments compared to 2018. Coupon interest income received from residential whole loans held at fair value is presented as a component of the total income earned on these investments and therefore is included in Other Income, net rather than net interest income. In addition, we incurred approximately \$9.0 million interest expense on our Convertible Senior Notes issued during 2019.

Analysis of Net Interest Income

The following table sets forth certain information about the average balances of our assets and liabilities and their related yields and costs for the years ended December 31, 2019 and 2018. Average yields are derived by dividing interest income by the average amortized cost of the related assets, and average costs are derived by dividing interest expense by the daily average balance of the related liabilities, for the periods shown. The yields and costs include premium amortization and purchase discount accretion which are considered adjustments to interest rates.

		I	or the Year En	ded December 31	,	
		2019	1 1		2018	
(Dollars in Thousands)	Average Balance	Interest	Average Yield/ Cost	Average Balance	Interest	Average Yield/ Cost
Assets:						
Interest-earning assets:						
Agency MBS (1)	\$ 2,220,246	\$ 55,90	1 2.52%	\$ 2,710,049	\$ 62,303	2.30%
Legacy Non-Agency MBS (1)	1,265,843	146,64	6 11.58	1,763,424	179,023	10.15
RPL/NPL MBS (1)	1,059,046	53,42	4 5.04	1,017,549	47,773	4.69
Total MBS	4,545,135	255,97	5.63	5,491,022	289,099	5.26
CRT securities (1)	384,583	18,58	3 4.83	543,671	33,376	6.14
Residential whole loans, at carrying value (2)	4,370,931	243,98	0 5.58	1,738,870	100,921	5.80
MSR-related assets (1)	1,014,943	52,64	7 5.19	479,041	28,420	5.93
Cash and cash equivalents (3)	195,795	3,39	3 1.73	208,447	2,936	1.41
Other interest-earning assets	105,718	7,15	2 6.77	16,886	923	5.47
Total interest-earning assets	10,617,105	581,72	6 5.48	8,477,937	455,675	5.37
Total non-interest-earning assets	2,459,916			2,708,908		
Total assets	\$ 13,077,021			\$ 11,186,845	_	
Liabilities and stockholders' equity:						
Interest-bearing liabilities:						
Total repurchase agreements (4)	\$ 8,586,684	\$ 292,05	0 3.40%	\$ 6,746,570	\$ 205,338	3.04%
Securitized debt	632,265	23,29	4 3.68	540,003	18,805	3.48
Convertible Senior Notes	129,886	8,96	5 6.90	_	_	_
Senior Notes	96,837	8,04	7 8.31	96,792	8,043	8.31
Total interest-bearing liabilities	9,445,672	332,35	6 3.52	7,383,365	232,186	3.14
Total non-interest-bearing liabilities	229,272			456,500		
Total liabilities	9,674,944			7,839,865	_	
Stockholders' equity	3,402,077			3,346,980		
Total liabilities and stockholders' equity	\$ 13,077,021			\$ 11,186,845		
Net interest income/net interest rate spread (5)		\$ 249,37	0 1.96%		\$ 223,489	2.23%
Net interest-earning assets/net interest margin (6)	\$ 1,171,433		2.35%	\$ 1,094,572		2.64%

⁽¹⁾ Yields presented throughout this Annual Report on Form 10-K are calculated using average amortized cost data for securities which excludes unrealized gains and losses and includes principal payments receivable on securities. For GAAP reporting purposes, purchases and sales are reported on the trade date. Average amortized cost data used to determine yields is calculated based on the settlement date of the associated purchase or sale as interest income is not earned on purchased assets and continues to be earned on sold assets until settlement date.

⁽²⁾ Excludes residential whole loans held at fair value that are reported as a component of total non-interest-earning assets.

⁽³⁾ Includes average interest-earning cash, cash equivalents and restricted cash.

⁽⁴⁾ Average cost of repurchase agreements includes the cost of Swaps allocated based on the proportionate share of the overall estimated weighted average portfolio duration.

⁽⁵⁾ Net interest rate spread reflects the difference between the yield on average interest-earning assets and average cost of funds.

⁽⁶⁾ Net interest margin reflects net interest income divided by average interest-earning assets.

Rate/Volume Analysis

The following table presents the extent to which changes in interest rates (yield/cost) and changes in the volume (average balance) of interest-earning assets and interest-bearing liabilities have affected our interest income and interest expense during the periods indicated. Information is provided in each category with respect to: (i) the changes attributable to changes in volume (changes in average balance multiplied by prior rate); (ii) the changes attributable to changes in rate (changes in rate multiplied by prior average balance); and (iii) the net change. The changes attributable to the combined impact of volume and rate have been allocated proportionately, based on absolute values, to the changes due to rate and volume.

Year Ended December 31, 2019 Compared to Year Ended December 31, 2018

	Year Ended December 31, 2018								
		Increase/(Dec	erease	e) due to		Total Net Change in Interest Income/			
(In Thousands)		Volume		Rate	Expense				
Interest-earning assets:									
Agency MBS	\$	(11,999)	\$	5,597	\$	(6,402)			
Legacy Non-Agency MBS		(55,215)		22,838		(32,377)			
RPL/NPL MBS		2,017		3,634		5,651			
CRT securities		(8,563)		(6,230)		(14,793)			
Residential whole loans, at carrying value (1)		147,063		(4,004)		143,059			
MSR-related assets		28,200		(3,973)		24,227			
Cash and cash equivalents		(187)		644		457			
Other interest earning assets		5,960		269		6,229			
Total net change in income from interest-earning assets	\$	107,276	\$	18,775	\$	126,051			
Interest-bearing liabilities:									
Agency repurchase agreements	\$	(8,042)	\$	7,771	\$	(271)			
Legacy Non-Agency repurchase agreements		(10,556)		(552)		(11,108)			
RPL/NPL MBS repurchase agreements		3,831		806		4,637			
CRT securities repurchase agreements		(3,630)		666		(2,964)			
MSR-related assets repurchased agreements		14,560		(59)		14,501			
Residential whole loan at carrying value repurchase agreements		80,293		(638)		79,655			
Residential whole loan at fair value repurchase agreements		(312)		(13)		(325)			
Other repurchase agreements		2,558		29		2,587			
Securitized debt		3,352		1,137		4,489			
Convertible Senior Notes		8,965		_		8,965			
Senior Notes		4		_		4			
Total net change in expense from interest-bearing liabilities	\$	91,023	\$	9,147	\$	100,170			
Net change in net interest income	\$	16,253	\$	9,628	\$	25,881			

⁽¹⁾ Excludes residential whole loans held at fair value which are reported as a component of non-interest-earning assets.

The following table presents certain quarterly information regarding our net interest spread and net interest margin for the quarterly periods presented:

	Total Interest-Earning Assets and Interest- Bearing Liabilities						
Quarter Ended	Net Interest Spread (1)	Net Interest Margin <i>(2)</i>					
December 31, 2019	2.33%	2.68%					
September 30, 2019	1.82	2.19					
June 30, 2019	1.90	2.29					
March 31, 2019	1.98	2.41					
December 31, 2018	2.17	2.60					
September 30, 2018	2.41	2.82					
June 30, 2018	2.30	2.66					
March 31, 2018	2.25	2.64					

- (1) Reflects the difference between the yield on average interest-earning assets and average cost of funds.
- (2) Reflects annualized net interest income divided by average interest-earning assets.

The following table presents the components of the net interest spread earned on our Agency MBS, Legacy Non-Agency MBS and RPL/NPL MBS for the quarterly periods presented:

	Agency MBS			Legacy Non-Agency MBS			RPL/NPL MBS			Total MBS		
Quarter Ended	Net Yield (1)	Cost of Funding (2)	Net Interest Spread (3)	Net Yield (1)	Cost of Funding (2)	Net Interest Spread (3)	Net Yield (1)	Cost of Funding (2)	Net Interest Spread (3)	Net Yield (1)	Cost of Funding (2)	Net Interest Spread (3)
December 31, 2019	2.38%	2.33%	0.05%	14.76%	3.18%	11.58%	5.17%	2.78%	2.39%	6.76%	2.70%	4.06%
September 30, 2019	2.32	2.47	(0.15)	10.32	3.24	7.08	5.18	3.18	2.00	5.28	2.86	2.42
June 30, 2019	2.50	2.56	(0.06)	11.30	3.30	8.00	4.98	3.39	1.59	5.45	2.95	2.50
March 31, 2019	2.77	2.53	0.24	10.45	3.30	7.15	4.90	3.43	1.47	5.31	2.95	2.36
December 31, 2018	2.72	2.36	0.36	10.65	3.30	7.35	4.82	3.27	1.55	5.36	2.82	2.54
September 30, 2018	2.21	2.22	(0.01)	10.76	3.29	7.47	5.01	3.10	1.91	5.49	2.73	2.76
June 30, 2018	2.03	2.04	(0.01)	9.89	3.30	6.59	4.52	3.19	1.33	5.16	2.64	2.52
March 31, 2018	2.21	1.91	0.30	9.44	3.29	6.15	4.36	2.94	1.42	5.06	2.53	2.53

⁽¹⁾ Reflects annualized interest income on MBS divided by average amortized cost of MBS.

⁽²⁾ Reflects annualized interest expense divided by average balance of repurchase agreements, including the cost of Swaps allocated based on the proportionate share of the overall estimated weighted average portfolio duration, and securitized debt. Agency MBS cost of funding includes 36, 1, (9), (13), (5), 6, 9 and 26 basis points and Legacy Non-Agency MBS cost of funding includes 24, 1, (14), (20), (4), 5, 8 and 30 basis points associated with Swaps to hedge interest rate sensitivity on these assets for the quarters ended December 31, 2019, September 30, 2019, June 30, 2019, March 31, 2019, December 31, 2018, September 30, 2018, June 30, 2018 and March 31, 2018, respectively.

⁽³⁾ Reflects the difference between the net yield on average MBS and average cost of funds on MBS.

The following table presents the components of the net interest spread earned on our Residential whole loans, at carrying value for the quarterly periods presented:

	Purchase	ed Performing	Loans	Purchased	Credit Impair	red Loans	Total Residential Whole Loans Carrying Valu				
Quarter Ended	Net Yield (1)	Cost of Funding (2)	Net Interest Spread (3)	Net Yield (1)	Cost of Funding (2)	Net Interest Spread (3)	Net Yield (1)	Cost of Funding (2)	Net Interest Spread (3)		
December 31, 2019	5.24%	3.61%	1.63%	5.80%	3.51%	2.29%	5.31%	3.59%	1.72%		
September 30, 2019	5.55	3.92	1.62	5.77	3.79	1.98	5.58	3.90	1.68		
June 30, 2019	5.71	4.22	1.50	5.76	3.98	1.79	5.72	4.17	1.56		
March 31, 2019	5.93	4.27	1.66	5.77	4.06	1.71	5.89	4.21	1.68		
December 31, 2018	5.79	4.06	1.73	5.71	3.88	1.83	5.77	3.99	1.78		
September 30, 2018	5.98	3.80	2.18	5.75	3.80	1.96	5.89	3.80	2.09		
June 30, 2018	6.07	_	6.07	5.70	3.86	1.84	5.84	3.86	1.98		
March 31, 2018	6.54	_	6.54	5.62	3.56	2.06	5.81	3.56	2.25		

- (1) Reflects annualized interest income on Residential whole loans, at carrying value divided by average amortized cost of Residential whole loans, at carrying value. Excludes servicing costs.
- (2) Reflects annualized interest expense divided by average balance of repurchase agreements and securitized debt. Total Residential whole loans, at carrying value cost of funding includes 5, 3, 5, 6 and 4 basis points associated with Swaps to hedge interest rate sensitivity on these assets for the quarters ended December 31, 2019, September 30, 2019, June 30, 2019, March 31, 2019 and December 31, 2018, respectively.
- (3) Reflects the difference between the net yield on average Residential whole loans, at carrying value and average cost of funds on Residential whole loans, at carrying value.

Interest Income

Interest income on our Agency MBS for 2019 decreased by \$6.4 million, or 10.3% to \$55.9 million from \$62.3 million for 2018. This decrease primarily reflects a \$489.8 million decrease in the average amortized cost of our Agency MBS portfolio, due primarily to portfolio run-off and sales, to \$2.2 billion for 2019 from \$2.7 billion for 2018 partially offset by an increase in the net yield on our Agency MBS to 2.52% for 2019 from 2.30% for 2018. At the end of 2019, the average coupon on mortgages underlying our Agency MBS was slightly higher compared to the end of 2018. In addition, during 2019, our Agency MBS portfolio experienced an 18.1% CPR and we recognized \$26.5 million of net premium amortization compared to a CPR of 14.4% and \$25.9 million of net premium amortization in 2018. At December 31, 2019, we had net purchase premiums on our Agency MBS of \$62.8 million, or 3.9% of current par value, compared to net purchase premiums of \$103.0 million, or 3.9% of par value, at December 31, 2018.

Interest income on our Non-Agency MBS decreased by \$26.7 million, or 11.8%, for 2019 to \$200.1 million compared to \$226.8 million for 2018. This decrease is primarily due to portfolio run-off and sales of Legacy Non-Agency MBS, which more than offset the impact of higher amounts invested in RPL/NPL MBS, and resulted in a decrease in the average amortized cost of our Non-Agency MBS portfolio of \$456.1 million or 16.4%, to \$2.3 billion for 2019, from \$2.8 billion for 2018.

Interest income on our Legacy Non-Agency MBS for 2019 decreased \$32.4 million to \$146.6 million from \$179.0 million for 2018. This decrease primarily reflects a \$497.6 million decrease in the average amortized cost of our Legacy Non-Agency MBS to \$1.3 billion for 2019 from \$1.8 billion for 2018. This decrease more than offset the impact of the higher yields generated on our Legacy Non-Agency MBS portfolio, which were 11.58% for 2019 compared to 10.15% for 2018. The increase in the net yield on our Legacy Non-Agency MBS portfolio primarily reflects higher accretion income recognized in 2019 due to the impact of redemptions of certain securities that had been previously purchased at a discount, the improved performance of loans underlying the Legacy Non-Agency MBS portfolio, which has resulted in credit reserve releases, changes in interest rates since 2018, as well as the impact of the cash proceeds received during 2019 and 2018 in connection with the settlement of litigation related to certain residential mortgage backed securitization trusts that were sponsored by JP Morgan Chase & Co. and affiliated entities and Lehman Brothers Holdings Inc.

Interest Income on our RPL/NPL MBS portfolio increased \$5.7 million to \$53.4 million for 2019 from \$47.8 million for 2018. This increase primarily reflects an increase in the net yield on our RPL/NPL portfolio to 5.04% for 2019 from 4.69% for 2018 and a \$41.5 million increase in the average amortized cost of this portfolio to \$1.1 billion for 2019 from \$1.0 billion from 2018. The increase in the net yield primarily reflects an increase in the average coupon yield to 5.01% for 2019 from 4.55% for

2018 and lower accretion income recognized in 2019 as the level of redemptions in 2018 of securities that had been previously purchased at a discount was higher than in 2019.

During 2019, we recognized net purchase discount accretion of \$60.0 million on our Non-Agency MBS, compared to \$70.7 million for 2018. At December 31, 2019, we had net purchase discounts of \$526.6 million, including Credit Reserve and previously recognized OTTI of \$436.6 million, on our Legacy Non-Agency MBS, or 33.8% of par value. During 2019, we reallocated \$17.7 million of purchase discount designated as Credit Reserve to accretable purchase discount.

The following table presents the coupon yield and net yields earned on our Agency MBS, Legacy Non-Agency MBS and RPL/NPL MBS and weighted average CPRs experienced for such MBS for the quarterly periods presented:

A	Agency MBS		Legacy	Non-Agency	MBS	RPL/NPL MBS			
Coupon Yield (1)	Net Yield (2)	3 Month Average CPR (3)	Coupon Yield (1)	Net Yield (2)	3 Month Average CPR (3)	Coupon Yield (1)	Net Yield (2)	3 Month Average Bond CPR (4)	
3.63%	2.38%	18.1%	6.88%	14.76%	16.4%	5.07%	5.17%	18.8%	
3.73	2.32	18.6	6.92	10.32	14.9	5.18	5.18	18.2	
3.76	2.50	18.3	6.91	11.30	15.7	4.98	4.98	16.1	
3.69	2.77	13.6	6.78	10.45	12.7	4.86	4.90	11.6	
3.58	2.72	12.5	6.64	10.65	14.7	4.75	4.82	12.9	
3.32	2.21	16.8	6.32	10.76	16.8	4.56	5.01	19.6	
3.09	2.03	16.2	6.09	9.89	15.8	4.49	4.52	20.4	
3.02	2.21	12.7	5.91	9.44	14.9	4.35	4.36	14.0	
	Coupon Yield (1) 3.63% 3.73 3.76 3.69 3.58 3.32 3.09	Yield (1) Yield (2) 3.63% 2.38% 3.73 2.32 3.76 2.50 3.69 2.77 3.58 2.72 3.32 2.21 3.09 2.03	Coupon Yield (I) Net Yield (2) 3 Month Average CPR (3) 3.63% 2.38% 18.1% 3.73 2.32 18.6 3.76 2.50 18.3 3.69 2.77 13.6 3.58 2.72 12.5 3.32 2.21 16.8 3.09 2.03 16.2	Coupon Yield (I) Net Yield (2) 3 Month Average CPR (3) Coupon Yield (I) 3.63% 2.38% 18.1% 6.88% 3.73 2.32 18.6 6.92 3.76 2.50 18.3 6.91 3.69 2.77 13.6 6.78 3.58 2.72 12.5 6.64 3.32 2.21 16.8 6.32 3.09 2.03 16.2 6.09	Coupon Yield (I) Net Yield (2) 3 Month Average CPR (3) Coupon Yield (I) Net Yield (2) 3.63% 2.38% 18.1% 6.88% 14.76% 3.73 2.32 18.6 6.92 10.32 3.76 2.50 18.3 6.91 11.30 3.69 2.77 13.6 6.78 10.45 3.58 2.72 12.5 6.64 10.65 3.32 2.21 16.8 6.32 10.76 3.09 2.03 16.2 6.09 9.89	Coupon Yield (I) Net Yield (2) 3 Month Average CPR (3) Coupon Yield (I) Net Yield (2) 3 Month Average CPR (3) 3.63% 2.38% 18.1% 6.88% 14.76% 16.4% 3.73 2.32 18.6 6.92 10.32 14.9 3.76 2.50 18.3 6.91 11.30 15.7 3.69 2.77 13.6 6.78 10.45 12.7 3.58 2.72 12.5 6.64 10.65 14.7 3.32 2.21 16.8 6.32 10.76 16.8 3.09 2.03 16.2 6.09 9.89 15.8	Coupon Yield (I) Net Yield (2) 3 Month Average CPR (3) Coupon Yield (I) Net Yield (2) 3 Month Average CPR (3) Coupon Yield (I) 3.63% 2.38% 18.1% 6.88% 14.76% 16.4% 5.07% 3.73 2.32 18.6 6.92 10.32 14.9 5.18 3.76 2.50 18.3 6.91 11.30 15.7 4.98 3.69 2.77 13.6 6.78 10.45 12.7 4.86 3.58 2.72 12.5 6.64 10.65 14.7 4.75 3.32 2.21 16.8 6.32 10.76 16.8 4.56 3.09 2.03 16.2 6.09 9.89 15.8 4.49	Coupon Yield (I) Net Yield (2) 3 Month Average CPR (3) Coupon Yield (I) Net Yield (2) Net Yield (I) Net Yield (I)	

⁽¹⁾ Reflects the annualized coupon interest income divided by the average amortized cost. The discounted purchase price on Legacy Non-Agency MBS causes the coupon yield to be higher than the pass-through coupon interest rate.

Interest income on our residential whole loans held at carrying value increased by \$143.1 million, or 141.8%, for 2019 to \$244.0 million compared to \$100.9 million for 2018. This increase primarily reflects a \$2.6 billion increase in the average balance of this portfolio to \$4.4 billion for 2019 from \$1.7 billion for 2018 partially offset by a decrease in the yield (excluding servicing costs) to 5.58% for 2019 from 5.80% for 2018.

Interest income on our MSR-related assets increased by \$24.2 million, or 85.2%, to \$52.6 million for 2019 compared to \$28.4 million for 2018. This increase primarily reflects a \$535.9 million increase in the average balance of these investments for 2019 to \$1.0 billion compared to \$479.0 million for 2018 partially offset by a decrease in the yield to 5.19% for 2019 from 5.93% for 2018.

Interest Expense

Our interest expense for 2019 increased by \$100.2 million, or 43.1%, to \$332.4 million, from \$232.2 million for 2018. This increase primarily reflects an increase in our average borrowings to finance our residential whole loans held at carrying value, MSR-related assets, RPL/NPL MBS and other interest-earning assets, an increase in securitized debt to finance residential whole loans held at fair value and an increase in financing rates on our repurchase agreement financings. In addition, we incurred interest expense on our Convertible Senior Notes issued during 2019. The impact of these items on our interest expense was partially offset by a decrease in our average repurchase agreement borrowings to finance our Legacy Non-Agency MBS, Agency MBS portfolios and CRT securities. The effective interest rate paid on our borrowings increased to 3.52% for 2019, from 3.14% for the 2018.

Payments made and/or received on our Swaps designated as hedges for accounting purposes are a component of our borrowing costs and resulted in interest expense of \$927,000, or one basis points, for 2019, compared to interest expense of \$3.8 million, or five basis points, for 2018. The weighted average fixed-pay rate on our Swaps designated as hedges increased to 2.28% for 2019

⁽²⁾ Reflects annualized interest income on MBS divided by average amortized cost of MBS.

^{(3) 3} month average CPR weighted by positions as of the beginning of each month in the quarter.

⁽⁴⁾ All principal payments are considered to be prepayments for CPR purposes.

from 2.12% for 2018. The weighted average variable interest rate received on our Swaps designated as hedges increased to 2.24% for 2019 from 1.96% for 2018.

Other Income, net

For the 2019, Other Income, net increased by \$67.9 million, or 43.0%, to \$225.9 million compared to \$158.0 million for 2018. The components of Other Income, net for the years ended 2019 and 2018 are summarized in the table below:

	For the Year Ended December 31,			
(In Thousands)	2019	2018		
Net gains on residential whole loans measured at fair value through earnings	\$ 158,330	\$ 137,619		
Net realized gains on residential mortgage securities	62,002	61,307		
Net unrealized gain/(loss) on residential mortgage securities measured at fair value through earnings	7,080	(36,815)		
Liquidation gains on Purchased Credit Impaired Loans and other loan related income	14,711	13,432		
Net loss on Swaps not designated as hedges for accounting purposes	(16,500)	(9,610)		
Other	234	(7,958)		
Total Other Income, net	\$ 225,857	\$ 157,975		

Operating and Other Expense

For 2019, we had compensation and benefits and other general and administrative expenses of \$52.6 million, or 1.55% of average equity, compared to \$46.1 million, or 1.38% of average equity, for 2018. Compensation and benefits expense increased by approximately \$3.8 million to \$32.2 million for 2019, compared to \$28.4 million for 2018, primarily reflecting higher headcount and additional expense in connection with long term incentive awards in the current year period. Our other general and administrative expenses increased by \$2.8 million to \$20.4 million for 2019 compared to \$17.7 million for 2018, primarily due to higher information technology related expenses incurred to support the growth in our business, higher costs associated with deferred compensation to Directors in the current year period, which are driven by the changes in our stock price, and transaction costs related to our investments in loan origination partners.

Operating and Other Expense during 2019 also includes \$44.5 million of loan servicing and other related operating expenses related to our residential whole loan activities. These expenses increased compared to the prior year period by approximately \$10.9 million, or 32.4%, primarily due to increases in non-recoverable advances and servicing fees that were driven by increases in our REO portfolio.

Selected Financial Ratios

The following table presents information regarding certain of our financial ratios at or for the dates presented:

At or for the Quarter Ended	Return on Average Total Assets (1)	Return on Average Total Stockholders' Equity (2)	Total Average Stockholders' Equity to Total Average Assets (3)	Dividend Payout Ratio (4)	Leverage Multiple (5)	Book Value per Share of Common Stock (6)	Economic Book Value per Share of Common Stock (7)
December 31, 2019	2.92%	11.90%	25.48%	0.95	3.0	\$ 7.04	\$ 7.44
September 30, 2019	2.79	11.24	25.80	1.00	2.8	7.09	7.41
June 30, 2019	2.74	10.91	26.13	1.00	2.8	7.11	7.40
March 31, 2019	2.66	10.40	26.71	1.05	2.7	7.11	7.32
December 31, 2018	1.87	6.96	28.65	1.54	2.6	7.15	7.35
September 30, 2018	2.94	10.21	30.15	1.05	2.3	7.46	7.63
June 30, 2018	2.58	8.74	31.19	1.18	2.3	7.54	7.75
March 31, 2018	2.93	10.27	29.91	1.00	2.2	7.62	7.81

- (1) Reflects annualized net income available to common stock and participating securities divided by average total assets.
- (2) Reflects annualized net income divided by average total stockholders' equity.
- (3) Reflects total average stockholders' equity divided by total average assets.
- (4) Reflects dividends declared per share of common stock divided by earnings per share.
- (5) Represents the sum of borrowings under repurchase agreements, securitized debt, payable for unsettled purchases, obligations to return securities obtained as collateral, Convertible Senior Notes and Senior Notes divided by stockholders' equity.
- (6) Reflects total stockholders' equity less the preferred stock liquidation preference divided by total shares of common stock outstanding.
- (7) "Economic book value" is a non-GAAP financial measure of our financial position. To calculate our Economic book value, our portfolios of Residential whole loans at carrying value are adjusted to their fair value, rather than the carrying value that is required to be reported under the GAAP accounting model applied to these loans. For additional information please refer to page 60 under the heading "Economic Book Value".

Reconciliation of GAAP and Non-GAAP Financial Measures

Core Earnings

"Core earnings" is a non-GAAP financial measure of our operating performance, within the meaning of Regulation G and Item 10(e) of Regulation S-K, as promulgated by the Securities and Exchange Commission. Core earnings excludes certain unrealized gains and losses on investments in residential mortgage securities and related hedges that we are required to include in GAAP Net Income each period because management believes that these items, which to date have typically resulted from short-term market volatility or other market technical factors and not due to changes in fundamental asset cash flows, are not reflective of the economic income generated by our investment portfolio. Accordingly, we believe that the adjustments to compute Core earnings specified below better allow investors and analysts to evaluate our financial results, including by analyzing changes in our Core earnings between periods. In addition to using Core earnings in the evaluation of investment portfolio performance over time, Management considers estimates of periodic Core earnings as an input to the determination of the level of quarterly dividends to common shareholders that are recommended to the Board of Directors for approval and in its forecasting and decision-making processes relating to the allocation of capital between different asset classes.

We believe that Core earnings provides useful supplemental information to both management and investors in evaluating our financial results. Core earnings should be used in conjunction with results presented in accordance with GAAP. Core earnings does not represent and should not be considered as a substitute for Net Income or Cash Flows from Operating Activities, each as determined in accordance with GAAP, and our calculation of this measure may not be comparable to similarly titled measures reported by other companies.

The following table provides a reconciliation of our GAAP net income available to common stock and participating securities to our non-GAAP Core earnings for the years ended December 31, 2019 and 2018:

	For the Year Ended December					
(In Thousands, Except Per Share Amounts)	2019			2018		
GAAP Net income to common stockholders - basic	\$	362,030	\$	285,858		
Adjustments:						
Unrealized loss/(gain) on CRT securities measured at fair value through earnings		710		33,526		
Unrealized net (gain)/loss on Agency MBS measured at fair value through earnings and related swaps that are not accounted for as hedging transactions		(9,021)		13,252		
Total adjustments	\$	(8,311)	\$	46,778		
Core earnings	\$	353,719	\$	332,636		
GAAP earnings per common share	\$	0.80	\$	0.68		
Core earnings per common share	\$	0.78	\$	0.79		
Weighted average common shares for basic earnings per share		450,972		418,934		

Economic Book Value

"Economic book value" is a non-GAAP financial measure of our financial position. To calculate our Economic book value, our portfolios of Residential whole loans at carrying value are adjusted to their fair value, rather than the carrying value that is required to be reported under the GAAP accounting model applied to these loans. This adjustment is also reflected in the table below in our end of period stockholders' equity. Management considers that Economic book value provides investors with a useful supplemental measure to evaluate our financial position as it reflects the impact of fair value changes for all of our residential mortgage investments, irrespective of the accounting model applied for GAAP reporting purposes. Economic book value does not represent and should not be considered as a substitute for Stockholders' Equity, as determined in accordance with GAAP, and our calculation of this measure may not be comparable to similarly titled measures reported by other companies.

The following table provides a reconciliation of our GAAP book value per common share to our non-GAAP Economic book value per common share for the quarterly periods below:

Quarter	Ended:
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(In Millions, Except Per Share Amounts)	De	cember 31, 2019	Sep	tember 30, 2019	J	une 30, 2019	M	arch 31, 2019	De	cember 31, 2018	Sej	ptember 30, 2018	J	une 30, 2018	M	arch 31, 2018
GAAP Total Stockholders' Equity	\$	3,384.0	\$	3,403.4	\$	3,403.4	\$	3,404.5	\$	3,416.1	\$	3,552.2	\$	3,206.6	\$	3,235.4
Preferred Stock, liquidation preference		(200.0)		(200.0)		(200.0)		(200.0)		(200.0)		(200.0)		(200.0)		(200.0)
GAAP Stockholders' Equity for book value per common share		3,184.0		3,203.4		3,203.4		3,204.5		3,216.1		3,352.2		3,006.6		3,035.4
Adjustments:																
Fair value adjustment to Residential whole loans, at carrying value		182.4		145.8		131.2		92.1		87.7		78.4		81.0		77.8
Stockholders' Equity including fair value adjustment to Residential whole loans, at carrying value (Economic book value)	\$	3,366.4	\$	3,349.2	\$	3,334.6	\$	3,296.7	\$	3,303.8	\$	3,430.6	\$	3,087.6	\$	3,113.2
GAAP book value per common share	\$	7.04	\$	7.09	\$	7.11	\$	7.11	\$	7.15	\$	7.46	\$	7.54	\$	7.62
Economic book value per common share	\$	7.44	\$	7.41	\$	7.40	\$	7.32	\$	7.35	\$	7.63	\$	7.75	\$	7.81
Number of shares of common stock outstanding		452.4		451.7		450.6		450.5		449.8	_	449.5		398.5		398.4

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Our consolidated financial statements include the accounts of all of our subsidiaries. The preparation of consolidated financial statements in accordance with GAAP requires management to make estimates, judgments and assumptions that affect the amounts reported in the consolidated financial statements, giving due consideration to materiality. Actual results could differ from these estimates.

Our accounting policies are described in Note 2 to the consolidated financial statements, included under Item 8 of this Annual Report on Form 10-K. Management believes the policies which more significantly rely on estimates and judgments to be as follows:

Fair Value Measurements

GAAP requires the categorization of fair value measurements into three broad levels that form a hierarchy. The following describes the valuation methodologies used for our financial instruments categorized as level 3 in the valuation hierarchy, which require the most significant estimates and judgments to be made.

Residential Whole Loans

We determine the fair value of our residential whole loans after considering valuations obtained from a third-party who specializes in providing valuations of residential mortgage loans. The valuation approach applied generally depends on whether the loan is considered performing or non-performing at the date the valuation is performed. For performing loans, estimates of fair value are derived using a discounted cash flow approach, where estimates of cash flows are determined from the scheduled payments, adjusted using forecasted prepayment, default and loss given default rates. For non-performing loans, asset liquidation cash flows are derived based on the estimated time to liquidate the loan, the estimated value of the collateral, expected costs and estimated home price appreciation. Estimated cash flows for both performing and non-performing loans are discounted at yields considered appropriate to arrive at a reasonable exit price for the asset. Indications of loan value such as actual trades, bids, offers and generic market color may be used in determining the appropriate discount yield. Certain short term loans are valued at their carrying amount. The estimation of cash flows used in pricing models is inherently subjective and imprecise. Changes in market conditions, as well as changes in the assumptions or methodology used to determine fair value, could result in a significant increase or decrease in fair value.

Residential whole loans, at fair value are recorded on our consolidated balance sheets at fair value and changes in their fair value are recorded through earnings. With respect to Residential whole loans, at carrying value, the fair value for these loans is disclosed in the footnotes to the consolidated financial statements and changes in their fair value do not impact earnings.

Term Notes Backed by MSR-Related Collateral

Our valuation process for term notes backed by MSR-related collateral is similar to that used for residential mortgage securities and considers a number of observable market data points, including prices obtained from pricing services, brokers and repurchase agreement counterparties, dialogue with market participants, as well as management's observations of market activity. Other factors taken into consideration include estimated changes in fair value of the related underlying MSR collateral and, as applicable, the financial performance of the ultimate parent or sponsoring entity of the issuer, which has provided a guarantee that is intended to provide for payment of interest and principal to the holders of the term notes should cash flows generated by the related underlying MSR collateral be insufficient. Following a re-evaluation during the third quarter of 2019 of the observability of the data used in its fair value estimation process, we determined that it was appropriate to reclassify these assets to Level 2 in the fair value hierarchy as of the end of the third quarter of 2019.

These term notes are recorded on our consolidated balance sheets at fair value and changes in their fair value are recorded through OCI and therefore do not impact earnings.

Corporate Loans Backed by MSR-Related Collateral

Our valuation process for corporate loans backed by MSR-related collateral, which are not held at fair value, considers recent past and expected future loan performance, recent financial performance of the borrower and estimates of the current value of the underlying collateral, which includes MSRs and other assets of the borrower that are pledged to secure the borrowing. The evaluation and weighting of the factors used in estimating fair value require considerable judgment. The fair value for these loans is disclosed in the footnotes to the consolidated financial statements and changes in their fair value do not impact earnings.

Real Estate Owned (REO)

REO represents real estate acquired by the Company, including through foreclosure, deed in lieu of foreclosure, or purchased in connection with the acquisition of residential whole loans. We measure REO assets at the lower of the current carrying amount or fair value less estimated selling costs. We have acquired certain properties that we hold for investment purposes, including rentals to third parties. These properties are held at their historical basis less depreciation, and are subject to impairment. Fair value is estimated through the use of broker price opinions (or BPOs), adjusted based on our experience and knowledge of the markets. REO is illiquid in nature and its valuation is subject to significant uncertainty and judgment and is greatly impacted by local market conditions.

Residential Mortgage Securities

Assessment of Other-Than-Temporary Impairments

Securities classified as AFS are carried on our consolidated balance sheets at their fair value with unrealized gains and losses excluded from earnings (except when an OTTI was recognized, as discussed below) and reported in AOCI, a component of Stockholders' Equity.

When the fair value of an AFS security is less than its amortized cost at the balance sheet date, the security is considered impaired. We have assessed our impaired securities on at least a quarterly basis and designated such impairments as either "temporary" or "other-than-temporary." If we intend to sell an impaired security, or it is more likely than not that we will be required to sell the impaired security before its anticipated recovery, then we must recognize an OTTI through charges to earnings equal to the entire difference between the investment's amortized cost and its fair value at the balance sheet date. If we do not expect to sell an other-than-temporarily impaired security, only the portion of the impairment related to credit losses is recognized through charges to earnings with the remainder recognized through AOCI on the consolidated balance sheets.

In making our assessments about OTTIs, we review and consider certain information relating to our financial position and the impaired securities, including the nature of such securities, the contractual collateral requirements impacting us and our investment and leverage strategies, as well as subjective information, including our current and targeted liquidity position, the credit quality and expected cash flows of the underlying assets collateralizing such securities, and current and anticipated market conditions. In determining the OTTI related to credit losses for securities that were purchased at significant discounts to par and/or are considered to be of less than high credit quality, we compare the present value of the remaining cash flows expected to be collected at the purchase date (or last date previously revised) against the present value of the cash flows expected to be collected at the current financial reporting date. The determination as to whether an OTTI exists and, if so, the amount of credit impairment recognized in earnings is subjective, as such determinations are based on factual information available at the time of assessment as well as management's estimates of, and judgments about, the future performance and cash flow projections. As a result, the timing and amount of OTTIs constitute material estimates that may be susceptible to significant change. Beginning on January 1, 2020, the accounting for OTTIs will change to an allowance-based methodology, as described under "Recent Accounting Standards to be Adopted in Future Periods" below.

The payments of principal and/or interest we receive on our Agency MBS, which depend directly upon payments on the mortgages underlying such securities, are guaranteed by Fannie Mae, Freddie Mac and Ginnie Mae. Fannie Mae and Freddie Mac are GSEs, but their guarantees are not explicitly backed by the full faith and credit of the United States. Ginnie Mae is part of a U.S. Government agency and its guarantees are explicitly backed by the full faith and credit of the United States. We believe that the stronger backing for the guarantors of Agency MBS resulting from the conservatorship of Fannie Mae and Freddie Mac has further strengthened their credit worthiness; however, there can be no assurance that these actions will be adequate for their needs. Accordingly, if these government actions are inadequate and the GSEs suffer losses in the future or cease to exist, our view of the credit worthiness of our Agency MBS could materially change, which may affect our assessment of impairment for Agency MBS in future periods. (See Part I, Item 1A., Risk Factors, "The federal conservatorship of Fannie Mae and Freddie Mac and related efforts, along with any changes in laws and regulations affecting the relationship between Fannie Mae and Freddie Mac and the U.S. Government, may materially adversely affect our business.")

Our expectations with respect to our securities in an unrealized loss position may change over time, given, among other things, the dynamic nature of markets and other variables. Future sales or changes in our expectations with respect to securities in an unrealized loss position could result in us recognizing impairment charges or realizing losses on sales of securities in the future.

Interest Income

Interest income on the Non-Agency MBS that were purchased at a discount to par value and/or are considered to be of less than high credit quality is recognized based on the security's effective interest rate, which is the security's IRR. The IRR is determined using management's estimate of the projected cash flows for each security, which are based on our observations of current information and events and include assumptions related to fluctuations in interest rates, prepayment speeds and the timing and amount of credit losses. On at least a quarterly basis, we review and, if appropriate, make adjustments to our cash flow projections based on input and analysis received from external sources, internal models, and our judgment about interest rates, prepayment rates, the timing and amount of credit losses, and other factors. Changes in cash flows from those originally projected, or from those estimated at the last evaluation, may result in a prospective change in the IRR/interest income recognized on these securities or in the recognition of impairment charges, and these changes could be significant.

Based on the projected cash flows from our Non-Agency MBS purchased at a discount to par value, a portion of the purchase discount may be designated as Credit Reserve, which effectively mitigates our risk of loss on the mortgages collateralizing such MBS, and is not expected to be accreted into interest income. The amount designated as Credit Reserve may be adjusted over time, based on the actual performance of the security, its underlying collateral, actual and projected cash flow from such collateral, economic conditions and other factors. If the performance of a security with a Credit Reserve is more favorable than forecasted, a portion of the amount designated as Credit Reserve may be reallocated to accretable discount and recognized into interest income over time. Conversely, if the performance of a security with a Credit Reserve is less favorable than forecasted, the amount

designated as Credit Reserve may be increased, or impairment charges and write-downs of such securities to a new cost basis could result.

Residential Whole Loans

Residential whole loans included in our consolidated balance sheets are primarily comprised of pools of fixed- and adjustable-rate residential mortgage loans acquired through consolidated trusts in secondary market transactions. The accounting model utilized by us is determined at the time each loan package is initially acquired and is generally based on the delinquency status of the majority of the underlying borrowers in the package at acquisition. The accounting model described below for Purchased Credit Impaired Loans that are held at carrying value is typically utilized by us for Purchased Credit Impaired Loans where the underlying borrower has a delinquency status of less than 60 days at the acquisition date. We also acquire Purchased Performing Loans that are typically held at carrying value, but the accounting methods for income recognition and determination and measurement of any required loan loss reserves differ from those used for Purchased Credit Impaired Loans held at carrying value. The accounting model described below for residential whole loans held at fair value is typically utilized by us for loans where the underlying borrower has a delinquency status of 60 days or more at the acquisition date. The accounting model initially applied is not subsequently changed.

Residential Whole Loans at Carrying Value

Purchased Performing Loans

Purchased Performing Loans are initially recorded at their purchase price. Interest income on Purchased Performing Loans acquired at par is accrued based on each loan's current interest bearing balance and current interest rate. Interest income on such loans purchased at a premium/discount to par is recorded each period based on the contractual coupon net of any amortization of premium or accretion of discount, adjusted for actual prepayment activity. For loans acquired with related servicing rights retained by the seller, interest income is reported net of related serving costs.

An allowance for loan losses is recorded when, based on current information and events, it is probable that we will be unable to collect all amounts due under the existing contractual terms of the loan agreement. Any required loan loss allowance would reduce the carrying value of the loan with a corresponding charge to earnings. Significant judgments are required in determining any allowance for loan loss, including assumptions regarding the loan cash flows expected to be collected, the value of the underlying collateral and our ability to collect on any other forms of security, such as a personal guaranty provided either by the borrower or an affiliate of the borrower. Income recognition is suspended for loans at the earlier of the date at which payments become 90 days past due or when, in the opinion of management, a full recovery of income and principal becomes doubtful. When the ultimate collectability of the principal of an impaired loan is in doubt, all payments are applied to principal under the cost recovery method. When the ultimate collectability of the principal of an impaired loan is not in doubt, interest income is recorded under the cash basis method as interest payments are received. Interest accruals are resumed when the loan becomes contractually current and performance is demonstrated to be resumed. A loan is written off when it is no longer realizable and/or it is legally discharged.

Purchased Credit Impaired Loans

We have generally elected to account for these loans as credit impaired as they were acquired at discounted prices that reflect, in part, the impaired credit history of the borrower. Substantially all of these loans generally have previously experienced payment delinquencies and the amount owed may exceed the value of the property pledged as collateral. Loans considered credit impaired are initially recorded at the purchase price with no allowance for loan losses. Subsequent to acquisition, the recorded amount for these loans reflects the original investment amount, plus accretion of interest income, less principal and interest cash flows received. These loans are presented on our consolidated balance sheets at carrying value, which reflects the recorded amount reduced by any allowance for loan losses established subsequent to acquisition.

Under the application of the accounting model for Purchased Credit Impaired Loans, we may aggregate into pools loans acquired in the same fiscal quarter that are assessed as having similar risk characteristics. For each pool established, or on an individual loans basis for loans not aggregated into pools, we estimate at acquisition, and periodically on at least a quarterly basis, the principal and interest cash flows expected to be collected. The difference between the cash flows expected to be collected and the carrying amount of the loans is referred to as the "accretable yield." This amount is accreted as interest income over the life of the loans using an effective interest rate (level yield) methodology. Interest income recorded each period reflects the amount of accretable yield recognized and not the coupon interest payments received on the underlying loans. The difference between contractually required principal and interest payments and the cash flows expected to be collected is referred to as the "non-

accretable difference," and includes estimates of both the effect of prepayments and expected credit losses over the life of the underlying loans.

A decrease in expected cash flows in subsequent periods may indicate impairment at the pool and/or individual loan level, thus requiring the establishment of an allowance for loan losses by a charge to the provision for loan losses. The allowance for loan losses generally represents the present value of cash flows expected at acquisition, adjusted for any increases due to changes in estimated cash flows, that are subsequently no longer expected to be received at the relevant measurement date. Under the accounting model applied to Purchased Credit Impaired Loans, a significant increase in expected cash flows in subsequent periods first reduces any previously recognized allowance for loan losses and then will result in a recalculation of the amount of accretable yield. The adjustment of accretable yield due to a significant increase in expected cash flows is accounted for prospectively as a change in estimate and results in reclassification from nonaccretable difference to accretable yield.

The estimation of future cash flows for Purchased Credit Impaired Loans is subject to significant judgment and uncertainty. Actual cash flows could be materially different than our estimates, which could result in material changes to loss allowances and/or interest income.

Residential Whole Loans at Fair Value

Certain of our residential whole loans are presented at fair value on our consolidated balance sheets as a result of a fair value election made at time of acquisition, as described above under Fair Value Measurements. Cash received representing coupon interest payments on residential whole loans held at fair value is not included in Interest Income, but rather is included in Net gain on residential whole loans measured at fair value through earnings on our consolidated statements of operations.

Recent Accounting Standards to Be Adopted in Future Periods

Financial Instruments - Credit Losses - Measurement of Credit Losses on Financial Instruments

In June 2016, the FASB issued ASU 2016-13, Measurement of Credit Losses on Financial Instruments (or ASU 2016-13), which has subsequently been amended by ASUs 2019-11, Codification Improvements to Topic 326, Financial Instruments - Credit Losses, 2019-05, Financial Instruments - Credit Losses (Topic 326): Targeted Relief, 2019-04, Codification Improvements to Topic 326, Financial Instruments - Credit Losses, and 2018-19, Codification Improvements to Topic 326, Financial Instruments - Credit Losses. The amendments in ASU 2016-13 require entities to measure all expected credit losses (rather than incurred losses) for financial assets held at the reporting date, based on historical experience, current conditions and reasonable and supportable forecasts. Entities will now use forward-looking information to better inform their credit loss estimates. ASU 2016-13 also requires enhanced financial statement disclosures to help financial statement users better understand significant estimates and judgments used in estimating credit losses, as well as the credit quality and underwriting standards of an entity's portfolio. ASU 2016-13 is effective for public business entities for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. Early adoption was permitted for all entities for annual periods beginning after December 15, 2018, and interim periods therein. The amendments in this ASU are required to be applied by recording a cumulative-effect adjustment to equity as of the beginning of the first reporting period in which the guidance is effective. A prospective transition approach is required for debt securities for which an OTTI had been recognized before the effective date. We adopted the new ASU on January 1, 2020. The impact of adoption was that the allowance for loan losses on our Purchased Performing Loans increased by approximately \$8.3 million. This transition adjustment was recorded as an increase in our allowance for loan losses and an adjustment to decrease retained earnings as of the adoption date. In addition, for our Purchased Credit Impaired Loans, the carrying value of the portfolio is adjusted on transition to include an estimate of the allowance for credit losses as required by the new standard. For financial statement reporting purposes, this adjusted carrying value will be presented net of the estimated allowance for loan losses. Consequently, the adjustments recorded on transition for our Purchased Credit Impaired Loan portfolio do not result in any adjustment to retained earnings as of the adoption date. We do not consider these transition adjustments to be material to our financial position or previously reported GAAP or economic book value. We continue to work on analyzing and developing the disclosure information required by ASU 2016-13 in our future interim and annual financial statements.

Under ASU 2016-13, credit losses for available-for-sale debt securities should be measured in a manner similar to current GAAP. However, the amendments in this ASU require that credit losses be recorded through an allowance for credit losses, which will allow subsequent reversals in credit loss estimates to be recognized in current income. In addition, the allowance on available-for-sale debt securities will be limited to the extent that the fair value is less than the amortized cost. Based on our initial evaluation of the amendments in this ASU, we anticipate being required to make changes to the way we account for credit impairment losses on our available-for-sale debt securities. Under our current accounting, credit impairment losses are generally required to be

recorded as OTTI, which directly reduce the carrying amount of impaired securities, and are recorded in earnings and are not reversed if expected cash flows subsequently recover. Under the new guidance, credit impairments on such securities will be recorded as an allowance for credit losses that are also recorded in earnings, but the allowance can be reversed through earnings in a subsequent period if expected cash flows subsequently recover. Transition to the new available-for-sale debt securities guidance did not result in a material change to our retained earnings.

LIQUIDITY AND CAPITAL RESOURCES

Our principal sources of cash generally consist of borrowings under repurchase agreements and other collateralized financings, payments of principal and interest we receive on our investment portfolio, cash generated from our operating results and, to the extent such transactions are entered into, proceeds from capital market and structured financing transactions. Our most significant uses of cash are generally to pay principal and interest on our financing transactions, to purchase residential mortgage assets, to make dividend payments on our capital stock, to fund our operations and to make other investments that we consider appropriate.

We seek to employ a diverse capital raising strategy under which we may issue capital stock and other types of securities. To the extent we raise additional funds through capital market transactions, we currently anticipate using the net proceeds from such transactions to acquire additional residential mortgage-related assets, consistent with our investment policy, and for working capital, which may include, among other things, the repayment of our financing transactions. There can be no assurance, however, that we will be able to access the capital markets at any particular time or on any particular terms. We have available for issuance an unlimited amount (subject to the terms and limitations of our charter) of common stock, preferred stock, depositary shares representing preferred stock, warrants, debt securities, rights and/or units pursuant to our automatic shelf registration statement and, at December 31, 2019, we had approximately 8.9 million shares of common stock available for issuance pursuant to our DRSPP shelf registration statement. During 2019, we issued 322,888 shares of common stock through our DRSPP, raising net proceeds of approximately \$2.4 million, and 1,357,526 shares of common stock through our ATM Program, raising net proceeds of approximately \$9.9 million.

Our borrowings under repurchase agreements are uncommitted and renewable at the discretion of our lenders and, as such, our lenders could determine to reduce or terminate our access to future borrowings at virtually any time. The terms of the repurchase transaction borrowings under our master repurchase agreements, as such terms relate to repayment, margin requirements and the segregation of all securities that are the subject of repurchase transactions, generally conform to the terms contained in the standard master repurchase agreement published by the Securities Industry and Financial Markets Association (or SIFMA) or the global master repurchase agreement published by SIFMA and the International Capital Market Association. In addition, each lender typically requires that we include supplemental terms and conditions to the standard master repurchase agreement. Typical supplemental terms and conditions, which differ by lender, may include changes to the margin maintenance requirements, required haircuts (as defined below), purchase price maintenance requirements, requirements that all controversies related to the repurchase agreement be litigated in a particular jurisdiction and cross default and setoff provisions.

With respect to margin maintenance requirements for repurchase agreements secured by harder to value assets, such as Non-Agency MBS, residential whole loans and MSR-related assets, margin calls are typically determined by our counterparties based on their assessment of changes in the fair value of the underlying collateral and in accordance with the agreed upon haircuts specified in the transaction confirmation with the counterparty. We address margin call requests in accordance with the required terms specified in the applicable repurchase agreement and such requests are typically satisfied by posting additional cash or collateral on the same business day. We review margin calls made by counterparties and assess them for reasonableness by comparing the counterparty valuation against our valuation determination. When we believe that a margin call is unnecessary because our assessment of collateral value differs from the counterparty valuation, we typically hold discussions with the counterparty and are able to resolve the matter. In the unlikely event that resolution cannot be reached, we will look to resolve the dispute based on the remedies available to us under the terms of the repurchase agreement, which in some instances may include the engagement of a third party to review collateral valuations. For certain other agreements that do not include such provisions, we could resolve the matter by substituting collateral as permitted in accordance with the agreement or otherwise request the counterparty to return the collateral in exchange for cash to unwind the financing.

The following tables present information regarding the margin requirements, or the percentage amount by which the collateral value is contractually required to exceed the loan amount (this difference is referred to as the "haircut"), on our repurchase agreements at December 31, 2019 and 2018:

At December 31, 2019	Weighted Average Haircut	Low	High
Repurchase agreement borrowings secured by:			
Agency MBS	4.46%	3.00%	5.00%
Legacy Non-Agency MBS	20.27	15.00	35.00
RPL/NPL MBS	21.52	15.00	30.00
CRT securities	18.84	12.50	25.00
Residential whole loans (1)	20.07	8.00	50.00
MSR-related assets	21.18	20.00	30.00
Other	22.01	20.00	35.00
At December 31, 2018	Weighted Average Haircut	Low	High
Repurchase agreement borrowings secured by:			
Agency MBS	4.60%	3.00%	5.00%
Legacy Non-Agency MBS	21.38	15.00	35.00
RPL/NPL MBS	21.31	15.00	30.00
CRT securities	20.01	17.00	25.00
Residential whole loans	16.55	8.00	33.00
MSR-related assets	21.88	20.00	30.00
Other	21.15	20.00	35.00

⁽¹⁾ At December 31, 2019, includes repurchase agreements with an aggregate balance of \$146.3 million secured by RPL/NPL MBS obtained in connection with our loan securitization transactions that are eliminated in consolidation. Such repurchase agreements had a weighted average haircut of 29.7%, a minimum haircut of 15.0%, and a maximum haircut of 50.0%.

Over the course of 2019, the weighted average haircut requirements for the respective underlying collateral types for our repurchase agreements have remained fairly consistent compared to the end of 2018.

Repurchase agreement funding for our residential mortgage investments has been available to us at generally attractive market terms from multiple counterparties. Typically, due to the risks inherent in credit sensitive residential mortgage investments, repurchase agreement funding involving such investments is available at terms requiring higher collateralization and higher interest rates than repurchase agreement funding secured by Agency MBS. Therefore, we generally expect to be able to finance our acquisitions of Agency MBS on more favorable terms than financing for credit sensitive investments.

We maintain cash and cash equivalents, unpledged Agency and Non-Agency MBS and collateral in excess of margin requirements held by our counterparties (or collectively, "cash and other unpledged collateral") to meet routine margin calls and protect against unforeseen reductions in our borrowing capabilities. Our ability to meet future margin calls will be affected by our ability to use cash or obtain financing from unpledged collateral, the amount of which can vary based on the market value of such collateral, our cash position and margin requirements. Our cash position fluctuates based on the timing of our operating, investing and financing activities and is managed based on our anticipated cash needs. (See "Interest Rate Risk" included under Item 7A. of this Annual Report on Form 10-K and our Consolidated Statements of Cash Flows, included under Item 8 of this Annual Report on Form 10-K.)

At December 31, 2019, we had a total of \$11.2 billion of residential whole loans, MBS, CRT securities, MSR-related assets and other interest-earning assets and \$42.0 million of restricted cash pledged against our repurchase agreements and Swaps. At December 31, 2019 we have access to various sources of liquidity which we estimate exceeds \$114.2 million. This includes (i) \$70.6 million of cash and cash equivalents; (ii) \$31.2 million in estimated financing available from unpledged Agency MBS and other Agency MBS collateral that is currently pledged in excess of contractual requirements; and (iii) \$12.4 million in estimated

financing available from unpledged Non-Agency MBS and from other Non-Agency MBS and CRT collateral that is currently pledged in excess of contractual requirements. Our sources of liquidity do not include restricted cash. In addition, we have \$1.1 billion of unencumbered residential whole loans. We are evaluating potential opportunities to finance these assets, including loan securitization.

The table below presents certain information about our borrowings under repurchase agreement and securitized debt:

	Re	epurchase Agreeme	nts	Securitized Debt				
Quarter Ended (1)	Quarterly Average Balance	End of Period Balance	Maximum Balance at Any Month-End	Quarterly Average Balance	Average End of Period			
(In Thousands)								
December 31, 2019	\$ 8,781,646	\$ 9,139,821	\$ 9,139,821	\$ 590,813	\$ 570,952	\$ 594,458		
September 30, 2019	8,654,350	8,571,422	8,833,159	617,689	605,712	621,071		
June 30, 2019	8,621,895	8,630,642	8,639,311	645,972	627,487	649,405		
March 31, 2019	8,282,621	8,509,713	8,509,713	675,678	659,184	679,269		
December 31, 2018	7,672,309	7,879,087	7,879,087	699,207	684,420	702,377		
September 30, 2018	6,594,050	7,278,270	7,278,270	665,572	714,203	744,521		
June 30, 2018	6,189,916	5,892,228	6,319,178	432,283	518,655	523,490		
March 31, 2018	6,519,390	6,558,860	6,558,860	357,819	351,278	361,002		
December 31, 2017	6,661,020	6,614,701	6,760,360	212,445	363,944	363,944		
September 30, 2017	7,022,913	6,871,443	7,023,702	139,276	137,327	141,088		
June 30, 2017	7,612,393	7,040,844	7,763,860	30,414	143,698	143,698		
March 31, 2017	8,494,853	8,137,102	8,564,493	_	_			

⁽¹⁾ The information presented in the table above excludes \$230.0 million of Convertible Senior Notes issued in June 2019 and \$100.0 million of Senior Notes issued in April 2012. The outstanding balance of both the Convertible Senior Notes and Senior Notes have been unchanged since issuance.

Cash Flows and Liquidity for the Year Ended December 31, 2019

Our cash, cash equivalents and restricted cash increased by \$46.0 million during the year ended December 31, 2019, reflecting: \$1.1 billion used in our investing activities, \$215.8 million provided by our operating activities and \$964.9 million provided by our financing activities.

At December 31, 2019, our debt-to-equity multiple was 3.0 times compared to 2.6 times at December 31, 2018. At December 31, 2019, we had borrowings under repurchase agreements of \$9.1 billion with 28 counterparties, of which \$1.6 billion were secured by Agency MBS, \$1.1 billion were secured by Legacy Non-Agency MBS, \$495.1 million were secured by RPL/NPL MBS, \$203.6 million were secured by CRT securities, \$4.7 billion were secured by residential whole loans, \$962.5 million were secured by MSR-related assets and \$57.2 million were secured by other interest-earning assets. We continue to have available capacity under our repurchase agreement credit lines. In addition, at December 31, 2019, we had securitized debt of \$571.0 million in connection with our loan securitization transactions. At December 31, 2018, we had borrowings under repurchase agreements of \$7.9 billion with 26 counterparties, of which \$2.4 billion were secured by Agency MBS, \$1.4 billion were secured by Legacy Non-Agency MBS, \$1.1 billion were secured by RPL/NPL MBS, \$391.6 million were secured by CRT securities, \$2.0 billion were secured by residential whole loans, \$474.1 million were secured by MSR-related assets and \$76.4 million were secured by other interest-earning assets. In addition, at December 31, 2018, we had \$684.4 million in connection with our loan securitization transactions.

During 2019, \$1.1 billion was used in our investing activities. We paid \$4.6 billion for purchases of residential whole loans, loan related investments and capitalized advances, and purchased \$673.7 million of MSR-related assets, \$324.0 million of Non-Agency MBS and \$10.5 million of CRT securities funded with cash and repurchase agreement borrowings. In addition, during 2019, we received cash of \$2.1 billion from prepayments and scheduled amortization on our MBS, CRT securities and MSR-related assets, of which \$680.0 million was attributable to Agency MBS, \$1.3 billion was from Non-Agency MBS, and \$73.7

million was attributable to MSR-related assets, and we sold certain of our investments securities for \$908.7 million, realizing net gains of \$62.0 million. While we generally intend to hold our MBS and CRT securities as long-term investments, we may sell certain of our securities in order to manage our interest rate risk and liquidity needs, meet other operating objectives and adapt to market conditions. In addition, during 2019 we received \$1.4 billion of principal payments on residential whole loans and \$108.0 million of proceeds on sales of REO.

In connection with our repurchase agreement borrowings and Swaps, we routinely receive margin calls/reverse margin calls from our counterparties and make margin calls to our counterparties. Margin calls and reverse margin calls, which requirements vary over time, may occur daily between us and any of our counterparties when the value of collateral pledged changes from the amount contractually required. The value of securities pledged as collateral fluctuates reflecting changes in: (i) the face (or par) value of our assets; (ii) market interest rates and/or other market conditions; and (iii) the market value of our Swaps. Margin calls/reverse margin calls are satisfied when we pledge/receive additional collateral in the form of additional assets and/or cash.

The table below summarizes our margin activity with respect to our repurchase agreement financings and derivative hedging instruments for the quarterly periods presented:

		Collateral	Pledg		Cash and					
For the Quarter Ended (1)	Sec	Fair Value of Securities Pledged		Cash Pledged		Aggregate ssets Pledged For Margin Calls	Securities Received For Reverse Margin Calls		Net Assets Received/ (Pledged) For Margin Activity	
(In Thousands)										
December 31, 2019	\$	_	\$	26,972	\$	26,972	\$	18,311	\$	(8,661)
September 30, 2019		77,214		35,271		112,485		129,132		16,647
June 30, 2019		26,037		1,019		27,056		7,295		(19,761)
March 31, 2019		49,139		_		49,139		65,461		16,322

⁽¹⁾ Excludes variation margin payments on the Company's cleared Swaps which are treated as a legal settlement of the exposure under the Swap contract.

We are subject to various financial covenants under our repurchase agreements and derivative contracts, which include minimum net worth and/or profitability requirements, maximum debt-to-equity ratios and minimum market capitalization requirements. We were in compliance with all of our financial covenants through December 31, 2019.

During 2019, we paid \$361.6 million for cash dividends on our common stock and dividend equivalents and paid cash dividends of \$15.0 million on our preferred stock. On December 12, 2019, we declared our fourth quarter 2019 dividend on our common stock of \$0.20 per share; on January 31, 2020, we paid this dividend, which totaled approximately \$90.7 million, including dividend equivalents of approximately \$276,000.

We believe that we have adequate financial resources to meet our current obligations, including margin calls, as they come due, to fund dividends we declare and to actively pursue our investment strategies. However, should the value of our residential mortgage assets suddenly decrease, significant margin calls on our repurchase agreement borrowings could result and our liquidity position could be materially and adversely affected. Further, should market liquidity tighten, our repurchase agreement counterparties might increase our margin requirements on new financings, reducing our ability to use leverage. Access to financing may also be negatively impacted by the ongoing volatility in the world financial markets, potentially adversely impacting our current or potential lenders' ability or willingness to provide us with financing. In addition, there is no assurance that favorable market conditions will continue to permit us to consummate additional securitization transactions if we determine to seek that form of financing.

OFF-BALANCE SHEET ARRANGEMENTS

We have not participated in transactions that create relationships with unconsolidated entities or financial partnerships which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

AGGREGATE CONTRACTUAL OBLIGATIONS

The following table summarizes the effect on our liquidity and cash flows in future periods related to principal and interest owed on contractual financing obligations:

	2021		2022		2023		2024		Thereafter		Total
8,232,945	\$	907,999	\$		\$		\$		\$		\$ 9,140,944
92,965		24,009		_		_		_		_	116,974
551,533		22,367		_		_		_		_	573,900
5,571		803		_		_		_		_	6,374
_		_		_		_		230,000		_	230,000
14,375		14,375		14,375		14,375		6,549		_	64,049
_		_		_		_		_		100,000	100,000
8,000		8,000		8,000		8,000		8,000		140,000	180,000
2,638		434		85		86		65		_	3,308
8,908,027	\$	977,987	\$	22,460	\$	22,461	\$	244,614	\$	240,000	\$10,415,549
	92,965 551,533 5,571 — 14,375 — 8,000 2,638	92,965 551,533 5,571 — 14,375 — 8,000 2,638	92,965 24,009 551,533 22,367 5,571 803 — — 14,375 14,375 — — 8,000 8,000 2,638 434	92,965 24,009 551,533 22,367 5,571 803 — — 14,375 14,375 — — 8,000 8,000 2,638 434	92,965 24,009 — 551,533 22,367 — 5,571 803 — — — — 14,375 14,375 14,375 — — — 8,000 8,000 8,000 2,638 434 85	92,965 24,009 — 551,533 22,367 — 5,571 803 — — — — 14,375 14,375 14,375 — — — 8,000 8,000 8,000 2,638 434 85	92,965 24,009 — — 551,533 22,367 — — 5,571 803 — — — — — — 14,375 14,375 14,375 14,375 — — — — 8,000 8,000 8,000 8,000 2,638 434 85 86	92,965 24,009 — — 551,533 22,367 — — 5,571 803 — — — — — — 14,375 14,375 14,375 14,375 — — — — 8,000 8,000 8,000 8,000 2,638 434 85 86	92,965 24,009 — — — 551,533 22,367 — — — 5,571 803 — — — — — — — 230,000 14,375 14,375 14,375 6,549 — — — — 8,000 8,000 8,000 8,000 8,000 2,638 434 85 86 65	92,965 24,009 — — — 551,533 22,367 — — — 5,571 803 — — — — — — — 230,000 14,375 14,375 14,375 6,549 — — — — 8,000 8,000 8,000 8,000 2,638 434 85 86 65	92,965 24,009 — — — — 551,533 22,367 — — — — 5,571 803 — — — — — — — — — — — — 230,000 — 14,375 14,375 14,375 6,549 — — — — — 100,000 8,000 8,000 8,000 8,000 140,000 2,638 434 85 86 65 —

- (1) Interest expense based on the interest rate in effect at December 31, 2019.
- (2) Securitized debt is contractually scheduled to mature by 2057. However, the weighted average life of the securitized debt is estimated to be approximately four months.
- (3) Convertible Senior Notes will mature on June 15, 2024, unless earlier converted, redeemed or repurchased in accordance with their terms. Excludes debt issuance costs of \$6.0 million.
- (4) Senior Notes mature April 2042 but may be redeemed, in whole or in part, at any time on or after April 15, 2017. Excludes debt issuance costs of \$3.1 million.
- (5) Table excludes amounts related to the lease agreement for new office space as we are not contractually obligated to make rental payments until 14 months after a temporary certificate of occupancy is delivered to the landlord, which is currently expected to occur on or before October 2020.

INFLATION

Substantially all of our assets and liabilities are financial in nature. As a result, changes in interest rates and other factors impact our performance far more than does inflation. Our results of operations and reported assets, liabilities and equity are measured with reference to historical cost or fair value without considering inflation.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

We seek to manage our risks related to interest rates, liquidity, prepayment speeds, market value and the credit quality of our assets while, at the same time, seeking to provide an opportunity to stockholders to realize attractive total returns through ownership of our capital stock. While we do not seek to avoid risk, we seek, consistent with our investment policies, to: assume risk that can be quantified based on management's judgment and experience and actively manage such risk; earn sufficient returns to justify the taking of such risks; and maintain capital levels consistent with the risks that we undertake.

INTEREST RATE RISK

We generally acquire interest-rate sensitive assets and fund them with interest-rate sensitive liabilities, a portion of which are hedged with Swaps. We are exposed to interest rate risk on our residential mortgage assets, as well as on our liabilities. Changes in interest rates can affect our net interest income and the fair value of our assets and liabilities.

We finance the majority of our investments in residential mortgage assets with short-term repurchase agreements. In general, when interest rates change, the borrowing costs of our repurchase agreements (net of the impact of Swaps) change more quickly than the yield on our assets. In a rising interest rate environment, the borrowing costs of our repurchase agreements may increase faster than the interest income on our assets, thereby reducing our net income. In order to mitigate compression in net income based on such interest rate movements, we use Swaps to lock in a portion of the net interest spread between assets and liabilities.

When interest rates change, the fair value of our residential mortgage assets could change at a different rate than the fair value of our liabilities. We measure the sensitivity of our portfolio to changes in interest rates by estimating the duration of our assets and liabilities. Duration is the approximate percentage change in fair value for a 100 basis point parallel shift in the yield

curve. In general, our assets have higher duration than our liabilities and in order to reduce this exposure we use Swaps to reduce the gap in duration between our assets and liabilities.

In calculating the duration of our Agency MBS we take into account the characteristics of the underlying mortgage loans including whether the underlying loans are fixed rate, adjustable or hybrid; coupon, expected prepayment rates and lifetime and periodic caps. We use third-party financial models, combined with management's assumptions and observed empirical data when estimating the duration of our Agency MBS.

In analyzing the interest rate sensitivity of our Legacy Non-Agency MBS we take into account the characteristics of the underlying mortgage loans, including credit quality and whether the underlying loans are fixed-rate, adjustable or hybrid. We estimate the duration of our Legacy Non-Agency MBS using management's assumptions.

The majority of our RPL/NPL MBS deal structures contain a contractual coupon step-up feature where the coupon increases from 300 - 400 basis points at 36 - 48 months from issuance or sooner. Therefore, we believe their fair value exhibits little sensitivity to changes in interest rates. We estimate the duration of these securities using management's assumptions.

The fair value of our re-performing residential whole loans is dependent on the value of the underlying real estate collateral, past and expected delinquency status of the borrower as well as the level of interest rates. Because the borrower is not delinquent on their mortgage payments but is less likely to prepay the loan due to weak credit history and/or high LTV, we believe our reperforming residential whole loans exhibit positive duration. We estimate the duration of our re-performing residential whole loans using management's assumptions.

The fair value of our Non-QM loans and Single-family rental loans are dependent on the value of the underlying real estate collateral, as well as the level of interest rates. Because these loans are primarily newly or recently originated performing loans, we believe these investments exhibit positive duration. Given the short duration of our Rehabilitation loans, we believe the fair value of these loans exhibits little sensitivity to changes in interest rates. We estimate the duration of these Purchased Performing Loans held at carrying value using management's assumptions.

The fair value of our non-performing residential whole loans is primarily dependent on the value of the underlying real estate collateral and the time required for collateral liquidation. Since neither the value of the collateral nor the liquidation timeline is generally sensitive to interest rates, we believe their fair value exhibits little sensitivity to interest rates. We estimate the duration of our non-performing residential whole loans using management's assumptions.

We use Swaps as part of our overall interest rate risk management strategy. Such derivative financial instruments are intended to act as a hedge against future interest rate increases on our repurchase agreement financings, which rates are typically highly correlated with LIBOR. While our derivatives do not extend the maturities of our borrowings under repurchase agreements, they do, in effect, lock in a fixed rate of interest over their term for a corresponding amount of our repurchase agreement financings that are hedged.

At December 31, 2019, our \$3.1 billion of Agency MBS and Legacy Non-Agency MBS were backed by Hybrid, adjustable and fixed-rate mortgages. Additional information about these MBS, including average months to reset and three-month average CPR, is presented below:

	gency MBS			Legacy No	n-Agency MB	S (1)	Total (1)					
· Value (2)	Average Months to Reset (3)	3 Month Average CPR (4)	Fair Value		Average Months to Reset (3)	3 Month Average CPR (4)	F	air Value (2)	Average Months to Reset (3)	3 Month Average CPR (4)		
722,078	6	18.0%	\$	866,868	5	16.5%	\$	1,588,946	5	17.2%		
84,843	35	17.5		_	_	_		84,843	35	17.5		
1,561	90	0.1						1,561	90	0.1		
808,482	9	17.9%	\$	866,868	5	16.5%	\$	1,675,350	7	17.2%		
575,183		10.6%	\$	594		62.4%	\$	575,777		12.3%		
280,303		34.4		511,155		14.7		791,458		21.0		
				47,052		17.0		47,052		17.0		
855,486		18.4%	\$	558,801		16.3%	\$	1,414,287		17.4%		
1,663,968		18.1%	\$	1,425,669		16.4%	\$	3,089,637		17.3%		
	722,078 84,843 1,561 808,482 575,183 280,303 — 855,486	722,078 6 84,843 35 1,561 90 808,482 9 575,183 280,303 — 855,486	Value (2) Months to Reset (3) Average CPR (4) 722,078 6 18.0% 84,843 35 17.5 1,561 90 0.1 808,482 9 17.9% 575,183 10.6% 280,303 34.4 — — 855,486 18.4%	Value (2) Months to Reset (3) Average CPR (4) 1 722,078 6 18.0% \$ 84,843 35 17.5 1.561 90 0.1 \$ 808,482 9 17.9% \$ \$ 575,183 10.6% \$ 280,303 34.4 - - 855,486 18.4% \$	Value (2) Months to Reset (3) Average CPR (4) Fair Value 722,078 6 18.0% \$ 866,868 84,843 35 17.5 — 1,561 90 0.1 — 808,482 9 17.9% \$ 866,868 575,183 10.6% \$ 594 280,303 34.4 511,155 — 47,052 855,486 18.4% \$ 558,801	Value (2) Months to Reset (3) Average CPR (4) Fair Value Months to Reset (3) 722,078 6 18.0% \$ 866,868 5 84,843 35 17.5 — — 1,561 90 0.1 — — 808,482 9 17.9% \$ 866,868 5 575,183 10.6% \$ 594 280,303 34.4 511,155 — 47,052 855,486 18.4% \$ 558,801	Value (2) Months to Reset (3) Average CPR (4) Fair Value Months to Reset (3) Average CPR (4) 722,078 6 18.0% \$ 866,868 5 16.5% 84,843 35 17.5 — — 1,561 90 0.1 — — — 808,482 9 17.9% \$ 866,868 5 16.5% 575,183 10.6% \$ 594 62.4% 280,303 34.4 511,155 14.7 — 47,052 17.0 855,486 18.4% \$ 558,801 16.3%	Value (2) Months to Reset (3) Average CPR (4) Fair Value Months to Reset (3) Average CPR (4) F 722,078 6 18.0% \$ 866,868 5 16.5% \$ 84,843 35 17.5 — — — — 1,561 90 0.1 — — — — 808,482 9 17.9% \$ 866,868 5 16.5% \$ 575,183 10.6% \$ 594 62.4% \$ 280,303 34.4 511,155 14.7 — 47,052 17.0 855,486 18.4% \$ 558,801 16.3% \$	Value (2) Months to Reset (3) Average CPR (4) Fair Value Months to Reset (3) Average CPR (4) Fair Value (2) 722,078 6 18.0% \$ 866,868 5 16.5% \$ 1,588,946 84,843 35 17.5 — — — 84,843 1,561 90 0.1 — — — 1,561 808,482 9 17.9% \$ 866,868 5 16.5% \$ 1,675,350 575,183 10.6% \$ 594 62.4% \$ 575,777 280,303 34.4 511,155 14.7 791,458 — — 47,052 17.0 47,052 855,486 18.4% \$ 558,801 16.3% \$ 1,414,287	Value (2) Months to Reset (3) Average CPR (4) Fair Value Months to Reset (3) Average CPR (4) Fair Value (2) Months to Reset (3) 722,078 6 18.0% \$ 866,868 5 16.5% \$ 1,588,946 5 84,843 35 17.5 — — — 84,843 35 1,561 90 0.1 — — — 1,561 90 808,482 9 17.9% \$ 866,868 5 16.5% \$ 1,675,350 7 575,183 10.6% \$ 594 62.4% \$ 575,777 280,303 34.4 511,155 14.7 791,458 — 47,052 17.0 47,052 855,486 18.4% \$ 558,801 16.3% \$ 1,414,287		

- (1) Excludes \$635.0 million of RPL/NPL MBS. Refer to table below for further information.
- (2) Does not include principal payments receivable of \$614,000.
- (3) Months to reset is the number of months remaining before the coupon interest rate resets. At reset, the MBS coupon will adjust based upon the underlying benchmark interest rate index, margin and periodic and/or lifetime caps. The months to reset do not reflect scheduled amortization or prepayments.
- (4) 3 month average CPR weighted by positions as of the beginning of each month in the quarter.
- (5) Amounts presented are based on origination data. Includes floating-rate MBS that may be collateralized by fixed-rate mortgages. In addition, underlying loans may have been modified to be fixed or step rate.
- (6) Information presented based on data available at time of loan origination.

The following table presents certain information about our RPL/NPL MBS portfolio at December 31, 2019:

	Fair Value		Net Coupon	Months to Step-Up (1)	3 Month Average Bond CPR (2)	
(Dollars in Thousands)						
Re-Performing loans	\$	114,475	4.45%	18	%	
Non-Performing loans		520,530	5.13	23	22.3	
Total RPL/NPL MBS	\$	635,005	5.01%	22	18.8%	

- (1) Months to step-up is the weighted average number of months remaining before the coupon interest rate increases pursuant to the first coupon reset. We anticipate that the securities will be redeemed prior to the step-up date.
- (2) All principal payments are considered to be prepayments for CPR purposes.

At December 31, 2019, our CRT securities and MSR-related assets had a fair value of \$255.4 million and \$1.2 billion, respectively, and their coupons reset monthly based on one-month LIBOR.

The interest rates for the vast majority of our investments, financings and hedging transactions are either explicitly or indirectly based on LIBOR. On July 27, 2017, the United Kingdom Financial Conduct Authority announced that it intends to stop persuading or compelling banks to submit LIBOR rates after 2021. At this time, it is not possible to predict the effect of such change, including the establishment of potential alternative reference rates, on the economy or markets we are active in either currently or in the future, or on any of our assets or liabilities whose interest rates are based on LIBOR. We are in the process of evaluating the potential impact of a discontinuation of LIBOR after 2021 on our portfolio, as well as the related accounting impact. However, we expect that throughout 2020, we will work closely with the Trustee companies and/or other entities that are involved in calculating the interest rates for our residential mortgage securities and securitized debt, our loan servicers for our hybrid and floating rate loans, and with the various counterparties to our financing and hedging transactions in order to determine what changes, if any, are required to be made to existing agreements for these transactions.

Shock Table

The information presented in the following "Shock Tables" projects the potential impact of sudden parallel changes in interest rates on our net interest income and portfolio value, including the impact of Swaps, over the next 12 months based on the assets in our investment portfolio at December 31, 2019 and 2018. All changes in income and value are measured as the percentage change from the projected net interest income and portfolio value under the base interest rate scenario at December 31, 2019 and 2018.

December 31, 2019

Change in Interest Rates (Dollars in Thousands)	Estimated Value f Assets (1)	Estimated Value of Swaps		Estimated Value of Financial Instruments		Change in Estimated Value		Percentage Change in Net Interest Income	Percentage Change in Portfolio Value	
+100 Basis Point Increase	\$ 13,336,868	\$	25,982	\$	13,362,850	\$	(225,169)	(3.63)%	(1.66)%	
+ 50 Basis Point Increase	\$ 13,486,554	\$	(792)	\$	13,485,762	\$	(102,257)	(1.51)%	(0.75)%	
Actual at December 31, 2019	\$ 13,615,584	\$	(27,565)	\$	13,588,019	\$	_	_	_	
- 50 Basis Point Decrease	\$ 13,723,957	\$	(54,339)	\$	13,669,618	\$	81,599	1.26 %	0.60 %	
-100 Basis Point Decrease	\$ 13,811,673	\$	(81,113)	\$	13,730,560	\$	142,541	2.01 %	1.05 %	

December 31, 2018

Change in Interest Rates (Dollars in Thousands)	Estimated Value of Assets (1)	Estimated Value of Swaps		Estimated Value of Financial Instruments		Change in Estimated Value		Percentage Change in Net Interest Income	Percentage Change in Portfolio Value	
+100 Basis Point Increase	\$ 12,001,744	\$	77,527	\$	12,079,271	\$	(145,118)	(4.04)%	(1.19)%	
+ 50 Basis Point Increase	\$ 12,123,276	\$	35,721	\$	12,158,997	\$	(65,392)	(1.51)%	(0.53)%	
Actual at December 31, 2018	\$ 12,230,474	\$	(6,085)	\$	12,224,389	\$	_	_	_	
- 50 Basis Point Decrease	\$ 12,323,338	\$	(47,891)	\$	12,275,447	\$	51,058	1.15 %	0.42 %	
-100 Basis Point Decrease	\$ 12,401,867	\$	(89,697)	\$	12,312,170	\$	87,781	0.34 %	0.72 %	

⁽¹⁾ Such assets include MBS and CRT securities, residential whole loans and REO, MSR-related assets, cash and cash equivalents and restricted cash.

Certain assumptions have been made in connection with the calculation of the information set forth in the Shock Table and, as such, there can be no assurance that assumed events will occur or that other events will not occur that would affect the outcomes. The base interest rate scenario assumes interest rates at December 31, 2019 and 2018. The analysis presented utilizes assumptions and estimates based on management's judgment and experience. Furthermore, while we generally expect to retain the majority of our assets and the associated interest rate risk to maturity, future purchases and sales of assets could materially change our interest rate risk profile. It should be specifically noted that the information set forth in the above table and all related disclosure constitute forward-looking statements within the meaning of Section 27A of the 1933 Act and Section 21E of the 1934 Act. Actual results could differ significantly from those estimated in the Shock Table above.

The Shock Table quantifies the potential changes in net interest income and portfolio value, which includes the value of our Swaps (which are carried at fair value), should interest rates immediately change (i.e., are shocked). The Shock Table presents the estimated impact of interest rates instantaneously rising 50 and 100 basis points, and falling 50 and 100 basis points. The cash flows associated with our portfolio for each rate shock are calculated based on assumptions, including, but not limited to, prepayment speeds, yield on replacement assets, the slope of the yield curve and composition of our portfolio. Assumptions made with respect to the interest rate sensitive liabilities include anticipated interest rates, collateral requirements as a percent of repurchase agreement financings, and the amounts and terms of borrowing. At December 31, 2019 and 2018, we applied a floor of 0% for all anticipated interest rates included in our assumptions. Due to this floor, it is anticipated that any hypothetical interest rate shock decrease would have a limited positive impact on our funding costs; however, because prepayments speeds are unaffected by this floor, it is expected that any increase in our prepayment speeds (occurring as a result of any interest rate shock decrease or otherwise) could result in an acceleration of premium amortization on our Agency MBS and discount accretion on our Non-Agency MBS and in the reinvestment of principal repayments in lower yielding assets. As a result, because the presence of this floor limits the positive impact of interest rate decrease on our funding costs, hypothetical interest rate shock decreases could cause a decline in the fair value of our financial instruments and our net interest income.

At December 31, 2019, the impact on portfolio value was an approximated using estimated net effective duration (i.e., the price sensitivity to changes in interest rates), including the effect of Swaps and securitized debt and other fixed rate debt, of 1.36, which is the weighted average of 1.50 for our Agency MBS, 0.94 for our Non-Agency investments, 2.35 for our Residential whole loans, (1.32) for our Swaps and securitized debt and other fixed rate debt, and 0.18 for our Other assets and cash and cash equivalents. Estimated convexity (i.e., the approximate change in duration relative to the change in interest rates) of the portfolio was (0.61), which is the weighted average of (0.61) for our Agency MBS, zero for our Swaps and securitized debt and other fixed rate debt, (0.12) for our Non-Agency MBS, (0.89) for our Residential whole loans, and zero for our Other assets and cash and cash equivalents. At December 31, 2018, the impact on portfolio value was approximated using estimated net effective duration (i.e., the price sensitivity to changes in interest rates), including the effect of Swaps, of 0.96 which is the weighted average of 2.04 for our Agency MBS, 0.94 for our Non-Agency investments, 2.17 for our Residential whole loans, (2.15) for our Swaps and securitized debt and 0.19 for our Other assets and cash and cash equivalents. Estimated convexity (i.e., the approximate change in duration relative to the change in interest rates) of the portfolio was (0.47), which is the weighted average of (0.86) for our Agency MBS, zero for our Swaps and securitized debt, (0.12) for our Non-Agency MBS, (0.60) for our Residential whole loans and zero for our Other assets and cash and cash equivalents. The impact on our net interest income is driven mainly by the difference between portfolio yield and cost of funding of our repurchase agreements, which includes the cost and/or benefit from Swaps. Our asset/liability structure is generally such that an increase in interest rates would be expected to result in a decrease in net interest income, as our borrowings are generally shorter in term than our interest-earning assets. When interest rates are shocked, prepayment assumptions are adjusted based on management's expectations along with the results from the prepayment model.

CREDIT RISK

Although we do not believe that we are exposed to credit risk in our Agency MBS portfolio, we are exposed to credit risk through our credit sensitive residential mortgage investments, in particular Legacy Non-Agency MBS, CRT securities, and residential whole loans and to a lesser extent our investments in RPL/NPL MBS and MSR-related assets. Our exposure to credit risk from our credit sensitive investments is discussed in more detail below:

Legacy Non-Agency MBS

Our investment process for Legacy Non-Agency MBS involves analysis focused primarily on quantifying and pricing credit risk. When we purchase Legacy Non-Agency MBS, we assign certain assumptions to each of the MBS, including but not limited to, future interest rates, voluntary prepayment rates, mortgage modifications, default rates and loss severities, and generally allocate a portion of the purchase discount as a Credit Reserve which provides credit protection for such securities. As part of our surveillance process, we review our Legacy Non-Agency MBS by tracking their actual performance compared to the securities' expected performance at purchase or, if we have modified our original purchase assumptions, compared to our revised performance expectations. To the extent that actual performance of a Legacy Non-Agency MBS is less favorable than its expected performance, we may revise our performance expectations. As a result, we could reduce the accretable discount on the security and/or recognize impairment charges through earnings, either of which could have a material adverse impact on our operating results.

In evaluating our asset/liability management and Legacy Non-Agency MBS credit performance, we consider the credit characteristics of the mortgage loans underlying our Legacy Non-Agency MBS. The following table presents certain information about our Legacy Non-Agency MBS portfolio at December 31, 2019. Information presented with respect to the weighted average Fair Isaac Corporation (or FICO) scores and other information aggregated based on information reported at the time of mortgage origination are historical and, as such, do not reflect the impact of the general changes in home prices or changes in borrowers' credit scores or the current use of the mortgaged properties.

The information in the table below is presented as of December 31, 2019:

(Dollars in Thousands)	Aver	ecurities with age Loan FICO 5 or Higher <i>(1)</i>	Avei	ecurities with rage Loan FICO Below 715 <i>(1)</i>		Total
Number of securities		156		135		291
MBS current face (2)	\$	847,335	\$	712,784	\$	1,560,119
Total purchase discounts, net (2)	\$	(254,656)	\$	(271,978)	\$	(526,634)
Purchase discount designated as Credit Reserve and OTTI (2)(3)	\$	(189,672)	\$	(246,925)	\$	(436,597)
Purchase discount designated as Credit Reserve and OTTI as percentage of current face	.	22.4%	•	34.6%	Ψ	28.0%
MBS amortized cost (2)	\$	592,679	\$	440,806	\$	1,033,485
MBS fair value (2)	\$	791,759	\$	633,910	\$	1,425,669
Weighted average fair value to current face		93.4%		88.9%		91.4%
Weighted average coupon (4)		4.47%		5.02%		4.72%
Weighted average loan age (months) (4)(5)		160		165		162
Weighted average current loan size (4)(5)	\$	420	\$	268	\$	351
Percentage amortizing (6)		100%		99%		100%
Weighted average FICO score at origination (4)(7)		728		702		716
Owner-occupied loans		90.9%		88.1%		89.7%
Rate-term refinancings		24.7%		18.0%		21.7%
Cash-out refinancings		35.0%		45.1%		39.6%
3 Month CPR (5)		17.5%		15.7%		16.7%
3 Month CRR (5)(8)		15.5%		12.4%		14.1%
3 Month CDR (5)(8)		2.7%		4.3%		3.4%
3 Month loss severity		67.1%		64.9%		65.8%
60+ days delinquent (7)		9.2%		11.9%		10.5%
Percentage of always current borrowers (Lifetime) (9)		23.4%		19.7%		21.7%
Percentage of always current borrowers (12M) (10)		77.4%		71.4%		74.7%

- (1) FICO score is used by major credit bureaus to indicate a borrower's creditworthiness at time of loan origination.
- (2) Excludes Non-Agency MBS issued since 2012 in which the underlying collateral consists of RPL/NPL MBS. These Non-Agency MBS have a current face of \$632.3 million amortized cost of \$631.8 million, fair value of \$635.0 million and purchase discounts of approximately \$581,000 at December 31, 2019.
- (3) Purchase discounts designated as Credit Reserve and OTTI are not expected to be accreted into interest income.
- (4) Weighted average is based on MBS current face at December 31, 2019.
- (5) Information provided is based on loans for individual groups owned by us.
- (6) Percentage of face amount for which the original mortgage note contractually calls for principal amortization in the current period.
- (7) Information provided is based on loans for all groups that provide credit enhancement for MBS with credit enhancement.
- (8) CRR represents voluntary prepayments and CDR represents involuntary prepayments.
- (9) Percentage of face amount of loans for which the borrower has not been delinquent since origination.
- (10) Percentage of face amount of loans for which the borrower has not been delinquent in the last twelve months.

The mortgages securing our Legacy Non-Agency MBS are located in many geographic regions across the United States. The following table presents the five largest geographic concentrations by state of the mortgages collateralizing our Legacy Non-Agency MBS at December 31, 2019:

Property Location	Percent of Unpaid Principal Balance
California	43.6%
Florida	8.0%
New York	8.2%
Maryland	4.0%
New Jersey	3.9%

RPL/NPL MBS

These securities are backed by re-performing and non-performing loans, were purchased primarily at prices around par and represent the senior and mezzanine tranches of the related securitizations. The majority of these securities are structured with significant credit enhancement (typically approximately 50%) and the subordinate tranches absorb all credit losses (until those tranches are extinguished) and typically receive no cash flow (interest or principal) until the senior tranche is paid off. Prior to purchase, we analyze the deal structure in order to assess the associated credit risk. Subsequent to purchase, the ongoing credit risk associated with the deal is evaluated by analyzing the extent to which actual credit losses occur that result in a reduction in the amount of subordination enjoyed by our bond.

CRT Securities

We are exposed to potential credit losses from our investments in CRT securities issued by or sponsored by Fannie Mae and Freddie Mac. While CRT securities are issued by or sponsored by these GSEs, payment of principal on these securities is not guaranteed. As an investor in a CRT security, we may incur a loss if losses on the mortgage loans in the reference pool exceed the credit enhancement on the underlying CRT security owned by us or if an actual pool of loans experience losses. We assess the credit risk associated with our investments in CRT securities by assessing the current and expected future performance of the associated loan pool.

Residential Whole Loans

We are also exposed to credit risk from our investments in residential whole loans. Our investment process for non-performing and Purchased Credit Impaired Loans is generally similar to that used for Legacy Non-Agency MBS and is likewise focused on quantifying and pricing credit risk. Non-Performing and Purchased Credit Impaired loans are acquired at purchase prices that are generally discounted to the contractual loan balances based on a number of factors, including the impaired credit history of the borrower and the value of the collateral securing the loan. In addition, as we generally own the mortgage-servicing rights associated with these loans, our process is also focused on selecting a sub-servicer with the appropriate expertise to mitigate losses and maximize our overall return. This involves, among other things, performing due diligence on the sub-servicer prior to their engagement as well as ongoing oversight and surveillance. To the extent that delinquencies and defaults on these loans are higher than our expectation at the time the loans were purchased, the discounted purchase price at which the asset is acquired is intended to provide a level of protection against financial loss.

Credit risk on Purchased Performing Loans is mitigated through our process to underwrite the loan before it is purchased and includes an assessment of the borrower's financial condition and ability to repay the loan, nature of the collateral and relatively low LTV, including after-repair LTV for the majority of our Rehabilitation loans.

The following table presents certain information about our Residential whole loans, at carrying value at December 31, 2019:

	Pu	rchased Perfo	rmir	ng Loans (1)	Purchased Credit Impaired Loans					
		Loans wit	h an	LTV:	Loans with an LTV:					
(Dollars in Thousands)	809	80% or Below		Above 80% 8		80% or Below		Above 80%		Total
Carrying value	\$ 5	,012,053	\$	358,599	\$	396,852	\$	301,622	\$	6,069,126
Unpaid principal balance (UPB)	\$ 4	,915,686	\$	352,409	\$	468,379	\$	404,947	\$	6,141,421
Weighted average coupon (2)		6.2%		6.5%		4.5%		4.4%		6.0%
Weighted average term to maturity (months)		283		348		270		322		288
Weighted average LTV (3)		64.2%		89.1%		57.7%		108.3%		68.0%
Loans 90+ days delinquent (UPB)	\$	89,297	\$	2,023	\$	41,458	\$	67,541	\$	200,319

- (1) Excludes an allowance for loan losses of \$2.8 million for Purchased Performing Loans at December 31, 2019.
- (2) Weighted average is calculated based on the interest bearing principal balance of each loan within the related category. For loans acquired with servicing rights released by the seller, interest rates included in the calculation do not reflect loan servicing fees. For loans acquired with servicing rights retained by the seller, interest rates included in the calculation are net of servicing fees.
- (3) LTV represents the ratio of the total unpaid principal balance of the loan to the estimated value of the collateral securing the related loan as of the most recent date available, which may be the origination date. For Rehabilitation loans, the LTV presented is the ratio of the maximum unpaid principal balance of the loan, including unfunded commitments, to the estimated "after repaired" value of the collateral securing the related loan, where available. For certain Rehabilitation loans, totaling \$269.2 million, an after repaired valuation was not obtained and the loan was underwritten based on an "as is" valuation. The LTV of these loans based on the current unpaid principal balance and the valuation obtained during underwriting, is 69%. Excluded from the calculation of weighted average LTV are certain low value loans secured by vacant lots, for which the LTV ratio is not meaningful.

The following table presents the five largest geographic concentrations by state of our residential whole loan portfolio at December 31, 2019:

Property Location	Percent of Interest-Bearing Unpaid Principal Balance
California	38.6%
Florida	12.0%
New York	7.3%
New Jersey	5.2%
Georgia	3.3%

MSR-Related Assets

Term Notes

We have invested in certain term notes that are issued by special purpose vehicles (or SPVs) that have acquired rights to receive cash flows representing the servicing fees and/or excess servicing spread associated with certain MSRs. Payment of principal and interest on these term notes is considered by us to be largely dependent on the cash flows generated by the underlying MSRs as this impacts the cash flows available to the SPV that issued the term notes. Credit risk borne by the holders of the term notes is also mitigated by structural credit support in the form of over-collateralization. In addition, credit support is also provided by a corporate guarantee from the ultimate parent or sponsor of the SPV that is intended to provide for payment of interest and principal to the holders of the term notes should cash flows generated by the underlying MSRs be insufficient.

Corporate Loan

We have participated in a loan agreement to provide financing to an entity that originates residential whole loans and owns the related MSRs. We assess the credit risk associated with this loan participation by considering various factors, including the current status of the loan, changes in fair value of the MSRs that secure the loan and the recent financial performance of the borrower.

Credit Spread Risk

Credit spreads measure the additional yield demanded by investors in financial instruments based on the credit risk associated with an instrument relative to benchmark interest rates. They are impacted by the available supply and demand for instruments with various levels of credit risk. Widening credit spreads would result in higher yields being required by investors in financial instruments. Credit spread widening generally results in lower values of the financial instruments we hold at that time, but will generally result in a higher yield on future investments with similar credit risk. It is possible that the credit spreads on our assets and liabilities, including hedges, will not always move in tandem. Consequently, changes in credit spreads can result in volatility in our financial results and reported book value.

LIQUIDITY RISK

The primary liquidity risk we face arises from financing long-maturity assets with shorter-term borrowings primarily in the form of repurchase agreement financings. We pledge residential mortgage assets and cash to secure our repurchase agreements and Swaps. At December 31, 2019, we had access to various sources of liquidity which we estimate to be in excess of \$114.2 million, an amount which includes: (i) \$70.6 million of cash and cash equivalents, (ii) \$31.2 million in estimated financing available from unpledged Agency MBS and other Agency MBS collateral that are currently pledged in excess of contractual requirements, and (iii) \$12.4 million in estimated financing available from currently unpledged Non-Agency MBS and from other Non-Agency MBS and CRT collateral that is currently pledged in excess of contractual requirements. Our sources of liquidity do not include restricted cash. In addition, we have \$1.1 billion of unencumbered residential whole loans. We are evaluating potential opportunities to finance these assets including loan securitization. Should the value of our residential mortgage assets pledged as collateral suddenly decrease, margin calls under our repurchase agreements would likely increase, causing an adverse change in our liquidity position. Additionally, if one or more of our financing counterparties chose not to provide ongoing funding, our ability to finance our long-maturity assets would decline or be available on possibly less advantageous terms. As such, we cannot assure you that we will always be able to roll over our repurchase agreement financings. Further, should market liquidity tighten, our repurchase agreement counterparties may increase our margin requirements on new financings, including repurchase agreement borrowings that we roll with the same counterparty, reducing our ability to use leverage.

PREPAYMENT RISK

Premiums arise when we acquire an MBS or loan at a price in excess of the aggregate principal balance of the mortgages securing the MBS (i.e., par value) or when we acquire residential whole loans at a price in excess of their aggregate principal balance. Conversely, discounts arise when we acquire an MBS or loan at a price below the aggregate principal balance of the mortgages securing the MBS or when we acquire residential whole loans at a price below their aggregate principal balance. Premiums paid are amortized against interest income and accretable purchase discounts on these investments are accreted to interest income. Purchase premiums, which are primarily carried on our Agency MBS, certain CRT securities and Non-QM loans, are amortized against interest income over the life of the investment using the effective yield method, adjusted for actual prepayment activity. An increase in the prepayment rate, as measured by the CPR, will typically accelerate the amortization of purchase premiums, thereby reducing the interest income earned on these assets. Generally, if prepayments on Non-Agency MBS and residential whole loans purchased at significant discounts and not accounted for at fair value are less than anticipated, we expect that the income recognized on these assets will be reduced and impairments and/or loan loss reserves may result.

In addition, increased prepayments are generally associated with decreasing market interest rates as borrowers are able to refinance their mortgages at lower rates. Therefore, increased prepayments on our investments may accelerate the redeployment of our capital to generally lower yielding investments. Similarly, decreased prepayments are generally associated with increasing market interest rates and may slow our ability to redeploy capital to generally higher yielding investments.

Item 8. Financial Statements and Supplementary Data.

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All other financial statement schedules are omitted because the required information is not applicable or deemed not material, or the required information is included in the consolidated financial statements and/or notes thereto.

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors

MFA Financial, Inc.:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of MFA Financial, Inc. and subsidiaries (the Company) as of December 31, 2019 and 2018, the related consolidated statements of operations, comprehensive income/(loss), changes in stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2019, and the related notes and Schedule IV - Mortgage Loans on Real Estate as of December 31, 2019 (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2019, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2019, 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 21, 2020 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our 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 consolidated 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 consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Assessment of the valuation of residential whole loans, at fair value

As discussed in Notes 2, 4 and 14 to the consolidated financial statements, the Company holds certain residential whole loans at fair value on its consolidated balance sheet as a result of a fair value election made at the time of acquisition. Subsequent changes in fair value are reported in current period earnings and presented in net gain on residential whole loans measured at fair value through earnings on the consolidated statement of operations. As of December 31, 2019, the Company held \$1.4 billion of residential whole loans, at fair value. The Company determines the fair value of its residential whole loans held at fair value after considering valuations obtained from a third-party that specializes in providing valuations of residential mortgage loans. The valuation approach depends on whether the loan is considered performing or non-performing at the valuation date. For performing loans, estimates of fair value are derived using a discounted cash flow approach, where estimates of cash flows are determined from the scheduled payments, adjusted using assumptions for forecasted prepayment, default, and loss given default rates. For non-performing loans, asset liquidation cash flows are derived based on assumptions, including the property's appraised value, estimated time to liquidate the loan, expected liquidation costs, and home price appreciation. Estimated cash flows for both performing and non-performing loans are discounted using yields to arrive at an exit price for the asset.

We identified the assessment of the valuation of residential whole loans, at fair value, as a critical audit matter because there is a high degree of subjectivity in determining the aforementioned assumptions, which are not readily observable in the market. The evaluation of the assumptions to determine the valuation of residential whole loans, at fair value, required challenging auditor judgment as the assumptions used were sensitive to changes in home prices and/or credit quality of the borrower.

The primary procedures we performed to address this critical audit matter included the following. We tested certain internal controls over the Company's valuation process including controls to (1) evaluate the third-party derived aforementioned assumptions used to determine the fair value and (2) assess the third-party developed valuation techniques and models. We involved valuation professionals with specialized skills and knowledge, who assisted in:

- evaluating the significant assumptions used by the Company by comparing them to market data for comparable peers and/or publicly available market data research studies; and
- developing an independent fair value estimate using publicly available external market data collectively with independently developed valuation models and/or inputs, and compared the results of our estimate of fair value to the Company's fair value estimate.

Assessment of the accretable yield on purchased credit impaired loans

As discussed in Notes 2 and 4 to the consolidated financial statements, the Company has elected to account for certain loans as credit impaired as they were acquired at discounted prices that reflect, in part, the impaired credit history of the borrower. Under the application of the accounting model for purchased credit impaired loans, the Company may aggregate into pools loans acquired in the same fiscal quarter that are assessed as having similar risk characteristics. For each pool established, or on an individual loan basis for loans not aggregated into pools, the Company estimates at acquisition and periodically, the principal and interest cash flows expected to be collected. The difference between the cash flows expected to be collected and the carrying amount of the loans is referred to as the "accretable yield." This amount is accreted as interest income over the life of the loans using an effective interest rate methodology. As of December 31, 2019, the remaining balance of accretable yield was \$339.0 million. During the year ended December 31, 2019, \$43.3 million of accretable yield was recognized in interest income.

We identified the assessment of the accretable yield on purchased credit impaired loans as a critical audit matter because of the complexity and significant judgment involved in the estimate. The methodology used to estimate the cash flows in the determination of the accretable yield requires certain key assumptions. Specifically, the prepayment rate, default rate, and loss severity assumptions required challenging auditor judgment to evaluate as changes to those assumptions could have a significant effect on the accretable yield.

The primary procedures we performed to address this critical audit matter included the following. We tested certain internal controls over the Company's accretable yield process, including controls to assess the quarterly loan yield and cash flows, including management's challenge of the aforementioned key assumptions at the loan pool level, or individual loan level for loans not aggregated into pools. We involved valuation professionals with specialized skills and knowledge who assisted in the evaluation of the key assumptions at the loan pool level, or individual loan level for loans not aggregated into pools, used by the Company to estimate cash flows, by comparing the Company's accretable yield against our independent estimate of the accretable yield using publicly available market data sources collectively with independently developed assumptions.

Assessment of the effective yield income on non-agency mortgage backed securities (MBS)

As discussed in Notes 2 and 3 to the consolidated financial statements, interest income on the Non-Agency MBS that were purchased at a discount to par value and/or are considered to be of less than high credit quality is recognized based on the security's effective interest rate, which is the security's internal rate of return ("IRR"). The IRR is determined using the Company's estimate of the cash flows for each security. On at least a quarterly basis, the Company evaluates and, if appropriate, makes adjustments to its cash flow estimates based on input and analysis received from external sources, internal models and its judgment about interest rates, prepayment rates, the timing and amount of credit losses and other factors. As of December 31, 2019, the Company held \$2.1 billion of Non-Agency MBS and recognized \$60.0 million of interest income based on the effective yield method.

We identified the assessment of the effective yield income on Non-Agency MBS as a critical audit matter because of the complexity and significant judgment involved in the estimate. The methodology used to estimate the cash flows in the determination of the effective yield requires certain key assumptions. Specifically, the prepayment rate, default rate and loss severity assumptions required challenging auditor judgment to evaluate as changes to those assumptions could have a significant effect on the effective yield.

The primary procedures we performed to address this critical audit matter included the following. We tested certain internal controls over the Company's effective yield process, including controls to assess the quarterly yield and cash flows, including management's challenge of the aforementioned key assumptions at the security level. We involved valuation professionals with specialized skills and knowledge who assisted in the evaluation of the key assumptions at the security level used by the Company to estimate the effective yield. This involved comparing the Company's cash flows in the determination of the effective yield against our independent estimate of the cash flows using publicly available market data sources collectively with independently developed assumptions. We tested the mathematical accuracy of the Company's effective yield calculation.

/s/ KPMG LLP

We have served as the Company's auditor since 2011.

New York, New York February 21, 2020

MFA FINANCIAL, INC. CONSOLIDATED BALANCE SHEETS

(In Thousands, Except Per Share Amounts)	December 31, 2019	December 31, 2018
Assets:		
Residential mortgage securities:		
Agency MBS, at fair value (\$1,658,614 and \$2,575,331 pledged as collateral, respectively)	\$ 1,664,582	\$ 2,698,213
Non-Agency MBS, at fair value (\$2,055,802 and \$3,248,900 pledged as collateral, respectively)	2,063,529	3,318,299
Credit Risk Transfer ("CRT") securities, at fair value (\$252,175 and \$480,315 pledged as collateral, respectively)	255,408	492,821
Residential whole loans, at carrying value (\$4,847,782 and \$1,645,372 pledged as collateral, respectively) (1)	6,066,345	3,016,715
Residential whole loans, at fair value (\$794,684 and \$738,638 pledged as collateral, respectively) (1)	1,381,583	1,665,978
Mortgage servicing rights ("MSR") related assets (\$1,217,002 and \$611,807 pledged as collateral, respectively)	1,217,002	611,807
Cash and cash equivalents	70,629	51,965
Restricted cash	64,035	36,744
Other assets	784,251	527,785
Total Assets	\$ 13,567,364	\$ 12,420,327
Liabilities:		
Repurchase agreements	\$ 9,139,821	\$ 7,879,087
Other liabilities	1,043,591	1,125,139
Total Liabilities	\$ 10,183,412	\$ 9,004,226
Commitments and contingencies (See Note 10)		
Stockholders' Equity:		
Preferred stock, \$.01 par value; 7.50% Series B cumulative redeemable; 8,050 shares authorized; 8,000 shares issued and outstanding (\$200,000 aggregate liquidation preference)	\$ 80	\$ 80
Common stock, \$.01 par value; 886,950 shares authorized; 452,369 and 449,787 shares issued and outstanding, respectively	4,524	4,498
Additional paid-in capital, in excess of par	3,640,341	3,623,275
Accumulated deficit	(631,040)	(632,040)
Accumulated other comprehensive income	370,047	420,288
Total Stockholders' Equity	\$ 3,383,952	\$ 3,416,101
Total Liabilities and Stockholders' Equity	\$ 13,567,364	\$ 12,420,327

⁽¹⁾ Includes approximately \$186.4 million and \$209.4 million of Residential whole loans, at carrying value and \$567.4 million and \$694.7 million of Residential whole loans, at fair value transferred to consolidated variable interest entities ("VIEs") at December 31, 2019 and 2018, respectively. Such assets can be used only to settle the obligations of each respective VIE.

MFA FINANCIAL, INC. CONSOLIDATED STATEMENTS OF OPERATIONS

For the Year Ended December 31, 2019 2017 2018 (In Thousands, Except Per Share Amounts) **Interest Income:** Agency MBS \$ 55,901 \$ 62,303 65,355 Non-Agency MBS 200.070 226,796 271,112 CRT securities 18,583 33,376 31,715 Residential whole loans held at carrying value 243,980 100,921 36,187 MSR-related assets 52,647 28,420 24,830 Cash and cash equivalent investments 3,393 2,936 4,249 923 Other interest-earning assets 7,152 **Interest Income** \$ 581,726 \$ 455,675 433,448 **Interest Expense:** \$ 292,050 \$ 205,338 \$ 186,347 Repurchase agreements Other interest expense 40,306 26,848 10,794 \$ 197,141 **Interest Expense** 332,356 \$ 232,186 \$ **Net Interest Income** \$ 249,370 223,489 \$ 236,307 Other Income, net: Net gain on residential whole loans measured at fair value through earnings 158.330 137.619 90.045 Net realized gain on sales of residential mortgage securities 62,002 61,307 39,577 Net unrealized gain/(loss) on residential mortgage securities measured at fair value through earnings 7,080 (36,815)27,709 Net loss on Swaps not designated as hedges for accounting purposes (16,500)(9,610)14,945 Other, net 5,474 656 \$ 225,857 157,987 Other Income, net 157,975 **Operating and Other Expense:** \$ Compensation and benefits 32,235 28,423 31,673 20,413 17,960 Other general and administrative expense 17,653 Loan servicing and other related operating expenses 44,462 33,587 22,268 \$ 71,901 **Operating and Other Expense** 97,110 79,663 Net Income \$ 378,117 \$ 301,801 \$ 322,393 Less Preferred Stock Dividends 15,000 15,000 15,000 Net Income Available to Common Stock and Participating Securities \$ 363,117 286,801 307,393 \$ Basic Earnings per Common Share 0.80 0.68 0.79 \$ Diluted Earnings per Common Share 0.79 0.68 \$ 0.79

MFA FINANCIAL, INC. CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME/(LOSS)

	For the Year Ended December 31,							
(In Thousands)		2019		2018		2017		
Net income	\$	378,117	\$	301,801	\$	322,393		
Other Comprehensive Income/(Loss):								
Unrealized gain/(loss) on Agency MBS, net		21,844		(17,891)		(39,158)		
Unrealized (loss)/gain on Non-Agency MBS, CRT securities and MSR term notes, net		(1,509)		(132,751)		79,142		
Reclassification adjustment for MBS sales included in net income		(44,600)		(51,580)		(38,707)		
Reclassification adjustment for other-than-temporary impairments included in net income		(180)		(1,259)		(1,032)		
Derivative hedging instrument fair value changes, net		(23,342)		14,545		35,297		
Amortization of de-designated hedging instruments, net		(2,454)		_		_		
Other Comprehensive Income/(Loss)		(50,241)		(188,936)		35,542		
Comprehensive income before preferred stock dividends	\$	327,876	\$	112,865	\$	357,935		
Dividends declared on preferred stock		(15,000)		(15,000)		(15,000)		
Comprehensive Income Available to Common Stock and Participating Securities	\$	312,876	\$	97,865	\$	342,935		

MFA FINANCIAL, INC. CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY

For the Year Ended December 31, 2019

(In Thousands,	Cumu Redeen Liquidation	red Stock Series B ulative emable - n Preference per Share Amount		Commo	n Stock	Additional Paid-in	Ac	cumulated	 ccumulated Other mprehensive	
Except Per Share Amounts)	Shares	Am	ount	Shares	Amount	Capital	710	Deficit	 Income	Total
Balance at December 31, 2018	8 8,000 \$ 80 449,787 \$ 4,49		\$ 4,498	\$3,623,275	\$	(632,040)	\$ 420,288	\$ 3,416,101		
Net income	_		_	_	_	_		378,117	_	378,117
Issuance of common stock, net of expenses	_		_	3,145	26	12,299		_	_	12,325
Repurchase of shares of common stock (1)	_		_	(563)	_	(4,118)		_	_	(4,118)
Equity based compensation expense	_		_	_	_	9,230		_	_	9,230
Accrued dividends attributable to stock- based awards	_		_	_	_	(345)		_	_	(345)
Dividends declared on common stock (\$0.80 per share)	_		_	_	_	_		(361,033)	_	(361,033)
Dividends declared on preferred stock (\$1.875 per share)	_		_	_	_	_		(15,000)	_	(15,000)
Dividends attributable to dividend equivalents	_		_	_	_	_		(1,084)	_	(1,084)
Change in unrealized losses on MBS, net	_		_	_	_	_		_	(24,445)	(24,445)
Derivative hedging instruments fair value changes, net	_		_	_	_	_		_	(25,796)	(25,796)
Balance at December 31, 2019	8,000	\$	80	452,369	\$ 4,524	\$3,640,341	\$	(631,040)	\$ 370,047	\$ 3,383,952

For the Year Ended December 31, 2018

(In Thousands.	Cum	Series B ılative mable - ı Prefer	ence	Commo	n Stock	Additional Paid-in	Accumulated	 ccumulated Other mprehensive	
Except Per Share Amounts)	Shares	Amo	unt	Shares	Amount	Capital	Deficit	 Income	Total
Balance at December 31, 2017	8,000	\$	80	30 397,831 \$ 3,978 \$ 3,22		\$3,227,304	\$ (578,950)	\$ 609,224	\$ 3,261,636
Cumulative effect adjustment on adoption of new accounting standard for revenue recognition	_		_	_	_	_	295	_	295
Net income	_		_	_	_	_	301,801	_	301,801
Issuance of common stock, net of expenses	_		_	52,420	520	391,625	_	_	392,145
Repurchase of shares of common stock (1)	_		_	(464)	_	(3,392)	_	_	(3,392)
Equity based compensation expense	_		_	_	_	7,999	_	_	7,999
Accrued dividends attributable to stock- based awards	_		_	_	_	(261)	_	_	(261)
Dividends declared on common stock (\$0.80 per share)	_		_	_	_	_	(339,244)	_	(339,244)
Dividends declared on preferred stock (\$1.875 per share)	_		_	_	_	_	(15,000)	_	(15,000)
Dividends attributable to dividend equivalents	_		_	_	_	_	(942)	_	(942)
Change in unrealized losses on MBS, net	_		_	_	_	_	_	(203,481)	(203,481)
Derivative hedging instruments fair value changes, net			_	_		_		14,545	14,545
Balance at December 31, 2018	8,000	\$	80	449,787	\$ 4,498	\$3,623,275	\$ (632,040)	\$ 420,288	\$ 3,416,101

MFA FINANCIAL, INC. CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY

For the Year Ended December 31, 2017

(In Thousands,	7.50% Cum Redee Liquidation	referred Stock 50% Series B Cumulative Redeemable - dation Preference 5.00 per Share		Common Stock		Additional Paid-in	Ac	cumulated	-	Accumulated Other Omprehensive	
Except Per Share Amounts)	Shares		ount	Shares	Shares Amount			Deficit		Income	Total
Balance at December 31, 2016	8,000	\$	80	371,854	\$ 3,719	\$3,029,062	\$	(572,641)	\$	573,682	\$ 3,033,902
Net income	_		_	_	_	_		322,393		_	322,393
Issuance of common stock, net of expenses	_		_	26,722	259	196,549		_		_	196,808
Repurchase of shares of common stock (1)	_		_	(745)	_	(5,995)		_		_	(5,995)
Equity based compensation expense	_		_	_	_	7,872		_		_	7,872
Accrued dividends attributable to stock- based awards	_		_	_	_	(184)		_		_	(184)
Dividends declared on common stock (\$0.80 per share)	_		_	_	_	_		(312,810)		_	(312,810)
Dividends declared on preferred stock (\$1.875 per share)	_		_	_	_	_		(15,000)		_	(15,000)
Dividends attributable to dividend equivalents	_		_	_	_	_		(892)		_	(892)
Change in unrealized gains on MBS, net	_		_	_	_	_		_		245	245
Derivative hedging instruments fair value changes, net			_			_		_		35,297	35,297
Balance at December 31, 2017	8,000	\$	80	397,831	\$ 3,978	\$3,227,304	\$	(578,950)	\$	609,224	\$ 3,261,636

⁽¹⁾ For the year ended December 31, 2019, includes approximately \$4.1 million (562,815 shares) surrendered for tax purposes related to equity-based compensation awards. For the year ended December 31, 2018, includes approximately \$3.4 million (464,429 shares) surrendered for tax purposes related to equity-based compensation awards. For the year ended December 31, 2017, includes approximately \$6.0 million (744,588 shares) surrendered for tax purposes related to equity-based compensation awards.

MFA FINANCIAL, INC. CONSOLIDATED STATEMENT OF CASH FLOWS

(In Thomsands)			Year	r Ended Decei	mbe	
(In Thousands)		2019	_	2018	_	2017
Cash Flows From Operating Activities:	•	270 117	¢.	201 001	¢.	222 202
Net income	\$	378,117	\$	301,801	\$	322,393
Adjustments to reconcile net income to net cash provided by operating activities:		((2,002)		((1.207)		(20.577
Gain on sales of residential mortgage securities and U.S. Treasury securities		(62,002)		(61,307)		(39,577
Gain on sales of real estate owned		(7,440)		(7,715)		(4,475
Gain on liquidation of residential whole loans		(19,081)		(22,409)		(11,868
Other-than-temporary impairment charges		180		1,259		1,032
Accretion of purchase discounts on residential mortgage securities, residential whole loans and MSR-related assets		(70,383)		(82,904)		(86,318
Amortization of purchase premiums on residential mortgage securities and residential whole loans		45,216		29,270		30,330
Depreciation and amortization on real estate, fixed assets and other assets		3,318		1,825		1,519
Equity-based compensation expense		9,239		8,007		8,033
Unrealized gains on residential whole loans at fair value		(47,849)		(36,725)		(33,617
Unrealized losses/(gains) on residential mortgage securities and interest rate swap agreements ("Swaps") and other		2,169		43,234		(27,091
(Increase)/decrease in other assets		(34,262)		(26,487)		21,964
Increase/(decrease) in other liabilities	_	18,553	_	32	_	(5,813
Net cash provided by operating activities	\$	215,775	\$	147,881	\$	176,512
Cash Flows From Investing Activities:						
Principal payments on residential mortgage securities and MSR-related assets	\$	2,098,416	\$	2,327,817	\$	3,996,489
Proceeds from sales of residential mortgage securities and U.S. Treasury securities		908,697		538,668		243,081
Purchases of residential mortgage securities, MSR-related assets and U.S. Treasury securities		(1,008,215)		(2,604,234)		(1,583,130
Purchases of residential whole loans, loan related investments and capitalized advances		(4,598,191)		(3,058,839)		(1,065,981
Principal payments on residential whole loans		1,378,529		531,909		160,469
Proceeds from sales of real estate owned		108,012		121,304		75,671
Purchases of real estate owned and capital improvements		(20,110)		(13,367)		(19,801
Redemption of Federal Home Loan Bank stock		_		_		10,422
Additions to leasehold improvements, furniture and fixtures		(1,879)	_	(1,133)	_	(872
Net cash (used in)/provided by investing activities	\$	(1,134,741)	\$	(2,157,875)	\$	1,816,348
Cash Flows From Financing Activities:						
Principal payments on repurchase agreements	\$(67,463,756)	\$((67,063,283)	\$(72,563,218
Proceeds from borrowings under repurchase agreements	(68,724,021		68,327,462		70,490,091
Proceeds from issuance of securitized debt		_		419,970		382,847
Principal payments on securitized debt		(114,386)		(97,969)		(16,562
Payments made for securitization related costs		_		(2,497)		(2,646
Proceeds from issuance of Convertible Senior Notes		223,311		_		_
Payments made for settlements on Swaps		(40,029)		(61,502)		(11,424
Proceeds from settlements on Swaps		_		65,393		_
Proceeds from issuances of common stock		12,325		392,474		197,223
Payments made for costs related to common stock issuances		_		(329)		(415
Dividends paid on preferred stock		(15,000)		(15,000)		(15,000
Dividends paid on common stock and dividend equivalents		(361,565)		(329,759)		(308,588
Net cash provided by/(used in) financing activities	\$	964,921	\$	1,634,960	\$	(1,847,692
Net increase/(decrease) in cash, cash equivalents and restricted cash	\$	45,955	\$	(375,034)	\$	145,168
Cash, cash equivalents and restricted cash at beginning of period	\$	88,709	\$	463,743	\$	318,575
Cash, cash equivalents and restricted cash at end of period	\$	134,664	\$	88,709	\$	463,743
Supplemental Disclosure of Cash Flow Information Interest Paid	\$	330,398	\$	232,657	\$	198,159
Non-cash Investing and Financing Activities:	_					
Net (decrease)/increase in securities obtained as collateral/obligation to return securities obtained as collateral	\$	_	\$	(505,850)	\$	134,100
Transfer from residential whole loans to real estate owned	\$	257,701	\$	215,038	\$	136,734
Dividends and dividend equivalents declared and unpaid	\$	90,749	\$	90,198	\$	79,771
Payable for unsettled residential whole loans purchases	\$, ,,, ,,	\$	211,129	\$. , , , , , , ,
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1. Organization

MFA Financial, Inc. (the "Company") was incorporated in Maryland on July 24, 1997 and began operations on April 10, 1998. The Company has elected to be treated as a real estate investment trust ("REIT") for U.S. federal income tax purposes. In order to maintain its qualification as a REIT, the Company must comply with a number of requirements under federal tax law, including that it must distribute at least 90% of its annual REIT taxable income to its stockholders. The Company has elected to treat certain of its subsidiaries as taxable REIT subsidiaries ("TRS"). In general, a TRS may hold assets and engage in activities that the Company cannot hold or engage in directly and generally may engage in any real estate or non-real estate related business. (See Note 2(n))

2. Summary of Significant Accounting Policies

(a) Basis of Presentation and Consolidation

The accompanying consolidated financial statements of the Company have been prepared on the accrual basis of accounting in accordance with U.S. generally accepted accounting principles ("GAAP"). The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Although the Company's estimates contemplate current conditions and how it expects them to change in the future, it is reasonably possible that actual conditions could differ from those estimates, which could materially impact the Company's results of operations and its financial condition. Management has made significant estimates in several areas, including other-than-temporary impairment ("OTTI") on mortgage-backed securities ("MBS") (See Note 3), valuation of MBS, CRT securities and MSR-related assets (See Notes 3 and 14), income recognition and valuation of residential whole loans (See Notes 4 and 14), valuation of derivative instruments (See Notes 5(c) and 14) and income recognition on certain Non-Agency MBS (defined below) purchased at a discount. (See Note 3) In addition, estimates are used in the determination of taxable income used in the assessment of REIT compliance and contingent liabilities for related taxes, penalties and interest. (See Note 2(n)) Actual results could differ from those estimates.

The Company has one reportable segment since it manages its business and analyzes and reports its results of operations on the basis of one operating segment: investing, on a leveraged basis, in residential mortgage assets.

The consolidated financial statements of the Company include the accounts of all subsidiaries. All intercompany accounts and transactions have been eliminated. In addition, the Company consolidates entities established to facilitate transactions related to the acquisition and securitization of residential whole loans completed in prior years. Certain prior period amounts have been reclassified to conform to the current period presentation.

(b) Residential Mortgage Securities

The Company has investments in residential MBS that are issued or guaranteed as to principal and/or interest by a federally chartered corporation, such as the Federal National Mortgage Association ("Fannie Mae") or the Federal Home Loan Mortgage Corporation ("Freddie Mac"), or an agency of the U.S. Government, such as the Government National Mortgage Association ("Ginnie Mae") (collectively, "Agency MBS"), and residential MBS that are not guaranteed by any agency of the U.S. Government or any federally chartered corporation ("Non-Agency MBS"). In addition, the Company has investments in CRT securities that are issued by or sponsored by Fannie Mae and Freddie Mac. The coupon payments on CRT securities are paid by the issuer and the principal payments received are dependent on the performance of loans in either a reference pool or an actual pool of loans. As the loans in the underlying pool are paid, the principal balance of the CRT securities is paid. As an investor in a CRT security, the Company may incur a principal loss if the performance of the actual or reference pool loans results in either an actual or calculated loss that exceeds the credit enhancement of the security owned by the Company.

Designation

MBS that the Company generally intends to hold until maturity, but that it may sell from time to time as part of the overall management of its business, are designated as "available-for-sale" ("AFS"). Such MBS are carried at their fair value with unrealized gains and losses excluded from earnings (except when an OTTI is recognized, as discussed below) and reported in Accumulated other comprehensive income/(loss) ("AOCI"), a component of Stockholders' Equity.

Upon the sale of an AFS security, any unrealized gain or loss is reclassified out of AOCI to earnings as a realized gain or loss using the specific identification method.

The Company has elected the fair value option for certain of its Agency MBS that it does not intend to hold to maturity. These securities are carried at their fair value with changes in fair value included in earnings for the period and reported in Other Income, net on the Company's consolidated statements of operations.

The Company has elected the fair value option for certain of its CRT securities as it considers this method of accounting to more appropriately reflect the risk-sharing structure of these securities. Such securities are carried at their fair value with changes in fair value included in earnings for the period and reported in Other Income, net on the Company's consolidated statements of operations.

Revenue Recognition, Premium Amortization and Discount Accretion

Interest income on securities is accrued based on their outstanding principal balance and their contractual terms. Premiums and discounts associated with Agency MBS and Non-Agency MBS assessed as high credit quality at the time of purchase are amortized into interest income over the life of such securities using the effective yield method. Adjustments to premium amortization are made for actual prepayment activity.

Interest income on Non-Agency MBS that were purchased at a discount to par value and/or are considered to be of less than high credit quality is recognized based on the security's effective interest rate which is the security's internal rate of return ("IRR"). The IRR is determined using management's estimate of the projected cash flows for each security, which are based on the Company's observation of current information and events and include assumptions related to fluctuations in interest rates, prepayment speeds and the timing and amount of credit losses. On at least a quarterly basis, the Company reviews and, if appropriate, makes adjustments to its cash flow projections based on input and analysis received from external sources, internal models, and its judgment about interest rates, prepayment rates, the timing and amount of credit losses, and other factors. Changes in cash flows from those originally projected, or from those estimated at the last evaluation, may result in a prospective change in the IRR/interest income recognized on these securities or in the recognition of OTTIs. (See Note 3)

Based on the projected cash flows from the Company's Non-Agency MBS purchased at a discount to par value, a portion of the purchase discount may be designated as non-accretable purchase discount ("Credit Reserve"), which effectively mitigates the Company's risk of loss on the mortgages collateralizing such MBS, and is not expected to be accreted into interest income. The amount designated as Credit Reserve may be adjusted over time, based on the actual performance of the security, its underlying collateral, actual and projected cash flow from such collateral, economic conditions and other factors. If the performance of a security with a Credit Reserve is more favorable than forecasted, a portion of the amount designated as Credit Reserve may be reallocated to accretable discount and recognized into interest income over time. Conversely, if the performance of a security with a Credit Reserve is less favorable than forecasted, the amount designated as Credit Reserve may be increased, or impairment charges and write-downs of such securities to a new cost basis could result.

Determination of Fair Value for Residential Mortgage Securities

In determining the fair value of the Company's residential mortgage securities, management considers a number of observable market data points, including prices obtained from pricing services, brokers and repurchase agreement counterparties, dialogue with market participants, as well as management's observations of market activity. (See Note 14)

Impairments/OTTI

When the fair value of an AFS security is less than its amortized cost at the balance sheet date, the security is considered impaired. The Company assesses its impaired securities on at least a quarterly basis and designates such impairments as either "temporary" or "other-than-temporary." If the Company intends to sell an impaired security, or it is more likely than not that it will be required to sell the impaired security before its anticipated recovery, then the Company must recognize an OTTI through charges to earnings equal to the entire difference between the investment's amortized cost and its fair value at the balance sheet date. If the Company does not expect to sell an other-than-temporarily impaired security, only the portion of the impairment related to credit losses is recognized through charges to earnings with the remainder recognized through AOCI on the Company's consolidated balance sheets. Impairments recognized through other comprehensive income/(loss) ("OCI") do not impact earnings. Following the recognition of an OTTI through earnings, a new cost basis is established for the security, which may not be adjusted for subsequent recoveries in fair value through earnings. However, OTTIs recognized through charges to earnings may, upon recovery, be accreted back to the amortized cost basis of the security on a prospective basis through interest income. The determination as to whether an OTTI exists and, if so, the amount of credit impairment recognized in earnings is subjective, as such determinations are based on factual information available at the time of assessment as well as the Company's estimates of future performance and cash flow projections. As a result, the timing and amount of OTTIs constitute material estimates that are susceptible to significant change. (See Note 3)

Non-Agency MBS that are assessed to be of less than high credit quality and on which impairments are recognized have experienced, or are expected to experience, credit-related adverse cash flow changes. The Company's estimate of cash flows for its Non-Agency MBS is based on its review of the underlying mortgage loans securing the MBS. The Company considers information available about the past and expected future performance of underlying mortgage loans, including timing of expected future cash flows, prepayment rates, default rates, loss severities, delinquency rates, percentage of non-performing loans, year of origination, loan-to-value ratios ("LTVs"), geographic concentrations and dialogue with market participants. As a result, significant judgment is used in the Company's analysis to determine the expected cash flows for its Non-Agency MBS. In determining the OTTI related to credit losses for securities that were purchased at significant discounts to par and/or are considered to be of less than high credit quality, the Company compares the present value of the remaining cash flows expected to be collected at the purchase date (or last date previously revised) against the present value of the cash flows expected to be collected at the current financial reporting date. The discount rate used to calculate the present value of expected future cash flows is the current yield used for income recognition purposes. Impairment assessment for Non-Agency MBS that were purchased at prices close to par and/or are otherwise considered to be of high credit quality involves comparing the present value of the remaining cash flows expected to be collected against the amortized cost of the security at the assessment date. The discount rate used to calculate the present value of the expected future cash flows is based on the instrument's IRR.

Balance Sheet Presentation

The Company's residential mortgage securities pledged as collateral against repurchase agreements and Swaps are included on the consolidated balance sheets with the fair value of the securities pledged disclosed parenthetically. Purchases and sales of securities are recorded on the trade date.

(c) Residential Whole Loans (including Residential Whole Loans transferred to consolidated VIEs)

Residential whole loans included in the Company's consolidated balance sheets are primarily comprised of pools of fixedand adjustable-rate residential mortgage loans acquired through consolidated trusts in secondary market transactions. The
accounting model utilized by the Company is determined at the time each loan package is initially acquired and is generally based
on the delinquency status of the majority of the underlying borrowers in the package at acquisition. The accounting model described
below for Purchased Credit Impaired Loans that are held at carrying value is typically utilized by the Company for Purchased
Credit Impaired Loans where the underlying borrower has a delinquency status of less than 60 days at the acquisition date. The
Company also acquires Purchased Performing Loans that are typically held at carrying value, but the accounting methods for
income recognition and determination and measurement of any required loan loss reserves (as discussed below) differ from those
used for Purchased Credit Impaired Loans held at carrying value. The accounting model described below for residential whole
loans held at fair value is typically utilized by the Company for loans where the underlying borrower has a delinquency status of
60 days or more at the acquisition date. The accounting model initially applied is not subsequently changed.

The Company's residential whole loans pledged as collateral against repurchase agreements are included in the consolidated balance sheets with amounts pledged disclosed parenthetically. Purchases and sales of residential whole loans that are subject to

an extended period of due diligence that crosses a reporting date are recorded in our balance sheet at amounts reflecting management's current estimate of assets that will be acquired or disposed at the closing of the transaction. This estimate is subject to revision at the closing of the transaction, pending the outcome of due diligence performed prior to closing. Residential whole loans purchased under flow arrangements with loan origination partners are generally recorded at the transaction settlement date. Recorded amounts of residential whole loans for which the closing of the purchase transaction is yet to occur are not eligible to be pledged as collateral against any repurchase agreement financing until the closing of the purchase transaction. Interest income, credit related losses and changes in the fair value of loans held at fair value are recorded post settlement for acquired loans and until transaction settlement for sold loans. (See Notes 4, 6, 7, 14 and 15)

Residential Whole Loans at Carrying Value

Purchased Performing Loans

Acquisitions of Purchased Performing Loans to date have been primarily comprised of: (i) loans to finance (or refinance) one-to-four family residential properties that are not considered to meet the definition of a "Qualified Mortgage" in accordance with guidelines adopted by the Consumer Financial Protection Bureau ("Non-QM loans"), (ii) short-term business purpose loans collateralized by residential properties made to non-occupant borrowers who intend to rehabilitate and sell the property for a profit ("Rehabilitation loans" or "Fix and Flip loans"), (iii) loans to finance (or refinance) non-owner occupied one-to four-family residential properties that are rented to one or more tenants ("Single-family rental loans"), and (iv) previously originated loans secured by residential real estate that is generally owner occupied ("Seasoned performing loans"). Purchased Performing Loans are initially recorded at their purchase price. Interest income on Purchased Performing Loans acquired at par is accrued based on each loan's current interest bearing balance and current interest rate, net of related servicing costs. Interest income on such loans purchased at a premium/discount to par is recorded each period based on the contractual coupon net of any amortization of premium or accretion of discount, adjusted for actual prepayment activity. For loans acquired with related servicing rights retained by the seller, interest income is reported net of related serving costs.

An allowance for loan losses is recorded when, based on current information and events, it is probable that the Company will be unable to collect all amounts due under to the existing contractual terms of the loan agreement. Any required loan loss allowance would reduce the carrying value of the loan with a corresponding charge to earnings. Significant judgments are required in determining any allowance for loan loss, including assumptions regarding the loan cash flows expected to be collected, the value of the underlying collateral and the ability of the Company to collect on any other forms of security, such as a personal guaranty provided either by the borrower or an affiliate of the borrower. Income recognition is suspended for loans at the earlier of the date at which payments become 90 days past due or when, in the opinion of management, a full recovery of income and principal becomes doubtful. When the ultimate collectability of the principal of an impaired loan is in doubt, all payments are applied to principal under the cost recovery method. When the ultimate collectability of the principal of an impaired loan is not in doubt, interest income is recorded under the cash basis method as interest payments are received. Interest accruals are resumed when the loan becomes contractually current and performance is demonstrated to be resumed. A loan is written off when it is no longer realizable and/or it is legally discharged.

Purchased Credit Impaired Loans

The Company has elected to account for these loans as credit impaired as they were acquired at discounted prices that reflect, in part, the impaired credit history of the borrower. Substantially all of these loans have previously experienced payment delinquencies and the amount owed may exceed the value of the property pledged as collateral. Consequently, these loans generally have a higher likelihood of default than newly originated mortgage loans with LTVs of 80% or less to creditworthy borrowers. The Company believes that amounts paid to acquire these loans represent fair market value at the date of acquisition. Loans considered credit impaired are initially recorded at the purchase price with no allowance for loan losses. Subsequent to acquisition, the recorded amount for these loans reflects the original investment amount, plus accretion of interest income, less principal and interest cash flows received. These loans are presented on the Company's consolidated balance sheets at carrying value, which reflects the recorded amount reduced by any allowance for loan losses established subsequent to acquisition.

Under the application of the accounting model for Purchased Credit Impaired loans, the Company may aggregate into pools loans acquired in the same fiscal quarter that are assessed as having similar risk characteristics. For each pool established, or on an individual loan basis for loans not aggregated into pools, the Company estimates at acquisition, and periodically on at least a quarterly basis, the principal and interest cash flows expected to be collected. The difference between the cash flows expected to be collected and the carrying amount of the loans is referred to as the "accretable yield." This amount is accreted as interest income

over the life of the loans using an effective interest rate (level yield) methodology. Interest income recorded each period reflects the amount of accretable yield recognized and not the coupon interest payments received on the underlying loans. The difference between contractually required principal and interest payments and the cash flows expected to be collected is referred to as the "non-accretable difference," and includes estimates of both the effect of prepayments and expected credit losses over the life of the underlying loans.

A decrease in expected cash flows in subsequent periods may indicate impairment at the pool and/or individual loan level, thus requiring the establishment of an allowance for loan losses by a charge to the provision for loan losses. The allowance for loan losses generally represents the present value of cash flows expected at acquisition, adjusted for any increases due to changes in estimated cash flows, that are subsequently no longer expected to be received at the relevant measurement date. Under the accounting model applied to Purchased Credit Impaired Loans, a significant increase in expected cash flows in subsequent periods first reduces any previously recognized allowance for loan losses and then will result in a recalculation of the amount of accretable yield. The adjustment of accretable yield due to a significant increase in expected cash flows is accounted for prospectively as a change in estimate and results in reclassification from nonaccretable difference to accretable yield.

Residential Whole Loans at Fair Value

Certain of the Company's residential whole loans are presented at fair value on its consolidated balance sheets as a result of a fair value election made at the time of acquisition. For the majority of these loans, there is significant uncertainty associated with estimating the timing of and amount of cash flows that will be collected. Further, the cash flows ultimately collected may be dependent on the value of the property securing the loan. Consequently, the Company considers that accounting for these loans at fair value should result in a better reflection over time of the economic returns for the majority of these loans. The Company determines the fair value of its residential whole loans held at fair value after considering portfolio valuations obtained from a third-party that specializes in providing valuations of residential mortgage loans and trading activity observed in the market place. Subsequent changes in fair value are reported in current period earnings and presented in Net gain on residential whole loans measured at fair value through earnings on the Company's consolidated statements of operations.

Cash received representing coupon interest payments on residential whole loans held at fair value is not included in Interest Income, but rather is included in Net gain on residential whole loans measured at fair value through earnings on the Company's consolidated statements of operations. Cash outflows associated with loan-related advances made by the Company on behalf of the borrower are included in the basis of the loan and are reflected in unrealized gains or losses reported each period.

(d) MSR-Related Assets

The Company has investments in financial instruments whose cash flows are considered to be largely dependent on underlying MSRs that either directly or indirectly act as collateral for the investment. These financial instruments, which are referred to as MSR-related assets, are discussed in more detail below. The Company's MSR-related assets pledged as collateral against repurchase agreements are included in the consolidated balance sheets with the amounts pledged disclosed parenthetically. Purchases and sales of MSR-related assets are recorded on the trade date. (See Notes 3, 6, 7 and 14)

Term Notes Backed by MSR-Related Collateral

The Company has invested in term notes that are issued by special purpose vehicles ("SPV") that have acquired rights to receive cash flows representing the servicing fees and/or excess servicing spread associated with certain MSRs. The Company considers payment of principal and interest on these term notes to be largely dependent on the cash flows generated by the underlying MSRs as this impacts the cash flows available to the SPV that issued the term notes. Credit risk borne by the holders of the term notes is also mitigated by structural credit support in the form of over-collateralization. Credit support is also provided by a corporate guarantee from the ultimate parent or sponsor of the SPV that is intended to provide for payment of interest and principal to the holders of the term notes should cash flows generated by the underlying MSRs be insufficient.

The Company's term notes backed by MSR-related collateral are treated as AFS securities and reported at fair value on the Company's consolidated balance sheets with unrealized gains and losses excluded from earnings and reported in AOCI. Interest income is recognized on an accrual basis on the Company's consolidated statements of operations. The Company's valuation process for such notes is similar to that used for residential mortgage securities and considers a number of observable market data points, including prices obtained from pricing services, brokers and repurchase agreement counterparties, dialogue with market participants, as well as management's observations of market activity. Other factors taken into consideration include estimated

changes in fair value of the related underlying MSR collateral and, as applicable, the financial performance of the ultimate parent or sponsoring entity of the issuer, which has provided a guarantee that is intended to provide for payment of interest and principal to the holders of the term notes should cash flows generated by the related underlying MSR collateral be insufficient.

Corporate Loans

The Company has made or participated in loans to provide financing to entities that originate residential mortgage loans and own the related MSRs. These corporate loans are generally secured by certain MSRs, as well as certain other unencumbered assets owned by the borrower.

Corporate loans are recorded on the Company's consolidated balance sheets at the drawn amount, on which interest income is recognized on an accrual basis on the Company's consolidated statements of operations. Commitment fees received on the undrawn amount are deferred and recognized as interest income over the remaining loan term at the time of draw. At the end of the commitment period, any remaining deferred commitment fees are recorded as Other Income on the Company's consolidated statements of operations. The Company evaluates the recoverability of its corporate loans on a quarterly basis considering various factors, including the current status of the loan, changes in the fair value of the MSRs that secure the loan and the recent financial performance of the borrower.

(e) Cash and Cash Equivalents

Cash and cash equivalents include cash on deposit with financial institutions and investments in money market funds, all of which have original maturities of three months or less. Cash and cash equivalents may also include cash pledged as collateral to the Company by its repurchase agreement counterparties as a result of reverse margin calls (i.e., margin calls made by the Company). The Company did not hold any cash pledged by its counterparties at December 31, 2019 and 2018. At December 31, 2019 and 2018, the Company had cash and cash equivalents of \$70.6 million and \$52.0 million, respectively. The Company's investments in overnight money market funds, which are not bank deposits and are not insured or guaranteed by the Federal Deposit Insurance Corporation ("FDIC") or any other government agency, were \$39.6 million and \$30.0 million at December 31, 2019 and 2018, respectively. In addition, deposits in FDIC insured accounts generally exceed insured limits. (See Notes 7 and 14)

(f) Restricted Cash

Restricted cash represents the Company's cash held by its counterparties in connection with certain of the Company's Swaps and/or repurchase agreements that is not available to the Company for general corporate purposes. Restricted cash may be applied against amounts due to repurchase agreement and/or Swap counterparties, or may be returned to the Company when the related collateral requirements are exceeded or at the maturity of the Swap and/or repurchase agreements. The Company had aggregate restricted cash held as collateral or otherwise in connection with its repurchase agreements and/or Swaps of \$64.0 million and \$36.7 million at December 31, 2019 and 2018, respectively. (See Notes 5(c), 6, 7 and 14)

(g) Real Estate Owned ("REO")

REO represents real estate acquired by the Company, including through foreclosure, deed in lieu of foreclosure, or purchased in connection with the acquisition of residential whole loans. REO acquired through foreclosure or deed in lieu of foreclosure is initially recorded at fair value less estimated selling costs. REO acquired in connection with the acquisition of residential whole loans is initially recorded at its purchase price. Subsequent to acquisition, REO is reported, at each reporting date, at the lower of the current carrying amount or fair value less estimated selling costs and for presentation purposes is included in Other assets on the Company's consolidated balance sheets. Changes in fair value that result in an adjustment to the reported amount of an REO property that has a fair value at or below its carrying amount are reported in Other Income, net on the Company's consolidated statements of operations. The Company has acquired certain properties that it holds for investment purposes, including rentals to third parties. These properties are held at their historical basis less depreciation, and are subject to impairment. Related rental income and expenses are recorded in Other Income, net. (See Note 5)

(h) Depreciation

Leasehold Improvements, Real estate and Other Depreciable Assets

Depreciation is computed on the straight-line method over the estimated useful life of the related assets or, in the case of leasehold improvements, over the shorter of the useful life or the lease term. Furniture, fixtures, computers and related hardware have estimated useful lives ranging from five to eight years at the time of purchase. The building component of real estate held-for-investment is depreciated over 27.5 years.

(i) Loan Securitization and Other Debt Issuance Costs

Loan securitization related costs are costs associated with the issuance of beneficial interests by consolidated VIEs and incurred by the Company in connection with various financing transactions completed by the Company. Other debt issuance and related costs include costs incurred by the Company in connection with issuing its 6.25% Convertible Senior Notes due 2024 ("Convertible Senior Notes"), 8% Senior Notes due 2042 ("Senior Notes") and certain other repurchase agreement financings. These costs may include underwriting, rating agency, legal, accounting and other fees. Such costs, which reflect deferred charges, are included on the Company's consolidated balance sheets as a direct deduction from the corresponding debt liability. These deferred charges are amortized as an adjustment to interest expense using the effective interest method. For the Convertible Senior Notes, Senior Notes and other repurchase agreement financings, such costs are amortized over the shorter of the period to the expected or stated legal maturity of the debt instruments. The Company periodically reviews the recoverability of these deferred costs and, in the event an impairment charge is required, such amount will be included in Operating and Other Expense on the Company's consolidated statements of operations.

(j) Repurchase Agreements

The Company finances the holdings of a significant portion of its residential mortgage assets with repurchase agreements. Under repurchase agreements, the Company sells assets to a lender and agrees to repurchase the same assets in the future for a price that is higher than the original sale price. The difference between the sale price that the Company receives and the repurchase price that the Company pays represents interest paid to the lender. Although legally structured as sale and repurchase transactions, the Company accounts for repurchase agreements as secured borrowings. Under its repurchase agreements, the Company pledges its assets as collateral to secure the borrowing, in an amount which is equal to a specified percentage of the fair value of the pledged collateral, while the Company retains beneficial ownership of the pledged collateral. At the maturity of a repurchase financing, unless the repurchase financing is renewed with the same counterparty, the Company is required to repay the loan including any accrued interest and concurrently receives back its pledged collateral from the lender. With the consent of the lender, the Company may renew a repurchase financing at the then prevailing financing terms. Margin calls, whereby a lender requires that the Company pledge additional assets or cash as collateral to secure borrowings under its repurchase financing with such lender, are routinely experienced by the Company when the value of the assets pledged as collateral declines as a result of principal amortization and prepayments or due to changes in market interest rates, spreads or other market conditions. The Company also may make margin calls on counterparties when collateral values increase.

The Company's repurchase financings collateralized by residential mortgage securities and MSR-related assets typically have terms ranging from one month to six months at inception, while a significant amount of our repurchase financings collateralized by residential whole loans have terms ranging from three months to twelve months or longer. Should a counterparty decide not to renew a repurchase financing at maturity, the Company must either refinance elsewhere or be in a position to satisfy the obligation. If, during the term of a repurchase financing, a lender should default on its obligation, the Company might experience difficulty recovering its pledged assets which could result in an unsecured claim against the lender for the difference between the amount loaned to the Company plus interest due to the counterparty and the fair value of the collateral pledged by the Company to such lender, including accrued interest receivable on such collateral. (See Notes 6, 7 and 14)

(k) Equity-Based Compensation

Compensation expense for equity-based awards that are subject to vesting conditions, is recognized ratably over the vesting period of such awards, based upon the fair value of such awards at the grant date.

Beginning in 2014, the Company has made annual grants of restricted stock units ("RSUs") certain of which cliff vest after a three-year period, subject only to continued employment, and others of which cliff vest after a three-year period, subject to both

continued employment and the achievement of certain performance criteria based on a formula tied to the Company's achievement of average total shareholder return during that three-year period, as well as the total shareholder return ("TSR") of the Company relative to the TSR of a group of peer companies (over the three-year period) selected by the Compensation Committee of the Company's Board of Directors (the "Compensation Committee") at the date of grant. The features in these awards related to the attainment of total shareholder return over a specified period constitute a "market condition" which impacts the amount of compensation expense recognized for these awards. Specifically, the uncertainty regarding the achievement of the market condition was reflected in the grant date fair valuation of the RSUs, which is recognized as compensation expense over the relevant vesting period. The amount of compensation expense recognized is not dependent on whether the market condition was or will be achieved.

The Company makes dividend equivalent payments in connection with certain of its equity-based awards. A dividend equivalent is a right to receive a distribution equal to the dividend distributions that would be paid on a share of the Company's common stock. Dividend equivalents may be granted as a separate instrument or may be a right associated with the grant of another award (e.g., an RSU) under the Company's Equity Compensation Plan (the "Equity Plan"), and they are paid in cash or other consideration at such times and in accordance with such rules, terms and conditions, as the Compensation Committee may determine in its discretion. Payments pursuant to dividend equivalents are generally charged to Stockholders' Equity to the extent that the attached equity awards are expected to vest. Compensation expense is recognized for payments made for dividend equivalents to the extent that the attached equity awards (i) do not or are not expected to vest and (ii) grantees are not required to return payments of dividends or dividend equivalents to the Company. (See Notes 2(l) and 13)

(l) Earnings per Common Share ("EPS")

Basic EPS is computed using the two-class method, which includes the weighted-average number of shares of common stock outstanding during the period and an estimate of other securities that participate in dividends, such as the Company's unvested restricted stock and RSUs that have non-forfeitable rights to dividends and dividend equivalents attached to/associated with RSUs and vested stock options to arrive at total common equivalent shares. In applying the two-class method, earnings are allocated to both shares of common stock and estimated securities that participate in dividends based on their respective weighted-average shares outstanding for the period. For the diluted EPS calculation, common equivalent shares are further adjusted for the effect of RSUs outstanding that are unvested and have dividends that are subject to forfeiture using the treasury stock method. Under the treasury stock method, common equivalent shares are calculated assuming that all dilutive common stock equivalents are exercised and the proceeds, along with future compensation expenses associated with such instruments, are used to repurchase shares of the Company's outstanding common stock at the average market price during the reported period. In addition, the Company's Convertible Senior Notes are included in the calculation of diluted EPS if the assumed conversion into common shares is dilutive, using the "if-converted" method. This involves adding back the periodic interest expense associated with the Convertible Senior Notes to the numerator and by adding the shares that would be issued in an assumed conversion (regardless of whether the conversion options is in or out of the money) to the denominator for the purposes of calculating diluted EPS. (See Note 12)

(m) Comprehensive Income/(Loss)

The Company's comprehensive income/(loss) available to common stock and participating securities includes net income, the change in net unrealized gains/(losses) on its AFS securities and derivative hedging instruments (to the extent that such changes are not recorded in earnings), adjusted by realized net gains/(losses) reclassified out of AOCI for sold AFS securities and is reduced by dividends declared on the Company's preferred stock and issuance costs of redeemed preferred stock.

(n) U.S. Federal Income Taxes

The Company has elected to be taxed as a REIT under the provisions of the Internal Revenue Code of 1986, as amended, (the "Code"), and the corresponding provisions of state law. The Company expects to operate in a manner that will enable it to satisfy the various requirements to maintain its status as a REIT for federal income tax purposes. In order to maintain its status as a REIT, the Company must, among other things, distribute at least 90% of its REIT taxable income (excluding net long-term capital gains) to stockholders in the timeframe permitted by the Code. As long as the Company maintains its status as a REIT, the Company will not be subject to regular federal income tax to the extent that it distributes 100% of its REIT taxable income (including net long-term capital gains) to its stockholders within the permitted timeframe. Should this not occur, the Company would be subject to federal taxes at prevailing corporate tax rates on the difference between its REIT taxable income and the amounts deemed to be distributed for that tax year. As the Company's objective is to distribute 100% of its REIT taxable income to its stockholders within the permitted timeframe, no provision for current or deferred income taxes has been made in the accompanying consolidated financial statements. Should the Company incur a liability for corporate income tax, such amounts would be recorded as REIT income tax expense on the Company's consolidated statements of operations. Furthermore, if the Company fails to distribute during each calendar year, or by the end of January following the calendar year in the case of distributions with declaration and record dates falling in the last three months of the calendar year, at least the sum of (i) 85% of its REIT ordinary income for such year, (ii) 95% of its REIT capital gain income for such year, and (iii) any undistributed taxable income from prior periods, the Company would be subject to a 4% nondeductible excise tax on the excess of the required distribution over the amounts actually distributed. To the extent that the Company incurs interest, penalties or related excise taxes in connection with its tax obligations, including as a result of its assessment of uncertain tax positions, such amounts will be included in Operating and Other Expense on the Company's consolidated statements of operations.

In addition, the Company has elected to treat certain of its subsidiaries as TRS. In general, a TRS may hold assets and engage in activities that the Company cannot hold or engage in directly and generally may engage in any real estate or non-real estate-related business. Generally, a domestic TRS is subject to U.S. federal, state and local corporate income taxes. Since a portion of the Company's business is conducted through one or more TRS, the net taxable income earned by its domestic TRS, if any, is subject to corporate income taxation. To maintain the Company's REIT election, no more than 20% of the value of the Company's assets at the end of each calendar quarter may consist of stock or securities in TRS. For purposes of the determination of U. S. federal and state income taxes, the Company's subsidiaries that elected to be treated as TRS record current or deferred income taxes based on differences (both permanent and timing) between the determination of their taxable income and net income under GAAP. No net deferred tax benefit was recorded by the Company in 2019 or 2018, related to the net taxable losses in the TRS, since a valuation allowance for the full amount of the associated deferred tax asset of approximately \$27.8 million was recognized as its recovery is not considered more likely than not. The related net operating loss carryforwards generated prior to 2018 will begin to expire in 2034; those generated in 2019 do not expire.

Based on its analysis of any potentially uncertain tax positions, the Company concluded that it does not have any material uncertain tax positions that meet the relevant recognition or measurement criteria as of December 31, 2019, 2018 or 2017. As of the date of this filing, the Company's tax returns for tax years 2016 through 2018 are open to examination.

(o) Derivative Financial Instruments

The Company may use a variety of derivative instruments to economically hedge a portion of its exposure to market risks, including interest rate risk and prepayment risk. The objective of the Company's risk management strategy is to reduce fluctuations in net book value over a range of interest rate scenarios. In particular, the Company attempts to mitigate the risk of the cost of its variable rate liabilities increasing during a period of rising interest rates. The Company's derivative instruments are currently comprised of Swaps, the majority of which are designated as cash flow hedges against the interest rate risk associated with its borrowings.

Swaps

The Company documents its risk-management policies, including objectives and strategies, as they relate to its hedging activities and the relationship between the hedging instrument and the hedged liability for all Swaps designated as hedging transactions. The Company assesses, both at the inception of a hedge and on a quarterly basis thereafter, whether or not the hedge is "highly effective."

Swaps are carried on the Company's consolidated balance sheets at fair value, in Other assets, if their fair value is positive, or in Other liabilities, if their fair value is negative. Since January 2017, variation margin payments on the Company's Swaps that have been novated to a clearing house have been treated as a legal settlement of the exposure under the Swap contract. Previously such payments were treated as collateral pledged against the exposure under the related Swap contract. The effect of this change is to reduce what would have otherwise been reported as the fair value of the Swap. All of the Company's Swaps have been novated to a central clearing house. Changes in the fair value of the Company's Swaps designated in hedging transactions are recorded in OCI provided that the hedge remains effective. Periodic payments accrued in connection with Swaps designated as hedges are included in interest expense and are treated as an operating cash flow.

The Company discontinues hedge accounting on a prospective basis and recognizes changes in fair value through earnings when: (i) it is determined that the derivative is no longer effective in offsetting cash flows of a hedged item (including forecasted transactions); (ii) it is no longer probable that the forecasted transaction will occur; or (iii) it is determined that designating the derivative as a hedge is no longer appropriate. (See Notes 5(c), 7 and 14)

Changes in the fair value of the Company's Swaps not designated in hedging transactions are recorded in Other income, net on the Company's consolidated statements of operations.

(p) Fair Value Measurements and the Fair Value Option for Financial Assets and Financial Liabilities

The Company's presentation of fair value for its financial assets and liabilities is determined within a framework that stipulates that the fair value of a financial asset or liability is an exchange price in an orderly transaction between market participants to sell the asset or transfer the liability in the market in which the reporting entity would transact for the asset or liability, that is, the principal or most advantageous market for the asset or liability. The transaction to sell the asset or transfer the liability is a hypothetical transaction at the measurement date, considered from the perspective of a market participant that holds the asset or owes the liability. This definition of fair value focuses on exit price and prioritizes the use of market-based inputs over entity-specific inputs when determining fair value. In addition, the framework for measuring fair value establishes a three-level hierarchy for fair value measurements based upon the observability of inputs to the valuation of an asset or liability as of the measurement date.

In addition to the financial instruments that it is required to report at fair value, the Company has elected the fair value option for certain of its residential whole loans, Agency MBS and CRT securities at the time of acquisition. Subsequent changes in the fair value of these financial instruments are reported in Other income, net, in the Company's consolidated statements of operations. A decision to elect the fair value option for an eligible financial instrument, which may be made on an instrument by instrument basis, is irrevocable. (See Notes 2(b), 2(c), 3, 4 and 14)

(q) Variable Interest Entities

An entity is referred to as a VIE if it meets at least one of the following criteria: (i) the entity has equity that is insufficient to permit the entity to finance its activities without the additional subordinated financial support of other parties; or (ii) as a group, the holders of the equity investment at risk lack (a) the power to direct the activities of an entity that most significantly impact the entity's economic performance; (b) the obligation to absorb the expected losses; or (c) the right to receive the expected residual returns; or (iii) the holders of the equity investment at risk have disproportional voting rights and the entity's activities are conducted on behalf of the investor that has disproportionately few voting rights.

The Company consolidates a VIE when it has both the power to direct the activities that most significantly impact the economic performance of the VIE and a right to receive benefits or absorb losses of the entity that could be potentially significant to the VIE. The Company is required to reconsider its evaluation of whether to consolidate a VIE each reporting period, based upon changes in the facts and circumstances pertaining to the VIE.

The Company has entered into several financing transactions which resulted in the Company forming entities to facilitate these transactions. In determining the accounting treatment to be applied to these transactions, the Company concluded that the entities used to facilitate these transactions are VIEs and that they should be consolidated. If the Company had determined that consolidation was not required, it would have then assessed whether the transfers of the underlying assets would qualify as sales or should be accounted for as secured financings under GAAP. (See Note 15)

The Company also includes on its consolidated balance sheets certain financial assets and liabilities that are acquired/issued by trusts and/or other special purpose entities that have been evaluated as being required to be consolidated by the Company under the applicable accounting guidance.

(r) Offering Costs Related to Issuance and Redemption of Preferred Stock

Offering costs related to the issuance of preferred stock are recorded as a reduction in Additional paid-in capital, a component of Stockholders' Equity, at the time such preferred stock is issued. On redemption of preferred stock, any excess of the fair value of the consideration transferred to the holders of the preferred stock over the carrying amount of the preferred stock in the Company's consolidated balance sheets is included in the determination of Net Income Available to Common Stock and Participating Securities in the calculation of EPS.

(s) New Accounting Standards and Interpretations

Accounting Standards Adopted in 2019

Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement

In August 2018, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2018-13, Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurements ("ASU 2018-13"). The amendments in ASU 2018-13 eliminate, add and modify certain disclosure requirements for fair value measurements as part of the FASB's disclosure framework project, which aims to improve the effectiveness of disclosures in the notes to financial statements by focusing on requirements that are the most important to the users. The Company adopted ASU 2018-13 effective on January 1, 2019 and its adoption did not have a significant impact on its financial position or financial statement disclosures.

Compensation - Stock Compensation - Improvements to Nonemployee Share-Based Payment Accounting

In June 2018, the FASB issued ASU 2018-07, *Improvements to Nonemployee Share-Based Payment Accounting* ("ASU 2018-07"). The amendments in this ASU simplify the accounting for share-based payments to nonemployees by aligning it with the accounting for share-based payments to employees, with certain exceptions. The amendments in ASU 2018-07 do not change existing guidance on accounting for share-based payment transactions for employees. The Company adopted ASU 2018-07 effective on January 1, 2019 and its adoption did not have a significant impact on its financial position or financial statement disclosures.

Derivatives and Hedging - Targeted Improvements to Accounting for Hedging Activities

In August 2017, the FASB issued ASU 2017-12, *Targeted Improvements to Accounting for Hedging Activities* ("ASU 2017-12"). The amendments in this ASU expand an entity's ability to hedge non-financial and financial risk components and reduce complexity in fair value hedges of interest rate risk. The new guidance eliminates the requirement to separately measure and report hedge ineffectiveness and requires the entire change in the fair value of a hedging instrument to be presented in the same income statement line as the hedged item. ASU 2017-12 also simplifies certain documentation and assessment requirements and modifies the accounting for components excluded from the assessment of hedge effectiveness. The Company adopted ASU 2017-12 effective on January 1, 2019 and its adoption did not have a significant impact on its financial statements or financial statement disclosures.

Receivables - Nonrefundable Fees and Other Costs

In March 2017, the FASB issued ASU 2017-08, *Premium Amortization on Purchased Callable Debt Securities* ("ASU 2017-08"). The amendments in this ASU shorten the amortization period for certain purchased callable debt securities held at a premium to the earliest call date. The Company adopted ASU 2017-08 effective on January 1, 2019 and its adoption did not have a significant impact on its financial statements or financial statement disclosures.

Leases

In February 2016, the FASB issued ASU 2016-02, *Leases* ("ASU 2016-02"). The amendments in this ASU establish a right-of-use model that requires a lessee to record a right-of-use asset and a lease liability on the balance sheet for all leases with terms

longer than 12 months. Leases will be classified as either finance or operating, with classification affecting the pattern of expense recognition in the income statement. The Company's significant lease contracts are discussed in Note 10(a) of the consolidated financial statements. The Company adopted ASU 2016-02 effective on January 1, 2019 and, given the relatively limited nature and extent of lease financing transactions that the Company has entered into, its adoption did not have a material impact on its financial position or financial statement disclosures.

3. Residential Mortgage Securities and MSR-Related Assets

Agency and Non-Agency MBS

The Company's MBS are comprised of Agency MBS and Non-Agency MBS which include MBS issued prior to 2008 ("Legacy Non-Agency MBS"). These MBS are secured by: (i) hybrid mortgages ("Hybrids"), which have interest rates that are fixed for a specified period of time and, thereafter, generally adjust annually to an increment over a specified interest rate index; (ii) adjustable-rate mortgages ("ARMs"), which have interest rates that reset annually or more frequently (collectively, "ARM-MBS"); and (iii) 15 and 30 year fixed-rate mortgages for Agency MBS and, for Non-Agency MBS, 30-year and longer-term fixed-rate mortgages. In addition, the Company's MBS are also comprised of MBS backed by securitized re-performing/non-performing loans ("RPL/NPL MBS"), where the cash flows of the bond may not reflect the contractual cash flows of the underlying collateral. The Company's RPL/NPL MBS are generally structured with a contractual coupon step-up feature where the coupon increases from 300 - 400 basis points at 36 - 48 months from issuance or sooner. The Company pledges a significant portion of its MBS as collateral against its borrowings under repurchase agreements and Swaps. (See Note 7)

Agency MBS: Agency MBS are guaranteed as to principal and/or interest by a federally chartered corporation, such as Fannie Mae or Freddie Mac, or an agency of the U.S. Government, such as Ginnie Mae. The payment of principal and/or interest on Ginnie Mae MBS is explicitly backed by the full faith and credit of the U.S. Government. Since the third quarter of 2008, Fannie Mae and Freddie Mac have been under the conservatorship of the Federal Housing Finance Agency, which significantly strengthened the backing for these government-sponsored entities.

Non-Agency MBS: The Company's Non-Agency MBS are primarily secured by pools of residential mortgages, which are not guaranteed by an agency of the U.S. Government or any federally chartered corporation. Credit risk associated with Non-Agency MBS is regularly assessed as new information regarding the underlying collateral becomes available and based on updated estimates of cash flows generated by the underlying collateral.

CRT Securities

CRT securities are debt obligations issued by or sponsored by Fannie Mae and Freddie Mac. The coupon payments on CRT securities are paid by the issuer and the principal payments received are dependent on the performance of loans in either a reference pool or an actual pool of loans. As an investor in a CRT security, the Company may incur a principal loss if the performance of the actual or reference pool loans results in either an actual or calculated loss that exceeds the credit enhancement of the security owned by the Company. The Company assesses the credit risk associated with its investments in CRT securities by assessing the current and expected future performance of the associated loan pool. The Company pledges a portion of its CRT securities as collateral against its borrowings under repurchase agreements. (See Note 7)

The following tables present certain information about the Company's residential mortgage securities at December 31, 2019 and 2018:

December 31, 2019

(In Thousands)	Principal/ Current Face	Purchase Premiums	Accretable Purchase Discounts	Discount Designated as Credit Reserve and OTTI (1)	Amortized Cost (2)	Gross Unrealized Gains	Gross Unrealized Losses	Net Unrealized Gain/(Loss)	Fair Value
Agency MBS: (3)									
Fannie Mae	\$ 1,119,708	\$ 43,249	\$ (22)	\$ —	\$ 1,162,935	\$ 9,799	\$ (14,741)	\$ (4,942)	\$ 1,157,993
Freddie Mac	480,879	19,468	_	_	500,961	5,475	(3,968)	1,507	502,468
Ginnie Mae	3,996	73	_	_	4,069	52	_	52	4,121
Total Agency MBS	1,604,583	62,790	(22)	_	1,667,965	15,326	(18,709)	(3,383)	1,664,582
Non-Agency MBS:									
Expected to Recover Par (4)(5)	722,477	_	(16,661)	_	705,816	19,861	(9)	19,852	725,668
Expected to Recover Less than Par (4)	1,472,826	_	(73,956)	(436,598)	962,272	375,598	(9)	375,589	1,337,861
Total Non-Agency MBS (6)	2,195,303	_	(90,617)	(436,598)	1,668,088	395,459	(18)	395,441	2,063,529
Total MBS	3,799,886	62,790	(90,639)	(436,598)	3,336,053	410,785	(18,727)	392,058	3,728,111
CRT securities (7)	244,932	4,318	(55)		249,195	6,304	(91)	6,213	255,408
Total MBS and CRT securities	\$ 4,044,818	\$ 67,108	\$ (90,694)	\$ (436,598)	\$ 3,585,248	\$ 417,089	\$ (18,818)	\$ 398,271	\$ 3,983,519

December 31, 2018

(In Thousands)	Principal/ Current Face	Purchase Premiums			Amortized Cost (2)	Gross Unrealized Gains	Gross Unrealized Losses	Net Unrealized Gain/(Loss)	Fair Value
Agency MBS: (3)									
Fannie Mae	\$ 1,716,340	\$ 65,930	\$ (24)	\$ —	\$ 1,782,246	\$ 12,107	\$ (32,321)	\$ (20,214)	\$ 1,762,032
Freddie Mac	909,561	36,991	_	_	947,588	907	(17,177)	(16,270)	931,318
Ginnie Mae	4,729	87	_	_	4,816	47	_	47	4,863
Total Agency MBS	2,630,630	103,008	(24)		2,734,650	13,061	(49,498)	(36,437)	2,698,213
Non-Agency MBS:									
Expected to Recover Par (4)(5)	1,536,485	40	(21,725)	_	1,514,800	20,520	(7,620)	12,900	1,527,700
Expected to Recover Less than Par (4)	2,002,319		(133,300)	(516,116)	1,352,903	438,465	(769)	437,696	1,790,599
Total Non-Agency MBS (6)	3,538,804	40	(155,025)	(516,116)	2,867,703	458,985	(8,389)	450,596	3,318,299
Total MBS	6,169,434	103,048	(155,049)	(516,116)	5,602,353	472,046	(57,887)	414,159	6,016,512
CRT securities (7)	476,744	9,321	107		486,172	12,545	(5,896)	6,649	492,821
Total MBS and CRT securities	\$ 6,646,178	\$ 112,369	\$ (154,942)	\$ (516,116)	\$ 6,088,525	\$ 484,591	\$ (63,783)	\$ 420,808	\$ 6,509,333

- (1) Discount designated as Credit Reserve and amounts related to OTTI are generally not expected to be accreted into interest income. Amounts disclosed at December 31, 2019 reflect Credit Reserve of \$426.0 million and OTTI of \$10.6 million. Amounts disclosed at December 31, 2018 reflect Credit Reserve of \$503.3 million and OTTI of \$12.8 million.
- (2) Includes principal payments receivable of \$614,000 and \$1.0 million at December 31, 2019 and 2018, respectively, which are not included in the Principal/Current Face.
- (3) Amounts disclosed at December 31, 2019 and 2018 include Agency MBS with a fair value of \$280.3 million and \$736.5 million, respectively, for which the fair value option has been elected. Such securities had \$4.5 million unrealized gains and no gross unrealized losses at December 31, 2019, and no unrealized gains and gross unrealized losses of approximately \$3.3 million at December 31, 2018, respectively.
- (4) Based on management's current estimates of future principal cash flows expected to be received.
- (5) Includes RPL/NPL MBS, which at December 31, 2019 had a \$632.3 million Principal/Current face, \$631.8 million amortized cost and \$635.0 million fair value. At December 31, 2018, RPL/NPL MBS had a \$1.4 billion Principal/Current face, \$1.4 billion amortized cost and \$1.4 billion fair value.
- (6) At December 31, 2019 and 2018, the Company expected to recover approximately 80% and 85% of the then-current face amount of Non-Agency MBS, respectively.
- (7) Amounts disclosed at December 31, 2019 includes CRT securities with a fair value of \$255.4 million for which the fair value option has been elected. Such securities had gross unrealized gains of approximately \$6.3 million and gross unrealized losses of approximately \$91,000 at December 31, 2019. Amounts disclosed at December 31, 2018 includes CRT securities with a fair value of \$477.4 million for which the fair value option had been elected. Such securities had gross unrealized gains of approximately \$12.5 million and gross unrealized losses of approximately \$5.6 million at December 31, 2018.

Sales of Residential Mortgage Securities

The following tables present information about the Company's sales of its residential mortgage securities for the years ended December 31, 2019, 2018 and 2017. The Company has no continuing involvement with any of the sold MBS.

For the Year Ended December 31,

	2019				2018					2017				
(In Thousands)	Sale	Sales Proceeds		Sales Proceeds Gair		Gains/(Losses)		Sales Proceeds		Gains/(Losses)		s Proceeds	Gair	ıs/(Losses)
Agency MBS	\$	360,634	\$	499	\$	122,027	\$	(6,810)	\$		\$			
Non-Agency MBS		291,391		50,360		117,060		36,744		103,989		39,889		
CRT Securities		256,671		11,143		299,878		31,373		_		_		
Total	\$	908,696	\$	62,002	\$	538,965	\$	61,307	\$	103,989	\$	39,889		

Unrealized Losses on Residential Mortgage Securities

The following table presents information about the Company's residential mortgage securities that were in an unrealized loss position at December 31, 2019:

Unrealized Loss Position For:

				<u> </u>	ettillett 20	90 .	COLUMN		<u>-</u>					
		Les	s tha	n 12 Mon	ths		12	nths or mo	Total					
(Dollars in Thousands)		Fair Value		realized osses	Number of Securities		Fair Value		nrealized Losses	Number of Securities		Fair Value		realized Losses
Agency MBS:														
Fannie Mae	\$	57,884	\$	341	44	\$	605,765	\$	14,400	275	\$	663,649	\$	14,741
Freddie Mac		1,224		2	1		154,284		3,966	101		155,508		3,968
Total Agency MBS		59,108	_	343	45		760,049	_	18,366	376		819,157		18,709
Non-Agency MBS:														
Expected to Recover Par (1)		_		_	_		7,492		9	1		7,492		9
Expected to Recover Less than Par (1)		_		_	_		242		9	1		242		9
Total Non-Agency MBS		_			_		7,734		18	2		7,734		18
Total MBS		59,108		343	45		767,783		18,384	378		826,891		18,727
CRT securities (2)		_			_		25,004		91	7		25,004		91
Total MBS and CRT securities	\$	59,108	\$	343	45	\$	792,787	\$	18,475	385	\$	851,895	\$	18,818
	_													

- (1) Based on management's current estimates of future principal cash flows expected to be received.
- (2) Amounts disclosed at December 31, 2019 include CRT securities with a fair value of \$25.0 million for which the fair value option has been elected. Such securities had unrealized losses of \$91,000 at December 31, 2019.

At December 31, 2019, the Company did not intend to sell any of its investments that were in an unrealized loss position, and it is "more likely than not" that the Company will not be required to sell these securities before recovery of their amortized cost basis, which may be at their maturity.

Gross unrealized losses on the Company's Agency MBS were \$18.7 million at December 31, 2019. Agency MBS are issued by Government Sponsored Entities ("GSEs") and enjoy either the implicit or explicit backing of the full faith and credit of the U.S. Government. While the Company's Agency MBS are not rated by any rating agency, they are currently perceived by market participants to be of high credit quality, with risk of default limited to the unlikely event that the U.S. Government would not continue to support the GSEs. Given the credit quality inherent in Agency MBS, the Company does not consider any of the current impairments on its Agency MBS to be credit related. In assessing whether it is more likely than not that it will be required to sell any impaired security before its anticipated recovery, which may be at its maturity, the Company considers for each impaired security, the significance of each investment, the amount of impairment, the projected future performance of such impaired securities, as well as the Company's current and anticipated leverage capacity and liquidity position. Based on these analyses, the Company determined that at December 31, 2019 any unrealized losses on its Agency MBS were temporary.

Gross unrealized losses on the Company's Non-Agency MBS were \$18,000 at December 31, 2019. Based upon the most recent evaluation, the Company does not consider these unrealized losses to be indicative of OTTI and does not believe that these unrealized losses are credit related, but are rather a reflection of current market yields and/or marketplace bid-ask spreads. The Company has reviewed its Non-Agency MBS that are in an unrealized loss position to identify those securities with losses that are other-than-temporary based on an assessment of changes in expected cash flows for such securities, which considers recent bond performance and, where possible, expected future performance of the underlying collateral.

The Company recognized credit-related OTTI losses through earnings related to its Non-Agency MBS of \$180,000, \$1.3 million, and \$1.0 million during the years ended December 31, 2019, 2018, and 2017, respectively. Non-Agency MBS on which OTTI is recognized have experienced, or are expected to experience, credit-related adverse cash flow changes. The Company's estimate of cash flows for these Non-Agency MBS is based on its review of the underlying mortgage loans securing these MBS. The Company considers information available about the structure of the securitization, including structural credit enhancement, if any, and the past and expected future performance of underlying mortgage loans, including timing of expected future cash flows, prepayment rates, default rates, loss severities, delinquency rates, percentage of non-performing loans, year of origination, LTVs, geographic concentrations, and dialogue with market participants. Changes in the Company's evaluation of each of these factors impacts the cash flows expected to be collected at the OTTI assessment date. For Non-Agency MBS purchased at a discount to par that were assessed for and had no OTTI recorded this period, such cash flow estimates indicated that the amount of expected losses decreased compared to the previous OTTI assessment date. These positive cash flow changes are primarily driven by recent improvements in LTVs due to loan amortization and home price appreciation, which, in turn, positively impacts the Company's estimates of default rates and loss severities for the underlying collateral. In addition, voluntary prepayments (i.e., loans that prepay in full with no loss) have generally trended higher relative to the Company's assumptions for these MBS which also positively impacts the Company's estimate of expected loss. Overall, the combination of higher voluntary prepayments and lower LTVs supports the Company's assessment that such MBS are not other-than-temporarily impaired.

The following table presents the composition of OTTI charges recorded by the Company for the years ended December 31, 2019, 2018 and 2017:

	For the Year Ended December 31,										
(In Thousands)		2019		2018		2017					
Total OTTI losses	\$	(264)	\$	(1,259)	\$	(63)					
OTTI recognized in/(reclassified from) OCI		84				(969)					
OTTI recognized in earnings	\$	(180)	\$	(1,259)	\$	(1,032)					

The following table presents a roll-forward of the credit loss component of OTTI on the Company's Non-Agency MBS for which a non-credit component of OTTI was previously recognized in OCI. Changes in the credit loss component of OTTI are presented based upon whether the current period is the first time OTTI was recorded on a security or a subsequent OTTI charge was recorded.

	For the Year Ended December 31,							
(In Thousands)		2019		2018		2017		
Credit loss component of OTTI at beginning of period	\$	39,596	\$	38,337	\$	37,305		
Additions for credit related OTTI not previously recognized		180		1,259		63		
Subsequent additional credit related OTTI recorded				_		969		
Credit loss component of OTTI at end of period	\$	39,776	\$	39,596	\$	38,337		

Purchase Discounts on Non-Agency MBS

The following table presents the changes in the components of the Company's purchase discount on its Non-Agency MBS between purchase discount designated as Credit Reserve and OTTI and accretable purchase discount for the years ended December 31, 2019 and 2018:

		led December 31,		
	2019		2018	
(In Thousands)	Discount Designated as Credit Reserve and OTTI	Accretable Discount (1)	Discount Designated as Credit Reserve and OTTI	Accretable Discount (1)
Balance at beginning of period	\$ (516,116)	\$ (155,025)	\$ (593,227)	\$ (215,325)
Impact of RMBS Issuer settlement (2)(3)	_	(2,077)	_	(14,822)
Accretion of discount	_	51,696	_	70,750
Realized credit losses	28,152		42,246	_
Purchases	(624)	(4)	(2,512)	1,685
Sales/Redemptions	34,510	32,453	12,987	28,336
Net impairment losses recognized in earnings	(180)	_	(1,259)	_
Transfers/release of credit reserve	17,660	(17,660)	25,649	(25,649)
Balance at end of period	\$ (436,598)	\$ (90,617)	\$ (516,116)	\$ (155,025)

- (1) Together with coupon interest, accretable purchase discount is recognized as interest income over the life of the security.
- (2) Includes the impact of approximately \$2.0 million and \$12.1 million during the years ended December 31, 2019 and 2018, respectively, of cash proceeds (a one-time payment) received by the Company in connection with the settlement of litigation related to certain residential mortgage backed securitization trusts that were sponsored by JP Morgan Chase & Co. and affiliated entities.
- (3) Includes the impact of approximately \$2.7 million of cash proceeds (a one-time payment) received by the Company during the year ended December 31, 2018 in connection with the settlement of litigation related to certain residential mortgage backed securitization trusts that were sponsored by Lehman Brothers Holdings Inc.

MSR-Related Assets

(a) Term Notes Backed by MSR-Related Collateral

At December 31, 2019 and 2018, the Company had \$1.2 billion and \$538.5 million, respectively, of term notes issued by SPVs that have acquired rights to receive cash flows representing the servicing fees and/or excess servicing spread associated with certain MSRs. Payment of principal and interest on these term notes is considered to be largely dependent on cash flows generated by the underlying MSRs, as this impacts the cash flows available to the SPV that issued the term notes.

At December 31, 2019, these term notes had an amortized cost of \$1.2 billion, gross unrealized gains of approximately \$5.2 million, a weighted average yield of 4.75% and a weighted average term to maturity of 5.3 years. At December 31, 2018, these term notes had an amortized cost of \$538.5 million, gross unrealized losses of \$7,000, a weighted average yield of 5.32% and a weighted average term to maturity of 4.7 years.

(b) Corporate Loans

The Company has made or participated in loans to provide financing to entities that originate residential mortgage loans and own the related MSRs. These corporate loans are secured by MSRs, as well as certain other unencumbered assets owned by the borrower.

During the year ended December 31, 2018, the Company participated in a loan where the Company committed to lend \$100.0 million of which approximately \$59.5 million was drawn at December 31, 2019. At December 31, 2019, the coupon paid by the borrower on the drawn amount is 5.14%, the remaining term associated with the loan is 8 months and the remaining commitment period on any undrawn amount is 8 months. During the remaining commitment period, the Company receives a commitment fee between 0.25% and 1.0% based on the undrawn amount of the loan.

In December 2016, the Company entered into a loan agreement under the terms of which it had committed to lend \$130.0 million, of which approximately \$124.2 million was drawn at March 31, 2018. This loan was paid in full during 2018, at which time any remaining commitment was extinguished.

Impact of AFS Securities on AOCI

The following table presents the impact of the Company's AFS securities on its AOCI for the years ended December 31, 2019, 2018, and 2017:

	For the Year Ended December 31,					
(In Thousands)	2019			2018		2017
AOCI from AFS securities:						
Unrealized gain on AFS securities at beginning of period	\$	417,167	\$	620,648	\$	620,403
Unrealized gain/(loss) on Agency MBS, net		21,844		(17,891)		(39,158)
Unrealized (loss)/gain on Non-Agency MBS, net		(6,682)		(131,939)		78,337
Unrealized gain/(loss) on MSR term notes, net		5,173		(812)		805
Reclassification adjustment for MBS sales included in net income		(44,600)		(51,580)		(38,707)
Reclassification adjustment for OTTI included in net income		(180)		(1,259)		(1,032)
Change in AOCI from AFS securities		(24,445)		(203,481)		245
Balance at end of period	\$	392,722	\$	417,167	\$	620,648

Interest Income on Residential Mortgage Securities and MSR-Related Assets

The following table presents the components of interest income on the Company's residential mortgage securities and MSR-related assets for the years ended December 31, 2019, 2018 and 2017:

	For the Year Ended December 3					er 31,		
(In Thousands)		2019 2018		2019 2018		2017		
Agency MBS								
Coupon interest	\$	82,446	\$	88,233	\$	96,678		
Effective yield adjustment (1)		(26,545)		(25,930)		(31,323)		
Interest income	\$	55,901	\$	62,303	\$	65,355		
Legacy Non-Agency MBS								
Coupon interest	\$	87,024	\$	109,714	\$	127,645		
Effective yield adjustment (2)(3)		59,622		69,309		76,005		
Interest income	\$	146,646	\$	179,023	\$	203,650		
RPL/NPL MBS								
Coupon interest	\$	53,086	\$	46,339	\$	65,957		
Effective yield adjustment (1)(4)		338		1,434		1,505		
Interest income	\$	53,424	\$	47,773	\$	67,462		
CRT securities								
Coupon interest	\$	20,532	\$	30,628	\$	27,706		
Effective yield adjustment (2)		(1,949)		2,748		4,009		
Interest income	\$	18,583	\$	33,376	\$	31,715		
MSR-related assets								
Coupon interest	\$	52,644	\$	27,174	\$	24,534		
Effective yield adjustment (1)		3		1,246		296		
Interest income	\$	52,647	\$	28,420	\$	24,830		

⁽¹⁾ Includes amortization of premium paid net of accretion of purchase discount. For Agency MBS, RPL/NPL MBS and the corporate loan secured by MSRs, interest income is recorded at an effective yield, which reflects net premium amortization/accretion based on actual prepayment activity.

⁽²⁾ The effective yield adjustment is the difference between the net income calculated using the net yield, which is based on management's estimates of the amount and timing of future cash flows, less the current coupon yield.

⁽³⁾ Includes accretion income recognized due to the impact of redemptions of certain securities that had been previously been purchased at a discount of \$14.5 million, \$2.7 million and \$1.7 million during the years ended December 31, 2019, 2018 and 2017, respectively.

⁽⁴⁾ Includes accretion income recognized due to the impact of redemptions of certain securities that had been previously been purchased at a discount of \$329,000, \$1.4 million and \$1.2 million during the years ended December 31, 2019, 2018 and 2017, respectively.

4. Residential Whole Loans

Included on the Company's consolidated balance sheets as of December 31, 2019 and 2018 are approximately \$7.4 billion and \$4.7 billion, respectively, of residential whole loans arising from the Company's interests in certain trusts established to acquire the loans and certain entities established in connection with its loan securitization transactions. The Company has assessed that these entities are required to be consolidated for financial reporting purposes.

Residential Whole Loans, at Carrying Value

The following table presents the components of the Company's Residential whole loans, at carrying value at December 31, 2019 and 2018:

(Dollars In Thousands)	December 31, 2019		Dec	ember 31, 2018
Purchased Performing Loans:				
Non-QM loans	\$	3,706,857	\$	1,354,774
Rehabilitation loans		1,023,766		494,576
Single-family rental loans		460,679		145,327
Seasoned performing loans		176,569		224,051
Total Purchased Performing Loans		5,367,871		2,218,728
Purchased Credit Impaired Loans		698,474		797,987
Total Residential whole loans, at carrying value	\$	6,066,345	\$	3,016,715
				_
Number of loans		17,082		11,149

The following table presents the components of interest income on the Company's Residential whole loans, at carrying value for the years ended December 31, 2019, 2018 and 2017:

	For the Year Ended December 31,					
(In Thousands)		2019		2018		2017
Purchased Performing Loans:						
Non-QM loans	\$	116,282	\$	31,036	\$	84
Rehabilitation loans		54,419		15,975		431
Single-family rental loans		17,742		3,315		15
Seasoned performing loans		12,191		5,818		_
Total Purchased Performing Loans		200,634		56,144		530
Purchased Credit Impaired Loans		43,346		44,777		35,657
Total Residential whole loans, at carrying value	\$	243,980	\$	100,921	\$	36,187

The following table presents additional information regarding the Company's Residential whole loans, at carrying value at December 31, 2019:

December 31, 2019

		** • •	***	Weighted	*** * 1 . 1	Weighted		Aging by	UPB	
		Unpaid Principal	Weighted Average	Average Term to				P	ast Due Da	ys
(Dollars In Thousands)	Carrying Value	Balance ("UPB")	Coupon (1)	Maturity (Months)	LTV Ratio (2)	Original FICO (3)	Current	30-59	60-89	90+
Purchased Performing Loans:										
Non-QM loans (4)	\$3,707,245	\$3,592,701	5.96%	368	67%	716	\$3,492,533	\$59,963	\$19,605	\$20,600
Rehabilitation loans (4)	1,026,097	1,026,097	7.30	8	64	717	868,281	67,747	27,437	62,632
Single-family rental loans (4)	460,741	457,146	6.29	324	70	734	432,936	15,948	2,047	6,215
Seasoned performing loans	176,569	192,151	4.24	181	46	723	187,683	2,164	430	1,874
Purchased Credit Impaired Loans (5)	698,474	873,326	4.46	294	81	N/A	N/A	N/A	N/A	108,998
Residential whole loans, at carrying value, total or weighted average	\$6,069,126	\$6,141,421	5.96%	288						

- (1) Weighted average is calculated based on the interest bearing principal balance of each loan within the related category. For loans acquired with servicing rights released by the seller, interest rates included in the calculation do not reflect loan servicing fees. For loans acquired with servicing rights retained by the seller, interest rates included in the calculation are net of servicing fees.
- (2) LTV represents the ratio of the total unpaid principal balance of the loan to the estimated value of the collateral securing the related loan as of the most recent date available, which may be the origination date. For Rehabilitation loans, the LTV presented is the ratio of the maximum unpaid principal balance of the loan, including unfunded commitments, to the estimated "after repaired" value of the collateral securing the related loan, where available. For certain Rehabilitation loans, totaling \$269.2 million, an after repaired valuation was not obtained and the loan was underwritten based on an "as is" valuation. The weighted average LTV of these loans based on the current unpaid principal balance and the valuation obtained during underwriting, is 69%. Excluded from the calculation of weighted average LTV are certain low value loans secured by vacant lots, for which the LTV ratio is not meaningful.
- (3) Excludes loans for which no Fair Issac Corporation ("FICO") score is available.
- (4) Carrying value of Non-QM, Rehabilitation and Single-family rental loans excludes an allowance for loan losses of \$388,000, \$2.3 million and \$62,000, respectively, at December 31, 2019.
- (5) Purchased Credit Impaired Loans tend to be characterized by varying performance of the underlying borrowers over time, including loans where multiple months of payments are received in a period to bring the loan to current status, followed by months where no payments are received. Accordingly, delinquency information is presented for loans that are more than 90 days past due that are considered to be seriously delinquent.

Purchased Performing Loans

As of December 31, 2019, there were 228 Purchased Performing Loans held at carrying value, that have been placed on non-accrual status because they are more than 90 or more days delinquent or otherwise had not met the necessary criteria to be returned to accrual status. Such loans have an unpaid balance of approximately \$99.2 million. These non-accrual loans represent approximately 1.9% of the total outstanding principal balance of all of the Company's Purchased Performing Loans and have a weighted average LTV of 68%. As of December 31, 2019, the Company had established an allowance for loan losses on its Purchased Performing Loans of approximately \$2.8 million. During the year ended December 31, 2019, a net provision for loan losses of \$3.3 million was recorded, which is included in Operating and Other expense on the Company's consolidated statements of operations. Receivables totaling approximately \$512,000 were charged off against the allowance.

In connection with purchased Rehabilitation loans, the Company had unfunded commitments of \$130.3 million at December 31, 2019.

Purchased Credit Impaired Loans

As of December 31, 2019 and 2018, the Company had established an allowance for loan losses of approximately \$244,000 and \$968,000, respectively, on its Purchased Credit Impaired Loans held at carrying value. The following table presents the activity in the Company's allowance for loan losses on its Purchased Credit Impaired Loans held at carrying value for the years ended December 31, 2019, 2018 and 2017:

	For the Year Ended December 31,							
(In Thousands)		2019		2018		2017		
Balance at the beginning of period	\$	968	\$	330	\$	990		
(Reversal of provisions)/provisions for loan losses		(724)		638		(660)		
Balance at the end of period	\$	244	\$	968	\$	330		

The Company did not acquire any Purchased Credit Impaired Loans held at carrying value during the year ended December 31, 2019. The following table presents information regarding the estimates of the contractually required payments, the cash flows expected to be collected, and the estimated fair value of the Purchased Credit Impaired loans held at carrying value acquired by the Company for the year ended December 31, 2018:

	he Year Ended ecember 31,
(In Thousands)	 2018
Contractually required principal and interest	\$ 154,911
Contractual cash flows not expected to be collected (non-accretable yield)	(15,378)
Expected cash flows to be collected	139,533
Interest component of expected cash flows (accretable yield)	(41,947)
Fair value at the date of acquisition	\$ 97,586

The following table presents accretable yield activity for the Company's Purchased Credit Impaired Loans held at carrying value for the years ended December 31, 2019 and 2018:

	I	cember 31,		
(In Thousands)		2019		2018
Balance at beginning of period	\$	415,329	\$	421,872
Additions		_		41,947
Accretion		(43,346)		(44,777)
Liquidations and other		(42,538)		(35,156)
Reclassifications from non-accretable difference, net		40,356		31,443
Balance at end of period	\$	369,801	\$	415,329

Accretable yield for Purchased Credit Impaired Loans is the excess of loan cash flows expected to be collected over the purchase price. The cash flows expected to be collected represent the Company's estimate of the amount and timing of undiscounted principal and interest cash flows. Additions include accretable yield estimates for purchases made during the period and reclassification to accretable yield from non-accretable yield. Accretable yield is reduced by accretion during the period. The reclassifications between accretable and non-accretable yield and the accretion of interest income are based on changes in estimates regarding loan performance and the value of the underlying real estate securing the loans. In future periods, as the Company updates estimates of cash flows expected to be collected from the loans and the underlying collateral, the accretable yield may change. Therefore, the amount of accretable income recorded during the year ended December 31, 2019 is not necessarily indicative of future results.

Residential Whole Loans at Fair Value

Certain of the Company's residential whole loans are presented at fair value on its consolidated balance sheets as a result of a fair value election made at the time of acquisition. Subsequent changes in fair value are reported in current period earnings and presented in Net gain on residential whole loans measured at fair value through earnings on the Company's consolidated statements of operations.

The following table presents information regarding the Company's residential whole loans held at fair value at December 31, 2019 and 2018:

(Dollars in Thousands)	Dec	ember 31, 2019	Dec	ember 31, 2018 <i>(1)</i>
Less than 60 Days Past Due:				
Outstanding principal balance	\$	666,026	\$	610,290
Aggregate fair value	\$	641,616	\$	561,770
Weighted Average LTV Ratio (2)		76.69%		76.18%
Number of loans		3,159		2,898
60 Days to 89 Days Past Due:				
Outstanding principal balance	\$	58,160	\$	63,938
Aggregate fair value	\$	53,485	\$	54,947
Weighted Average LTV Ratio (2)		79.48%		82.86%
Number of loans		313		285
90 Days or More Past Due:				
Outstanding principal balance	\$	767,320	\$	970,758
Aggregate fair value	\$	686,482	\$	854,545
Weighted Average LTV Ratio (2)		89.69%		90.24%
Number of loans		2,983		3,531
Total Residential whole loans, at fair value	\$	1,381,583	\$	1,471,262

⁽¹⁾ Excluded from the table above are approximately \$194.7 million of residential whole loans held at fair value for which the closing of the purchase transaction had not occurred as of December 31, 2018.

The following table presents the components of Net gain on residential whole loans measured at fair value through earnings for the years ended December 31, 2019, 2018 and 2017:

	For the Year Ended December					
(In Thousands)		2019		2018		2017
Coupon payments and other income received (1)	\$	82,168	\$	70,515	\$	41,399
Net unrealized gains		47,849		36,725		33,617
Net gain on payoff/liquidation of loans		9,270		11,087		4,958
Net gain on transfers to REO		19,043		19,292		10,071
Total	\$	158,330	\$	137,619	\$	90,045

⁽¹⁾ Primarily includes recovery of delinquent interest upon the liquidation of non-performing loans, recurring coupon interest payments received on mortgage loans that are contractually current, and cash payments received from private mortgage insurance on liquidated loans.

⁽²⁾ LTV represents the ratio of the total unpaid principal balance of the loan, to the estimated value of the collateral securing the related loan. Excluded from the calculation of weighted average LTV are certain low value loans secured by vacant lots, for which the LTV ratio is not meaningful.

5. Other Assets

The following table presents the components of the Company's Other assets at December 31, 2019 and 2018:

(In Thousands)	I	December 31, 2019	Dec	cember 31, 2018
REO (1)	\$	411,659	\$	249,413
Capital contributions made to loan origination partners		147,992		23,210
Other interest-earning assets		70,468		92,022
MBS and loan related receivables		114,828		130,964
Other		39,304		32,176
Total Other Assets	\$	784,251	\$	527,785

⁽¹⁾ Includes \$27.3 million of REO that is held-for-investment at December 31, 2019.

(a) Real Estate Owned

At December 31, 2019, the Company had 1,652 REO properties with an aggregate carrying value of \$411.7 million. At December 31, 2018, the Company had 1,093 REO properties with an aggregate carrying value of \$249.4 million.

At December 31, 2019, \$407.3 million of residential real estate property was held by the Company that was acquired either through a completed foreclosure proceeding or from completion of a deed-in-lieu of foreclosure or similar legal agreement. In addition, excluding unsettled residential whole loans, formal foreclosure proceedings were in process with respect to \$61.2 million of residential whole loans held at carrying value and \$594.6 million of residential whole loans held at fair value at December 31, 2019.

The following table presents the activity in the Company's REO for the years ended December 31, 2019 and 2018:

		For the Year Ended D					
(Dollars In Thousands)		2019	2018				
Balance at beginning of period	\$	249,413	\$	152,356			
Adjustments to record at lower of cost or fair value		(14,884)		(15,929)			
Transfer from residential whole loans (1)		257,701		215,038			
Purchases and capital improvements		20,746		13,367			
Disposals (2)		(101,317)		(115,419)			
Balance at end of period	\$	411,659	\$	249,413			
Number of properties		1,652		1,093			

⁽¹⁾ Includes net gain recorded on transfer of approximately \$19.8 million and \$19.6 million, respectively, for the years ended December 31, 2019 and 2018.

⁽²⁾ During the year ended December 31, 2019, the company sold 571 REO properties for consideration of \$109.2 million, realizing net gains of approximately \$7.4 million. During the year ended December 31, 2018, the Company sold 705 REO properties for consideration of \$123.2 million, realizing net gains of approximately \$7.7 million. These amounts are included in Other Income, net on the Company's consolidated statements of operations.

(b) Capital Contributions Made to Loan Origination Partners

The Company has made investments in several loan originators as part of its strategy to be a reliable source of capital to select partners from whom it sources residential mortgage loans through both flow arrangements and bulk purchases. To date, such contributions of capital have included the acquisition of approximately \$28.5 million of common equity, \$69.4 million of preferred equity and \$50.0 million of convertible notes. In addition, for certain partners, options or warrants may have also been acquired that provide the Company the ability to increase the level of its investment if certain conditions are met. At the end of each reporting period, or earlier if circumstances warrant, the Company evaluates whether the nature of its interests and other involvement with the investee entity requires the Company to apply equity method accounting or consolidate the results of the investee entity with the Company's financial results. To date, the nature of the Company's interests and/or involvement with investee companies has not resulted in consolidation. Further, to the extent that the nature of the Company's interests has resulted in the need for the Company to apply equity method accounting, the impact of such accounting on the Company's results for periods subsequent to that in which the Company was determined to have significant influence over the investee company was not material for any period. As the interests acquired to date by the Company generally do not have a readily determinable fair value, the Company accounts for its non-equity method interests (including any acquired options and warrants) in loan originators initially at cost. The carrying value of these investments will be adjusted if it is determined that an impairment has occurred or if there has been a subsequent observable transaction in either the investee company's equity securities or a similar security that provides evidence to support an adjustment to the carrying value. At December 31, 2019, approximately \$1.7 billion of the Company's Residential whole loans, at carrying value were serviced by entities in which the Company has an investment.

(c) Derivative Instruments

The Company's derivative instruments are currently comprised of Swaps, the majority of which are designated as cash flow hedges against the interest rate risk associated with its borrowings. In addition, in connection with managing risks associated with purchases of longer duration Agency MBS, the Company has also entered into Swaps that are not designated as hedges for accounting purposes.

The following table presents the fair value of the Company's derivative instruments at December 31, 2019 and 2018:

		December 31,						
		20)19	2018				
Derivative Instrument (1)	Designation	Notional Amount	Fair Value	Notional Amount	Fair Value			
(In Thousands)								
Swaps	Hedging	\$ 2,942,000	\$ —	\$ 2,622,000	\$ —			
Swaps	Non-Hedging	\$ 230,000	\$ —	\$ 595,000	\$ —			

⁽¹⁾ Represents Swaps executed bilaterally with a counterparty in the over-the-counter market but then novated to a central clearing house, whereby the central clearing house becomes the counterparty to both of the original counterparties.

Swaps

The following table presents the assets pledged as collateral against the Company's Swap contracts at December 31, 2019 and 2018:

	mber 31,		
2019		2018	
\$ 2,241	\$	2,735	
 16,777		30,068	
\$ 19,018	\$	32,803	
\$	\$ 2,241 16,777	\$ 2,241 \$ 16,777	

Swaps designated as hedges, or a portion thereof, could become ineffective in the future if the associated repurchase agreements that such derivatives hedge fail to exist or if expected payments under the Swaps fail to adequately offset expected payments under

the repurchase agreements. At December 31, 2019, all of the Company's derivatives that were designated in a hedging relationship were deemed effective for hedging purposes.

The Company's Swaps designated as hedging transactions have the effect of modifying the repricing characteristics of the Company's repurchase agreements and cash flows for such liabilities. To date, no cost has been incurred at the inception of a Swap (except for certain transaction fees related to entering into Swaps cleared though a central clearing house), pursuant to which the Company agrees to pay a fixed rate of interest and receive a variable interest rate, generally based on one-month or three-month London Interbank Offered Rate ("LIBOR"), on the notional amount of the Swap. During the year ended December 31, 2019, the Company de-designated and re-designated any Swaps previously designated as a hedge in order to benefit from the simplified assessment requirements under ASU 2017-12. This de-designation and re-designation had no net impact on the Company's financial condition or results of operations.

At December 31, 2019, the Company had Swaps with an aggregate notional amount of \$3.2 billion and extended 16 months on average with a maximum term of approximately 47 months.

The following table presents information about the Company's Swaps at December 31, 2019 and 2018:

	December 31, 2019			December 31, 2018				
Maturity (1)	Notional Amount	Weighted Average Fixed-Pay Interest Rate	Weighted Average Variable Interest Rate (2)	Notional Amount	Weighted Average Fixed-Pay Interest Rate	Weighted Average Variable Interest Rate (2)		
(Dollars in Thousands)								
Within 30 days	\$ —	%	%	\$ —	%	%		
Over 30 days to 3 months		_	_	100,000	1.71	2.50		
Over 3 months to 6 months	200,000	2.05	1.70	100,000	1.71	2.50		
Over 6 months to 12 months	1,430,000	2.30	1.77	_	_	_		
Over 12 months to 24 months	1,300,000	2.11	1.86	1,630,000	2.27	2.50		
Over 24 months to 36 months	20,000	1.38	1.90	800,000	2.57	2.64		
Over 36 months to 48 months	222,000	2.88	1.84		_	_		
Over 48 months to 60 months		_		417,000	2.88	2.63		
Over 84 months	_	_	_	170,000	3.00	2.66		
Total Swaps	\$ 3,172,000	2.24%	1.81%	\$ 3,217,000	2.42%	2.56%		

- (1) Each maturity category reflects contractual amortization and/or maturity of notional amounts.
- (2) Reflects the benchmark variable rate due from the counterparty at the date presented, which rate adjusts monthly or quarterly based on one-month or three-month LIBOR, respectively.

The following table presents the net impact of the Company's derivative hedging instruments on its net interest expense and the weighted average interest rate paid and received for such Swaps for the years ended December 31, 2019, 2018 and 2017:

	For the Year Ended December 3					er 31,	
(Dollars in Thousands)		2019		2018		2017	
Interest expense attributable to Swaps	\$	927	\$	3,780	\$	24,524	
Weighted average Swap rate paid		2.28%		2.12%		1.98%	
Weighted average Swap rate received		2.24%		1.96%	ı	1.07%	

During the year ended December 31, 2019, the Company recorded net losses on Swaps not designated in hedging relationships of approximately \$16.5 million, which included \$17.7 million of losses realized on the unwind of certain Swaps. During the year ended December 31, 2018, the Company recorded net losses on Swaps not designated in hedging relationships of \$9.6 million. These amounts are included in Other income, net on the Company's consolidated statements of operations. All of the Company's Swaps were designated in hedging relationships during the year ended December 31, 2017.

Impact of Derivative Hedging Instruments on AOCI

The following table presents the impact of the Company's derivative hedging instruments on its AOCI for the years ended December 31, 2019, 2018 and 2017:

				For the Year Ended December 31,				
	2019		2018		2017			
\$	3,121	\$	(11,424)	\$	(46,721)			
	(23,342)		14,545		35,297			
	(2,454)				_			
\$	(22,675)	\$	3,121	\$	(11,424)			
	\$	\$ 3,121 (23,342) (2,454)	\$ 3,121 \$ (23,342)	\$ 3,121 \$ (11,424) (23,342) 14,545 (2,454) —	\$ 3,121 \$ (11,424) \$ (23,342) 14,545 (2,454) —			

6. Repurchase Agreements

The Company's repurchase agreements are accounted for as secured borrowings and bear interest that is generally LIBOR-based. (See Notes 2(j) and 7) At December 31, 2019, the Company's borrowings under repurchase agreements had a weighted average remaining term-to-interest rate reset of 40 days and an effective repricing period of 10 months, including the impact of related Swaps. At December 31, 2018, the Company's borrowings under repurchase agreements had a weighted average remaining term-to-interest rate reset of 31 days and an effective repricing period of 8 months, including the impact of related Swaps.

The following table presents information with respect to the Company's borrowings under repurchase agreements and associated assets pledged as collateral at December 31, 2019 and 2018:

(Dollars in Thousands)	December 31, 2019	December 31, 2018
Repurchase agreement borrowings secured by Agency MBS	\$ 1,557,675	\$ 2,384,357
Fair value of Agency MBS pledged as collateral under repurchase agreements	\$ 1,656,373	\$ 2,572,597
Weighted average haircut on Agency MBS (1)	4.46%	4.60%
Repurchase agreement borrowings secured by Legacy Non-Agency MBS	\$ 1,121,802	\$ 1,447,585
Fair value of Legacy Non-Agency MBS pledged as collateral under repurchase agreements	\$ 1,420,797	\$ 1,871,650
Weighted average haircut on Legacy Non-Agency MBS (1)	20.27%	21.38%
Repurchase agreement borrowings secured by RPL/NPL MBS	\$ 495,091	\$ 1,084,532
Fair value of RPL/NPL MBS pledged as collateral under repurchase agreements	\$ 635,005	\$ 1,377,250
Weighted average haircut on RPL/NPL MBS (1)	21.52%	21.31%
Repurchase agreements secured by CRT securities	\$ 203,569	\$ 391,586
Fair value of CRT securities pledged as collateral under repurchase agreements	\$ 252,175	\$ 480,315
Weighted average haircut on CRT securities (1)	18.84%	20.01%
Repurchase agreements secured by residential whole loans (2)	\$ 4,743,094	\$ 2,020,508
Fair value of residential whole loans pledged as collateral under repurchase agreements (3)(4)	\$ 5,986,267	\$ 2,441,931
Weighted average haircut on residential whole loans (1)	20.07%	16.55%
Repurchase agreements secured by MSR-related assets	\$ 962,515	\$ 474,127
Fair value of MSR-related assets pledged as collateral under repurchase agreements	\$ 1,217,002	\$ 611,807
Weighted average haircut on MSR-related assets (1)	21.18%	21.88%
Repurchase agreements secured by other interest-earning assets	\$ 57,198	\$ 76,419
Fair value of other interest-earning assets pledged as collateral under repurchase agreements	\$ 61,708	\$ 81,494
Weighted average haircut on other interest-earning assets (1)	22.01%	21.15%

⁽¹⁾ Haircut represents the percentage amount by which the collateral value is contractually required to exceed the loan amount.

In addition, the Company had cash pledged as collateral in connection with its repurchase agreements of \$25.2 million and \$6.7 million at December 31, 2019 and 2018, respectively.

⁽²⁾ Excludes \$1.1 million and \$27,000 of unamortized debt issuance costs at December 31, 2019 and 2018, respectively.

⁽³⁾ At December 31, 2019 and 2018, includes RPL/NPL MBS with an aggregate fair value of \$238.8 million and \$27.0 million, respectively, obtained in connection with the Company's loan securitization transactions that are eliminated in consolidation.

⁽⁴⁾ At December 31, 2019 and 2018, includes residential whole loans held at carrying value with an aggregate fair value of \$5.0 billion and \$1.7 billion and aggregate amortized cost of \$4.8 billion and \$1.6 billion, respectively and residential whole loans held at fair value with an aggregate fair value and amortized cost of \$794.7 million and \$738.6 million, respectively.

The following table presents repricing information about the Company's borrowings under repurchase agreements, which does not reflect the impact of associated derivative hedging instruments, at December 31, 2019 and 2018:

	December 31, 2019		December 31, 2018			
Time Until Interest Rate Reset		Balance	Weighted Average Interest Rate		Balance	Weighted Average Interest Rate
(Dollars in Thousands)						
Within 30 days	\$	4,472,120	2.55%	\$	6,747,166	3.35%
Over 30 days to 3 months		2,746,384	3.43		368,857	3.10
Over 3 months to 12 months		1,014,441	3.36		763,091	4.18
Over 12 months		907,999	3.44		_	_
Total repurchase agreements	\$	9,140,944	2.99%	\$	7,879,114	3.42%
Less debt issuance costs		1,123			27	
Total repurchase agreements less debt issuance costs	\$	9,139,821		\$	7,879,087	

The following table presents contractual maturity information about the Company's borrowings under repurchase agreements, all of which are accounted for as secured borrowings, at December 31, 2019, and does not reflect the impact of derivative contracts that hedge such repurchase agreements:

December 21 2010

	December 31, 2019						
Contractual Maturity	Ov	ernight	Within 30 Days	Over 30 Days to 3 Months	Over 3 Months to 12 Months	Over 12 months	Total
(Dollars in Thousands)							
Agency MBS	\$	_	\$ 1,557,675	\$ —	\$ —	\$ —	\$ 1,557,675
Legacy Non-Agency MBS		_	942,212	_	179,590	_	1,121,802
RPL/NPL MBS		_	495,091	_	_	_	495,091
CRT securities		_	203,569	_	_	_	203,569
Residential whole loans (1)		_	486,226	2,600,720	748,149	907,999	4,743,094
MSR-related assets		_	772,197	145,664	44,654	_	962,515
Other		_	15,150	_	42,048	_	57,198
Total (2)	\$		\$ 4,472,120	\$ 2,746,384	\$ 1,014,441	\$ 907,999	\$ 9,140,944
Weighted Average Interest Rate		<u>_%</u>	2.55%	3.43%	3.36%	3.44%	2.99%

⁽¹⁾ Repurchase agreement financings secured by residential whole loan collateral are disclosed based on the contractual maturity agreed with the respective counterparty. At December 31, 2019, \$2.4 billion of repurchase agreement financings are subject to termination, at the option of the lender, prior to the otherwise agreed contractual maturity following the conclusion of a properly advised notice period. Such notice periods currently range from one month to six months. In addition, such repurchase agreements are subject to periodic repricing during their terms.

Undrawn Financing Commitment

In connection with the financing of MSR-related assets, the Company has obtained a financing commitment of up to \$75.0 million, of which \$44.7 million was utilized and was outstanding as of December 31, 2019. The Company pays a commitment fee ranging from 0.125% to 0.5% of the undrawn amount, depending on the amount of financing utilized.

⁽²⁾ Excludes \$1.1 million of unamortized debt issuance costs at December 31, 2019.

The Company had repurchase agreement borrowings with 28 and 26 counterparties at December 31, 2019 and 2018, respectively. The following table presents information with respect to each counterparty under repurchase agreements for which the Company had greater than 5% of stockholders' equity at risk in the aggregate at December 31, 2019:

		December 31, 2019				
Counterparty	Counterparty Rating (I)	Amount at Risk (2)	Weighted Average Months to Maturity for Repurchase Agreements	Percent of Stockholders' Equity		
(Dollars in Thousands)						
Credit Suisse (3)	BBB+/Baa2/A-	\$ 414,987	2	12.3%		
Barclay's Bank	BBB/Aa3/A	393,391	2	11.6		
Goldman Sachs (4)	BBB+/A3/A	247,191	7	7.3		
Wells Fargo (5)	A+/Aa2/AA-	206,651	17	6.1		

- (1) As rated at December 31, 2019 by S&P, Moody's and Fitch, Inc., respectively. The counterparty rating presented is the lowest published for these entities.
- (2) The amount at risk reflects the difference between (a) the amount loaned to the Company through repurchase agreements, including interest payable, and (b) the cash and the fair value of the securities pledged by the Company as collateral, including accrued interest receivable on such securities.
- (3) Includes \$362.6 million at risk with Credit Suisse and \$52.4 million at risk with Credit Suisse Cayman.
- (4) Includes \$130.5 million at risk with Goldman Sachs Bank USA and \$116.7 million at risk with Goldman Sachs Lending Partners.
- (5) Includes \$199.8 million at risk with Wells Fargo Bank, NA and \$6.9 million at risk with Wells Fargo Securities LLC.

7. Collateral Positions

The Company pledges securities or cash as collateral to its counterparties pursuant to its borrowings under repurchase agreements and for initial margin payments on centrally cleared Swaps. In addition, the Company receives securities or cash as collateral pursuant to financing provided under reverse repurchase agreements. The Company exchanges collateral with its counterparties based on changes in the fair value, notional amount and term of the associated repurchase agreements and Swap contracts, as applicable. In connection with these margining practices, either the Company or its counterparty may be required to pledge cash or securities as collateral. When the Company's pledged collateral exceeds the required margin, the Company may initiate a reverse margin call, at which time the counterparty may either return the excess collateral or provide collateral to the Company in the form of cash or equivalent securities.

The Company's assets pledged as collateral are described in Notes 2(f) - Restricted Cash, 5(c) - Derivative Instruments and 6 - Repurchase Agreements. The total fair value of assets pledged as collateral with respect to the Company's borrowings under repurchase agreements and derivative hedging instruments was \$11.3 billion and \$9.5 billion at December 31, 2019 and 2018, respectively. An aggregate of \$57.2 million and \$33.1 million of accrued interest on those assets had also been pledged as of December 31, 2019 and 2018, respectively.

8. Offsetting Assets and Liabilities

Certain of the Company's repurchase agreement and derivative transactions are governed by underlying agreements that generally provide for a right of setoff in the event of default or in the event of a bankruptcy of either party to the transaction. In the Company's consolidated balance sheets, all balances associated with repurchase agreements are presented on a gross basis.

The fair value of financial instruments pledged against the Company's repurchase agreements was \$11.2 billion and \$9.4 billion at December 31, 2019 and 2018, respectively. Since January 2017, variation margin payments on the Company's cleared Swaps have been treated as a legal settlement of the exposure under the Swap contract. Previously such payments were treated as collateral pledged against the exposure under the related Swap contract. The effect of this change is to reduce what would have otherwise been reported as fair value of the Swap. The fair value of financial instruments pledged against the Company's Swaps was \$2.2 million and \$2.7 million at December 31, 2019 and 2018, respectively. In addition, cash that has been pledged as collateral against repurchase agreements and Swaps is reported as Restricted cash on the Company's consolidated balance sheets. (See Notes 2(f), 5(c) and 6)

9. Other Liabilities

The following table presents the components of the Company's Other liabilities at December 31, 2019 and 2018:

(In Thousands)	December 31, 2019		December 31, 2018	
Securitized debt (1)	\$	570,952	\$	684,420
Convertible Senior Notes		223,971		_
Senior Notes		96,862		96,816
Dividends and dividend equivalents payable		90,749		90,198
Accrued interest payable		18,238		16,280
Payable for unsettled residential whole loans purchases				211,129
Accrued expenses and other		42,819		26,296
Total Other Liabilities	\$	1,043,591	\$	1,125,139

⁽¹⁾ Securitized debt represents third-party liabilities of consolidated VIEs and excludes liabilities of the VIEs acquired by the Company that are eliminated in consolidation. The third-party beneficial interest holders in the VIEs have no recourse to the general credit of the Company. (See Notes 10 and 15 for further discussion.)

(a) Convertible Senior Notes

On June 3, 2019, the Company issued \$230.0 million in aggregate principal amount of its Convertible Senior Notes in an underwritten public offering, including an additional \$30.0 million issued pursuant to the exercise of the underwriters' option to purchase additional Convertible Senior Notes. The total net proceeds the Company received from the offering were approximately \$223.3 million, after deducting offering expenses and the underwriting discount. The Convertible Senior Notes bear interest at a fixed rate of 6.25% per year, paid semiannually on June 15 and December 15 of each year commencing December 15, 2019 and will mature on June 15, 2024, unless earlier converted, redeemed or repurchased in accordance with their terms. The Convertible Senior Notes are convertible at the option of the holders at any time until the close of business on the business day immediately preceding the maturity date into shares of the Company's common stock based on an initial conversion rate of 125.7387 shares of the Company's common stock for each \$1,000 principal amount of the Convertible Senior Notes, which is equivalent to an initial conversion price of approximately \$7.95 per share of common stock. The Convertible Senior Notes have an effective interest rate, including the impact of amortization to interest expense of debt issuance costs, of 6.94%. The Company does not have the right to redeem the Convertible Senior Notes prior to maturity, except to the extent necessary to preserve its status as a REIT, in which case the Company may redeem the Convertible Senior Notes, in whole or in part, at a redemption price equal to the principal amount redeemed plus accrued and unpaid interest.

The Convertible Senior Notes are the Company's senior unsecured obligations and are effectively junior to all of the Company's secured indebtedness, which includes the Company's repurchase agreements and other financing arrangements, to the extent of the value of the collateral securing such indebtedness and equal in right of payment to the Company's existing and future senior unsecured obligations, including the Senior Notes.

(b) Senior Notes

On April 11, 2012, the Company issued \$100.0 million in aggregate principal amount of its Senior Notes in an underwritten public offering. The total net proceeds the Company received from the offering of the Senior Notes were approximately \$96.6 million, after deducting offering expenses and the underwriting discount. The Senior Notes bear interest at a fixed rate of 8.00% per year, paid quarterly in arrears on January 15, April 15, July 15 and October 15 of each year and will mature on April 15, 2042. The Senior Notes have an effective interest rate, including the impact of amortization to interest expense of debt issuance costs, of 8.31%. The Company may redeem the Senior Notes, in whole or in part, at any time, at a redemption price equal to 100% of the principal amount redeemed plus accrued and unpaid interest.

The Senior Notes are the Company's senior unsecured obligations and are effectively junior to all of the Company's secured indebtedness, which includes the Company's repurchase agreements and other financing arrangements, to the extent of the value of the collateral securing such indebtedness and equal in right of payment to the Company's existing and future senior unsecured obligations, including the Convertible Senior Notes.

10. Commitments and Contingencies

(a) Lease Commitments

The Company pays monthly rent pursuant to three office leases. In November 2018, the Company amended the lease for its corporate headquarters in New York, New York, under the same terms and conditions, to extend the expiration date for the lease by up to one year, through June 30, 2021, with a mutual option to terminate in February 2021. For the year ended December 31, 2019, the Company recorded expense of approximately \$2.6 million in connection with the lease for its current corporate headquarters.

In addition, in November 2018, the Company executed a lease agreement on new office space in New York, New York. The Company plans to relocate its corporate headquarters to this new office space upon the substantial completion of the building. The lease term specified in the agreement is fifteen years with an option to renew for an additional five years. The Company's current estimate of annual lease rental expense under the new lease, excluding escalation charges which at this point are unknown, is approximately \$4.6 million. The Company currently expects to relocate to the space in the fourth fiscal quarter of 2020, but this timing, as well as when it is required to begin making payments and recognize rental and other expenses under the new lease, is dependent on when the space is actually available for use.

The Company recognized lease expense of \$2.7 million, \$2.7 million and \$2.7 million for the years ended December 31, 2019, 2018 and 2017, respectively, which is included in Other general and administrative expense within the consolidated statements of operations. At December 31, 2019, the contractual minimum rental payments (exclusive of possible rent escalation charges and normal recurring charges for maintenance, insurance and taxes) were as follows:

Year Ended December 31,		Minimum Rental Payments (1)		
(In Thousands)				
2020	\$	2,638		
2021		434		
2022		85		
2023		86		
2024		65		
Thereafter				
Total	\$	3,308		

⁽¹⁾ Table excludes amounts related to the lease agreement for new office space discussed above as the Company is not contractually obligated to make rental payments until fourteen months after a temporary certificate of occupancy is delivered to the landlord, which is currently expected to occur on or before October 2020.

(b) Representations and Warranties in Connection with Loan Securitization Transactions

In connection with the loan securitization transactions entered into by the Company, the Company has the obligation under certain circumstances to repurchase assets previously transferred to securitization vehicles upon breach of certain representations and warranties. As of December 31, 2019, the Company had no reserve established for repurchases of loans and was not aware of any material unsettled repurchase claims that would require the establishment of such a reserve. (See Note 15)

(c) Corporate Loans

The Company has participated in loans to provide financing to entities that originate loans and own MSRs, as well as certain other unencumbered assets owned by the borrower. Under the terms of the respective lending agreements, the Company has committed to lend \$150.0 million of which approximately \$109.5 million was drawn at December 31, 2019. (See Note 3)

(d) Rehabilitation Loan Commitments

At December 31, 2019, the Company had unfunded commitments of \$130.3 million in connection with its purchased Rehabilitation loans. (See Note 4)

11. Stockholders' Equity

(a) Preferred Stock

On April 15, 2013, the Company completed the issuance of 8.0 million shares of its 7.50% Series B Cumulative Redeemable Preferred Stock ("Series B Preferred Stock") with a par value of \$0.01 per share, and a liquidation preference of \$25.00 per share plus accrued and unpaid dividends, in an underwritten public offering. The Company's Series B Preferred Stock is entitled to receive a dividend at a rate of 7.50% per year on the \$25.00 liquidation preference before the Company's common stock is paid any dividends and is senior to the Company's common stock with respect to distributions upon liquidation, dissolution or winding up. Dividends on the Series B Preferred Stock are payable quarterly in arrears on or about March 31, June 30, September 30 and December 31 of each year. The Series B Preferred Stock is redeemable at \$25.00 per share plus accrued and unpaid dividends (whether or not authorized or declared) exclusively at the Company's option.

The Series B Preferred Stock generally does not have any voting rights, subject to an exception in the event the Company fails to pay dividends on such stock for six or more quarterly periods (whether or not consecutive). Under such circumstances, the Series B Preferred Stock will be entitled to vote to elect two additional directors to the Company's Board of Directors (the "Board"), until all unpaid dividends have been paid or declared and set apart for payment. In addition, certain material and adverse

changes to the terms of the Series B Preferred Stock cannot be made without the affirmative vote of holders of at least 66 2/3% of the outstanding shares of Series B Preferred Stock.

The following table presents cash dividends declared by the Company on its Series B Preferred Stock from January 1, 2017 through December 31, 2019:

Year	Declaration Date	Record Date	Payment Date	Dividend Per Share
2019	November 15, 2019	December 2, 2019	December 31, 2019	\$0.46875
	August 9, 2019	August 30, 2019	September 30, 2019	0.46875
	May 20, 2019	June 3, 2019	June 28, 2019	0.46875
	February 15, 2019	March 4, 2019	March 29, 2019	0.46875
2018	November 26, 2018	December 7, 2018	December 28, 2018	\$0.46875
	August 20, 2018	September 7, 2018	September 28, 2018	0.46875
	May 17, 2018	June 4, 2018	June 29, 2018	0.46875
	February 20, 2018	March 2, 2018	March 30, 2018	0.46875
2017	November 17, 2017	December 1, 2017	December 29, 2017	\$0.46875
	August 10, 2017	September 1, 2017	September 29, 2017	0.46875
	May 16, 2017	June 2, 2017	June 30, 2017	0.46875
	February 17, 2017	March 6, 2017	March 31, 2017	0.46875

(b) Dividends on Common Stock

The following table presents cash dividends declared by the Company on its common stock from January 1, 2017 through December 31, 2019:

Year	Declaration Date	Record Date	Payment Date	Dividend Per Share
2019	December 12, 2019	December 30, 2019	January 31, 2020	\$0.20 (1)
	September 12, 2019	September 30, 2019	October 31, 2019	0.20
	June 12, 2019	July 1, 2019	July 31, 2019	0.20
	March 6, 2019	March 29, 2019	April 30, 2019	0.20
2018	December 12, 2018	December 28, 2018	January 31, 2019	\$0.20
	September 13, 2018	October 1, 2018	October 31, 2018	0.20
	June 7, 2018	June 29, 2018	July 31, 2018	0.20
	March 7, 2018	March 29, 2018	April 30, 2018	0.20
2017	December 13, 2017	December 28, 2017	January 31, 2018	\$0.20
	September 14, 2017	September 28, 2017	October 31, 2017	0.20
	June 12, 2017	June 29, 2017	July 28, 2017	0.20
	March 8, 2017	March 29, 2017	April 28, 2017	0.20

⁽¹⁾ At December 31, 2019, the Company had accrued dividends and dividend equivalents payable of \$90.7 million related to the common stock dividend declared on December 12, 2019.

In general, the Company's common stock dividends have been characterized as ordinary income to its stockholders for income tax purposes. However, a portion of the Company's common stock dividends may, from time to time, be characterized as capital

gains or return of capital. For the years ended December 31, 2019, 2018 and 2017, the portions of the Company's common stock dividends that were deemed to be capital gains were \$0.1672, \$0.1290 and \$0.0831 per share of common stock, respectively.

(c) Public Offering of Common Stock

The Company did not issue any common stock through public offerings during the year ended December 31, 2019. The table below presents information with respect to shares of the Company's common stock issued through public offerings during the year ended December 31, 2018.

Share Issue Date	Shares Issued		ss Proceeds Per Share	Gross Proceeds
(In Thousands, Except Per Share Amounts)				
August 7, 2018	50,875	(1) \$	7.78	\$ 395,807 (1)

⁽¹⁾ Includes approximately 875,000 shares issued on September 5, 2018 pursuant to the exercise of the underwriters' option to purchase additional shares. The Company incurred approximately \$6.4 million of underwriting discounts and related expenses in connection with this equity offering.

(d) Discount Waiver, Direct Stock Purchase and Dividend Reinvestment Plan ("DRSPP")

On October 15, 2019, the Company filed a shelf registration statement on Form S-3 with the SEC under the Securities Act of 1933, as amended (the "1933 Act"), for the purpose of registering additional common stock for sale through its DRSPP. Pursuant to Rule 462(e) under the 1933 Act, this shelf registration statement became effective automatically upon filing with the SEC and, when combined with the unused portion of the Company's previous DRSPP shelf registration statements, registered an aggregate of 9.0 million shares of common stock. The Company's DRSPP is designed to provide existing stockholders and new investors with a convenient and economical way to purchase shares of common stock through the automatic reinvestment of dividends and/or optional cash investments. At December 31, 2019, approximately 8.9 million shares of common stock remained available for issuance pursuant to the DRSPP shelf registration statement.

During the years ended December 31, 2019, 2018 and 2017, the Company issued 322,888, 379,903 and 2,293,192 shares of common stock through the DRSPP, raising net proceeds of approximately \$2.4 million, \$2.8 million and \$18.5 million, respectively. From the inception of the DRSPP in September 2003 through December 31, 2019, the Company issued 34,378,768 shares pursuant to the DRSPP, raising net proceeds of \$286.6 million.

(e) At-the-Market Offering Program

On August 16, 2019 the Company entered into a distribution agreement under the terms of which the Company may offer and sell shares of its common stock having an aggregate gross sales price of up to \$400.0 million (the "ATM Shares"), from time to time, through various sales agents, pursuant to an at-the-market equity offering program (the "ATM Program"). Sales of the ATM Shares, if any, may be made in negotiated transactions or by transactions that are deemed to be "at-the-market" offerings, as defined in Rule 415 under the 1933 Act, including sales made directly on the New York Stock Exchange ("NYSE") or sales made to or through a market maker other than an exchange. The sales agents are entitled to compensation of up to two percent of the gross sales price per share for any shares of common stock sold under the distribution agreement.

During the year ended December 31, 2019, the Company sold 1,357,526 shares of common stock through the ATM Program at a weighted average price of \$7.40, raising proceeds of approximately \$9.9 million, net of fees and commissions paid to sales agents of approximately \$100,000. At December 31, 2019, approximately \$390.0 million remained outstanding for future offerings under this program.

(f) Stock Repurchase Program

As previously disclosed, in August 2005, the Company's Board authorized a stock repurchase program (the "Repurchase Program") to repurchase up to 4.0 million shares of its outstanding common stock. The Board reaffirmed such authorization in May 2010. In December 2013, the Board increased the number of shares authorized under the Repurchase Program to an aggregate of 10.0 million. Such authorization does not have an expiration date and, at present, there is no intention to modify or otherwise rescind such authorization. Subject to applicable securities laws, repurchases of common stock under the Repurchase Program

are made at times and in amounts as the Company deems appropriate (including, in our discretion, through the use of one or more plans adopted under Rule 10b5-1 promulgated under the Securities Exchange Act of 1934, as amended (the "1934 Act")) using available cash resources. Shares of common stock repurchased by the Company under the Repurchase Program are cancelled and, until reissued by the Company, are deemed to be authorized but unissued shares of the Company's common stock. The Repurchase Program may be suspended or discontinued by the Company at any time and without prior notice. The Company did not repurchase any shares of its common stock during the three years ended December 31, 2019. At December 31, 2019, 6,616,355 shares remained authorized for repurchase under the Repurchase Program.

(g) Accumulated Other Comprehensive Income/(Loss)

The following table presents changes in the balances of each component of the Company's AOCI for the years ended December 31, 2019, 2018 and 2017:

				For the Ye	ar Ended Dece	ember 31,				
	2019 2018 2									
(In Thousands)	Net Unrealized Gain/ (Loss) on AFS Securities	Net Gain/ (Loss) on Swaps	Total AOCI	Net Unrealized Gain/ (Loss) on AFS Securities	Net Gain/ (Loss) on Swaps	Total AOCI	Net Unrealized Gain/ (Loss) on AFS Securities	Net Gain/ (Loss) on Swaps	Total AOCI	
Balance at beginning of period	\$ 417,167	\$ 3,121	\$420,288	\$ 620,648	\$ (11,424)	\$609,224	\$ 620,403	\$ (46,721)	\$573,682	
OCI before reclassifications	20,335	(23,342)	(3,007)	(150,642)	14,545	(136,097)	39,984	35,297	75,281	
Amounts reclassified from AOCI (1)	(44,780)	(2,454)	(47,234)	(52,839)		(52,839)	(39,739)		(39,739)	
Net OCI during period (2)	(24,445)	(25,796)	(50,241)	(203,481)	14,545	(188,936)	245	35,297	35,542	
Balance at end of period	\$ 392,722	\$ (22,675)	\$370,047	\$ 417,167	\$ 3,121	\$420,288	\$ 620,648	\$ (11,424)	\$609,224	
	\$ 392,722	\$ (22,675)	\$370,047	\$ 417,167	\$ 3,121	\$420,288	\$ 620,648	\$ (11,424)	\$609,224	

⁽¹⁾ See separate table below for details about these reclassifications.

The following table presents information about the significant amounts reclassified out of the Company's AOCI for the years ended December 31, 2019, 2018, and 2017:

		For the	Year	Ended Decen	ıber	31,			
		2019		2018		2017			
Details about AOCI Components		Amoun	ts Re	classified fron	Affected Line Item in the Statement Where Net Income is Presented				
(In Thousands)									
AFS Securities:									
Realized gain on sale of securities	\$	(44,600)	\$	(51,580)	\$	(38,707)	Net realized gain on sales of residential mortgage securities		
OTTI recognized in earnings		(180)		(1,259)		(1,032)	Other, net		
Total AFS Securities	\$	(44,780)	\$	(52,839)	\$	(39,739)			
Swaps designated as cash flow hedges:									
Amortization of de-designated hedging instruments		(2,454)		_		_	Other, net		
Total Swaps designated as cash flow hedges	\$	(2,454)	\$		\$	_			
Total reclassifications for period	\$	(47,234)	\$	(52,839)	\$	(39,739)			

On securities for which OTTI had been recognized in prior periods, the Company did not have any unrealized losses recorded in OCI at December 31, 2019 and had \$224,000 of unrealized losses recorded in AOCI at December 31, 2018.

⁽²⁾ For further information regarding changes in OCI, see the Company's consolidated statements of comprehensive income/(loss).

12. EPS Calculation

The following table presents a reconciliation of the earnings and shares used in calculating basic and diluted EPS for the years ended December 31, 2019, 2018 and 2017:

	For the	Year	Ended Decer	nber	31,
(In Thousands, Except Per Share Amounts)	2019		2018		2017
Basic EPS:					
Net income to common stockholders	\$ 378,117	\$	301,801	\$	322,393
Dividends declared on preferred stock	(15,000)		(15,000)		(15,000)
Dividends, dividend equivalents and undistributed earnings allocated to participating securities	(1,087)		(943)		(891)
Net income to common stockholders - basic	\$ 362,030	\$	285,858	\$	306,502
Basic weighted average common shares outstanding	450,972		418,934		388,357
Basic EPS	\$ 0.80	\$	0.68	\$	0.79
Diluted EPS:					
Net income to common stockholders - basic	\$ 362,030	\$	285,858	\$	306,502
Interest expense on Convertible Senior Notes	8,965		_		_
Net income to common stockholders - diluted	\$ 370,995	\$	285,858	\$	306,502
Basic weighted average common shares outstanding	450,972		418,934		388,357
Effect of assumed Convertible Senior Notes conversion to common shares	16,797		_		_
Diluted weighted average common shares outstanding (1)	467,769		418,934		388,357
Diluted EPS	\$ 0.79	\$	0.68	\$	0.79

⁽¹⁾ At December 31, 2019, the Company had approximately 3.3 million equity instruments outstanding that were not included in the calculation of diluted EPS for the year ended December 31, 2019, as their inclusion would have been anti-dilutive. These equity instruments reflect RSUs (based on current estimate of expected share settlement amount) with a weighted average grant date fair value of \$7.24. These equity instruments may have a dilutive impact on future EPS.

During the year ended December 31, 2019, the Convertible Senior Notes were determined to be dilutive and were included in the calculation of diluted EPS under the "if-converted" method. Under this method, the periodic interest expense for dilutive notes is added back to the numerator and the weighted average number of shares that the notes are entitled to (if converted, regardless of whether the conversion option is in or out of the money) is included in the denominator for the purpose of calculating diluted EPS.

13. Equity Compensation, Employment Agreements and Other Benefit Plans

(a) Equity Compensation Plan

In accordance with the terms of the Company's Equity Compensation Plan (the "Equity Plan"), which was adopted by the Company's stockholders on May 21, 2015 (and which amended and restated the Company's 2010 Equity Compensation Plan), directors, officers and employees of the Company and any of its subsidiaries and other persons expected to provide significant services for the Company and any of its subsidiaries are eligible to receive grants of stock options ("Options"), restricted stock, RSUs, dividend equivalent rights and other stock-based awards under the Equity Plan.

Subject to certain exceptions, stock-based awards relating to a maximum of 12.0 million shares of common stock may be granted under the Equity Plan; forfeitures and/or awards that expire unexercised do not count toward this limit. At December 31, 2019, approximately 3.4 million shares of common stock remained available for grant in connection with stock-based awards under the Equity Plan. A participant may generally not receive stock-based awards in excess of 1.5 million shares of common stock in any one year and no award may be granted to any person who, assuming exercise of all Options and payment of all awards held by such person, would own or be deemed to own more than 9.8% of the outstanding shares of the Company's common stock. Unless previously terminated by the Board, awards may be granted under the Equity Plan until May 20, 2025.

Restricted Stock Units

Under the terms of the Equity Plan, RSUs are instruments that provide the holder with the right to receive, subject to the satisfaction of conditions set by the Compensation Committee of the Board (the "Compensation Committee") at the time of grant, a payment of a specified value, which may be a share of the Company's common stock, the fair market value of a share of the Company's common stock, or such fair market value to the extent in excess of an established base value, on the applicable settlement date. Although the Equity Plan permits the Company to issue RSUs that can settle in cash, all of the Company's outstanding RSUs as of December 31, 2019 are designated to be settled in shares of the Company's common stock. All RSUs outstanding at December 31, 2019 may be entitled to receive dividend equivalent payments depending on the terms and conditions of the award either in cash at the time dividends are paid by the Company, or for certain performance-based RSU awards, as a grant of stock at the time such awards are settled. At December 31, 2019 and 2018, the Company had unrecognized compensation expense of \$5.5 million and \$5.2 million, respectively, related to RSUs. The unrecognized compensation expense at December 31, 2019 is expected to be recognized over a weighted average period of 1.7 years.

The following table presents information with respect to the Company's RSUs during the years ended December 31, 2019, 2018 and 2017:

				For the Year Ended	Decem	ber 31, 201	9			
	RSUs With Service Condition	A Gr	eighted verage ant Date ir Value	RSUs With Market and Service Conditions	Av Gra	eighted verage ant Date r Value	Total RSUs		We Av Gra	Total eighted verage int Date r Value
Outstanding at beginning of year:	1,206,446	\$	7.57	1,151,250	\$	6.21	2,357,69	96	\$	6.90
Granted (1)	461,525		7.35	451,000		6.97	912,52	25		7.16
Settled	(269,290)		6.93	(290,000)		4.81	(559,29	90)		5.83
Cancelled/forfeited	(19,000)		7.72	(11,000)		6.71	(30,00	00)		7.35
Outstanding at end of year	1,379,681	\$	7.62	1,301,250	\$	6.78	2,680,93	31	\$	7.21
RSUs vested but not settled at end of year	809,681	\$	7.70	441,250	\$	6.48	1,250,93	31	\$	7.27
RSUs unvested at end of year	570,000	\$	7.50	860,000	\$	6.94	1,430,00	00	\$	7.16

		F	or the Year Ended	December 31, 2018		
	RSUs With Service Condition	Weighted Average Grant Date Fair Value	RSUs With Market and Service Conditions	Weighted Average Grant Date Fair Value	Total RSUs	Total Weighted Average Grant Date Fair Value
Outstanding at beginning of year:	1,025,028	\$ 7.67	1,021,250	\$ 5.80	2,046,278	\$ 6.73
Granted (2)	428,802	7.65	415,000	6.91	843,802	7.29
Settled	(237,384)	8.17	(275,000)	5.73	(512,384)	6.86
Cancelled/forfeited	(10,000)	7.23	(10,000)	5.64	(20,000)	6.44
Outstanding at end of year	1,206,446	\$ 7.57	1,151,250	\$ 6.21	2,357,696	\$ 6.90
RSUs vested but not settled at end of year	708,946	\$ 7.47	290,000	\$ 4.81	998,946	\$ 6.70
RSUs unvested at end of year	497,500	\$ 7.71	861,250	\$ 6.69	1,358,750	\$ 7.06

For the Year Ended December 31, 2017

	RSUs With Service Condition	Av Gra	ighted erage nt Date r Value	RSUs With Market and Service Conditions	Av Gra	eighted verage int Date r Value		Total RSUs	G	Total Veighted Average rant Dat air Value
Outstanding at beginning of year:	1,194,299	\$	7.38	863,800	\$	5.45		2,058,099	\$	6.5
Granted (3)	447,695		7.96	451,250		6.48		898,945		7.22
Settled	(616,966)		7.32	(293,800)		5.83		(910,766)		6.84
Cancelled/forfeited	_		_							_
Outstanding at end of year	1,025,028	\$	7.67	1,021,250	\$	5.80		2,046,278	\$	6.73
RSUs vested but not settled at end of year	586,419	\$	7.98	275,000	\$	5.73		861,419	\$	7.20
RSUs unvested at end of year	438,609	\$	7.25	746,250	\$	5.82	_	1,184,859	\$	6.3

- (1) The weighted average grant date fair value of these awards require the Company to estimate certain valuation inputs. In determining the fair value for 752,500 of these awards granted in 2019, the Company applied: (i) a weighted average volatility estimate of approximately 15%, which was determined considering historic volatility in the price of the Company's and its peer group companies' common stock over the three-year period prior to the grant date and the implied volatility of certain exchange-traded options on the Company's and peer group companies' common stock at the grant date; and (ii) a weighted average risk-free rate of 2.47% based on the continuously compounded constant maturity treasury rate corresponding to a maturity commensurate with the expected vesting term of the awards. The weighted average grant date fair value for the remaining 160,025 awards with a service condition only was estimated based on the closing price of the Company's common stock at the grant date of \$7.28. There are no post vesting conditions on these awards.
- (2) The weighted average grant date fair value of these awards require the Company to estimate certain valuation inputs. In determining the fair value for 692,500 of these awards granted in 2018, the Company applied: (i) a weighted average volatility estimate of approximately 17%, which was determined considering historic volatility in the price of the Company's and its peer group companies' common stock over the three-year period prior to the grant date and the implied volatility of certain exchange-traded options on the Company's and peer group companies' common stock at the grant date; and (ii) a weighted average risk-free rate of 2.36% based on the continuously compounded constant maturity treasury rate corresponding to a maturity commensurate with the expected vesting term of the awards. The weighted average grant date fair value for the remaining 151,302 awards with a service condition only was estimated based on the closing price of the Company's common stock at the grant date of \$7.70. There are no post vesting conditions on these awards.
- (3) The weighted average grant date fair value of these awards require the Company to estimate certain valuation inputs. In determining the fair value for 758,750 of these awards granted in 2017, the Company applied: (i) a weighted average volatility estimate of approximately 15%, which was determined considering historic volatility in the price of Company's and its peer group companies' common stock over the three-year period prior to the grant date and the implied volatility of certain exchange-traded options on the Company's and peer group companies' common stock at the grant date; and (ii) a weighted average risk-free rate of 1.46% based on the continuously compounded constant maturity treasury rate corresponding to a maturity commensurate with the expected vesting term of the awards. The weighted average grant date fair value for the remaining 140,195 awards with a service condition only was estimated based on the closing price of the Company's common stock at the grant date of \$8.31. There are no post vesting conditions on these awards.

Restricted Stock

At December 31, 2019 and 2018, the Company did not have any unvested shares of restricted common stock outstanding. The total fair value of restricted shares vested during the years ended December 31, 2019, 2018 and 2017 was approximately \$3.2 million, \$3.0 million and \$2.0 million, respectively.

The following table presents information with respect to the Company's restricted stock for the years ended December 31, 2019, 2018 and 2017:

				For the Year Ende	d Decem	oer 31,					
	201	9		201	8		201	2017			
	Shares of Restricted Stock	Weighted Average Grant Date Fair Value (1)		Shares of Restricted Stock	Weighted Average Grant Date Fair Value <i>(1)</i>		Shares of Restricted Stock	A Gra	eighted verage ant Date Value (1)		
Outstanding at beginning of year:	_	\$		_	\$		28,968	\$	7.12		
Granted	412,185		7.83	450,193		6.74	214,859		8.06		
Vested (2)	(412,185)		7.83	(450,193)		6.74	(243,827)		7.95		
Cancelled/forfeited						_	_				
Outstanding at end of year		\$			\$			\$			

- (1) The grant date fair value of restricted stock awards is based on the closing market price of the Company's common stock at the grant date.
- (2) All restrictions associated with restricted stock are removed on vesting.

Dividend Equivalents

A dividend equivalent is a right to receive a distribution equal to the dividend distributions that would be paid on a share of the Company's common stock. Dividend equivalents may be granted as a separate instrument or may be a right associated with the grant of another award (e.g., an RSU) under the Equity Plan, and they are paid in cash or other consideration at such times and in accordance with such rules, as the Compensation Committee of the Board shall determine in its discretion. Payments made on the Company's outstanding dividend equivalent rights are generally are charged to Stockholders' Equity when common stock dividends are declared to the extent that such equivalents are expected to vest. The Company did not make any payments in respect of such instruments during the years ended December 31, 2019, 2018 and 2017. In addition, no dividend equivalents rights awarded as separate instruments were granted during the years ended December 31, 2019, 2018 and 2017.

Expense Recognized for Equity-Based Compensation Instruments

The following table presents the Company's expenses related to its equity-based compensation instruments for the years ended December 31, 2019, 2018 and 2017:

	 For the Year Ended December 31,									
(In Thousands)	2019	2018 2017			2017					
RSUs (1)	\$ 6,012	\$	4,974	\$	6,098					
Restricted shares of common stock	3,227		3,033		1,935					
Total	\$ 9,239	\$	8,007	\$	8,033					

(1) Equity-based compensation for the year ended December 31, 2017 includes a one-time expense of approximately \$900,000 for the accelerated vesting of certain time-based equity awards arising from the death of the Company's former Chief Executive Officer.

(b) Employment Agreements

At December 31, 2019, the Company had employment agreements with four of its officers, with varying terms that provide for, among other things, base salary, bonus and change-in-control payments upon the occurrence of certain triggering events.

(c) Deferred Compensation Plans

The Company administers deferred compensation plans for its senior officers and non-employee directors (collectively, the "Deferred Plans"), pursuant to which participants may elect to defer up to 100% of certain cash compensation. The Deferred Plans are designed to align participants' interests with those of the Company's stockholders.

Amounts deferred under the Deferred Plans are considered to be converted into "stock units" of the Company. Stock units do not represent stock of the Company, but rather are a liability of the Company that changes in value as would equivalent shares of the Company's common stock. Deferred compensation liabilities are settled in cash at the termination of the deferral period, based on the value of the stock units at that time. The Deferred Plans are non-qualified plans under the Employee Retirement Income Security Act of 1974 and, as such, are not funded. Prior to the time that the deferred accounts are settled, participants are unsecured creditors of the Company.

The Company's liability for stock units in the Deferred Plans is based on the market price of the Company's common stock at the measurement date. The following table presents the Company's expenses related to its Deferred Plans for the years ended December 31, 2019, 2018 and 2017:

	For the Year Ended December 31,								
(In Thousands)		2019		2018		2017			
Non-employee directors	\$	663	\$	(165)	\$	171			
Total	\$	663	\$	(165)	\$	171			

The Company distributed cash of \$568,900 and \$123,700 to the participants of the Deferred Plans during the years ended December 31, 2019 and 2018, respectively. The Company did not distribute cash to the participants of the Deferred Plans during the year ended December 31, 2017. The following table presents the aggregate amount of income deferred by participants of the Deferred Plans through December 31, 2019 and 2018 that had not been distributed and the Company's associated liability for such deferrals at December 31, 2019 and 2018:

	December 31, 2019				December 31, 2018				
(In Thousands)	Undistributed Income Deferred (1)			Liability Under Deferred Plans		listributed Income ferred <i>(1)</i>	Liability Under Deferred Plans		
Non-employee directors	\$	2,349	\$	3,071	\$	2,263	\$	2,417	
Total	\$ 2,349		2,349 \$ 3,071		\$ 3,071 \$ 2,263		\$ 2,41		

⁽¹⁾ Represents the cumulative amounts that were deferred by participants through December 31, 2019 and 2018, which had not been distributed through such respective date.

(d) Savings Plan

The Company sponsors a tax-qualified employee savings plan (the "Savings Plan") in accordance with Section 401(k) of the Code. Subject to certain restrictions, all of the Company's employees are eligible to make tax-deferred contributions to the Savings Plan subject to limitations under applicable law. Participant's accounts are self-directed and the Company bears the costs of administering the Savings Plan. The Company matches 100% of the first 3% of eligible compensation deferred by employees and 50% of the next 2%, subject to a maximum as provided by the Code. The Company has elected to operate the Savings Plan under the applicable safe harbor provisions of the Code, whereby among other things, the Company must make contributions for all participating employees and all matches contributed by the Company immediately vest 100%. For the years ended December 31, 2019, 2018 and 2017, the Company recognized expenses for matching contributions of \$503,500, \$371,000 and \$363,000, respectively.

14. Fair Value of Financial Instruments

GAAP requires the categorization of fair value measurements into three broad levels that form a hierarchy. A financial instrument's categorization within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement. The three levels of valuation hierarchy are defined as follows:

Level 1 — Inputs to the valuation methodology are quoted prices (unadjusted) for identical assets or liabilities in active markets.

Level 2 — Inputs to the valuation methodology include quoted prices for similar assets and liabilities in active markets, and inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instrument.

Level 3 — Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The following describes the valuation methodologies used for the Company's financial instruments measured at fair value on a recurring basis, as well as the general classification of such instruments pursuant to the valuation hierarchy.

Residential Mortgage Securities

The Company determines the fair value of its Agency MBS based upon prices obtained from third-party pricing services, which are indicative of market activity, and repurchase agreement counterparties.

For Agency MBS, the valuation methodology of the Company's third-party pricing services incorporate commonly used market pricing methods, trading activity observed in the marketplace and other data inputs. The methodology also considers the underlying characteristics of each security, which are also observable inputs, including: collateral vintage, coupon, maturity date, loan age, reset date, collateral type, periodic and life cap, geography, and prepayment speeds. Management analyzes pricing data received from third-party pricing services and compares it to other indications of fair value including data received from repurchase agreement counterparties and its own observations of trading activity observed in the marketplace.

In determining the fair value of the Company's Non-Agency MBS and CRT securities, management considers a number of observable market data points, including prices obtained from pricing services and brokers as well as dialogue with market participants. In valuing Non-Agency MBS, the Company understands that pricing services use observable inputs that include, in addition to trading activity observed in the marketplace, loan delinquency data, credit enhancement levels and vintage, which are taken into account to assign pricing factors such as spread and prepayment assumptions. For tranches of Legacy Non-Agency MBS that are cross-collateralized, performance of all collateral groups involved in the tranche are considered. The Company collects and considers current market intelligence on all major markets, including benchmark security evaluations and bid-lists from various sources, when available.

The Company's Legacy Non-Agency MBS, RPL/NPL MBS and CRT securities are valued using various market data points as described above, which management considers directly or indirectly observable parameters. Accordingly, these securities are classified as Level 2 in the fair value hierarchy.

Residential Whole Loans, at Fair Value

The Company determines the fair value of its residential whole loans held at fair value after considering valuations obtained from a third-party that specializes in providing valuations of residential mortgage loans. The valuation approach applied generally depends on whether the loan is considered performing or non-performing at the date the valuation is performed. For performing loans, estimates of fair value are derived using a discounted cash flow approach, where estimates of cash flows are determined from the scheduled payments, adjusted using forecasted prepayment, default and loss given default rates. For non-performing loans, asset liquidation cash flows are derived based on the estimated time to liquidate the loan, the estimated value of the collateral, expected costs and estimated home price appreciation. Estimated cash flows for both performing and non-performing loans are discounted at yields considered appropriate to arrive at a reasonable exit price for the asset. Indications of loan value such as actual trades, bids, offers and generic market color may be used in determining the appropriate discount yield. The Company's residential whole loans held at fair value are classified as Level 3 in the fair value hierarchy.

Term Notes Backed by MSR-Related Collateral

The Company's valuation process for term notes backed by MSR-related collateral is similar to that used for residential mortgage securities and considers a number of observable market data points, including prices obtained from pricing services, brokers and repurchase agreement counterparties, dialogue with market participants, as well as management's observations of market activity. Other factors taken into consideration include estimated changes in fair value of the related underlying MSR collateral and, as applicable, the financial performance of the ultimate parent or sponsoring entity of the issuer, which has provided

a guarantee that is intended to provide for payment of interest and principal to the holders of the term notes should cash flows generated by the related underlying MSR collateral be insufficient. Following a re-evaluation during the third quarter of 2019 of the observability of the data used in its fair value estimation process, the Company determined that it was appropriate to reclassify these assets to Level 2 in the fair value hierarchy as of the end of the third quarter of 2019.

Swaps

All of the Company's Swaps are cleared by a central clearing house. Valuations provided by the clearing house are used for purposes of determining the fair value of the Company's Swaps. Such valuations obtained are tested with internally developed models that apply readily observable market parameters. As the Company's Swaps are subject to the clearing house's margin requirements, no credit valuation adjustment was considered necessary in determining the fair value of such instruments. Since January 2017, variation margin payments on the Company's cleared Swaps have been treated as a legal settlement of the exposure under the related Swap contract. Previously such payments were treated as collateral pledged against the exposure under the related Swap contract. The effect of this change is to reduce what would have otherwise been reported as the fair value of the Swap. Swaps are classified as Level 2 in the fair value hierarchy.

Changes to the valuation methodologies used with respect to the Company's financial instruments are reviewed by management to ensure any such changes result in appropriate exit price valuations. The Company will refine its valuation methodologies as markets and products develop and pricing methodologies evolve. The methods described above may produce fair value estimates that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while the Company believes its valuation methods are appropriate and consistent with those used by market participants, the use of different methodologies, or assumptions, to determine the fair value of certain financial instruments could result in a different estimate of fair value at the reporting date. The Company uses inputs that are current as of the measurement date, which may include periods of market dislocation, during which price transparency may be reduced. The Company reviews the classification of its financial instruments within the fair value hierarchy on a quarterly basis, and management may conclude that its financial instruments should be reclassified to a different level in the future.

The following tables present the Company's financial instruments carried at fair value on a recurring basis as of December 31, 2019 and 2018, on the consolidated balance sheets by the valuation hierarchy, as previously described:

Fair Value at December 31, 2019

(In Thousands)	Level 1	evel 1 Level 2			Level 3		Total	
Assets:								
Agency MBS	\$ _	\$	1,664,582	\$	_	\$	1,664,582	
Non-Agency MBS	_		2,063,529		_		2,063,529	
CRT securities	_		255,408		_		255,408	
Residential whole loans, at fair value	_		_		1,381,583		1,381,583	
Term notes backed by MSR-related collateral	_		1,157,463		_		1,157,463	
Total assets carried at fair value	\$ 	\$	5,140,982	\$	1,381,583	\$	6,522,565	

Fair Value at December 31, 2018

(In Thousands)	Level 1 Level 2			Level 3		Total	
Assets:							
Agency MBS	\$	_	\$	2,698,213	\$ _	\$	2,698,213
Non-Agency MBS		_		3,318,299	_		3,318,299
CRT securities		_		492,821	_		492,821
Residential whole loans, at fair value		_		_	1,665,978		1,665,978
Term notes backed by MSR-related collateral		_		_	538,499		538,499
Total assets carried at fair value	\$	_	\$	6,509,333	\$ 2,204,477	\$	8,713,810

Changes in Level 3 Assets Measured at Fair Value on a Recurring Basis

The following table presents additional information for the years ended December 31, 2019 and 2018 about the Company's Residential whole loans, at fair value, which are classified as Level 3 and measured at fair value on a recurring basis:

	R	Residential Whole Loans, at Fair Value						
	For the Year Ended December 31,							
(In Thousands)		2019	2018 (1)					
Balance at beginning of period	\$	1,471,263	\$	1,325,115				
Purchases and capitalized advances (2)		234,979		500,004				
Changes in fair value recorded in Net gain on residential whole loans measured at fair value through earnings		47,848		36,725				
Collection of principal, net of liquidation gains/(losses)		(152,011)		(199,203)				
Repurchases		(1,337)		(1,807)				
Transfer to REO		(219,159)		(189,571)				
Balance at end of period	\$	1,381,583	\$	1,471,263				

- (1) Excluded from the table above are approximately \$194.7 million of residential whole loans held at fair value for which the closing of the purchase transaction had not occurred as of December 31, 2018.
- (2) Included in the activity presented for the year ended December 31, 2019 is an adjustment of \$70.6 million for loans the Company committed to purchase during the year ended December 31, 2018, but for which the closing of the purchase transaction occurred during the three months ended March 31, 2019. The adjustment was required following the finalization of due diligence performed prior to the closing of the purchase transaction and resulted in a downward revision to the prior estimate of the loan purchase amount.

The following table presents additional information for the years ended December 31, 2019 and 2018 about the Company's investments in term notes backed by MSR-related collateral, which were classified as Level 3 prior to September 30, 2019 and measured at fair value on a recurring basis:

	Ter	Term Notes Backed by MSR-Related Collateral							
		Year Ended	December 31,						
(In Thousands)		2019	2018						
Balance at beginning of period	\$	538,499	\$	381,804					
Purchases		573,137		548,404					
Collection of principal		(12,897)		(390,898)					
Changes in unrealized gain/(losses)		5,391		(811)					
Transfer to Level 2		(1,104,130)		_					
Balance at end of period	\$		\$	538,499					

The Company did not transfer any assets or liabilities from one level to another during the year ended December 31, 2018.

Fair Value Methodology for Level 3 Financial Instruments

Residential Whole Loans, at Fair Value

The following tables present a summary of quantitative information about the significant unobservable inputs used in the fair value measurement of the Company's residential whole loans held at fair value for which it has utilized Level 3 inputs to determine fair value as of December 31, 2019 and 2018:

December 31, 2019

(Dollars in Thousands)	Fair Value (1) Valuation Technique		Unobservable Input	Weigl Averag		Range	
Residential whole loans, at fair value	\$	829,842	Discounted cash flow	Discount rate		4.2%	3.8-8.0%
				Prepayment rate		4.5%	0.7-18.0%
				Default rate		4.0%	0.0-23.0%
				Loss severity		12.9%	0.0-100.0%
	\$	551,271	Liquidation model	Discount rate		8.0%	6.2-50.0%
				Annual change in home prices		3.7%	2.4-8.0%
				Liquidation timeline (in years)		1.8	0.1-4.5
				Current value of underlying properties (3)	\$	684	\$10-\$4,500
Total	\$	1,381,113					

December 31, 2018

	200000000000000000000000000000000000000								
(Dollars in Thousands)	Fair Value (1) Valuation Technique		Fair Value (1)		Valuation Technique	Unobservable Input	Weighted Average (2)	Range	
Residential whole loans, at fair value	\$	700,250	Discounted cash flow	Discount rate	5.2%	4.5-8.0%			
				Prepayment rate	4.8%	0.9-15.9%			
				Default rate	4.1%	0.0-24.1%			
				Loss severity	12.9%	0.0-100.0%			
	\$	683,252	Liquidation model	Discount rate	8.0%	6.1-50.0%			
				Annual change in home prices	3.5%	(0.5)-12.2%			
				Liquidation timeline (in years)	1.8	0.1-4.5			
				Current value of underlying properties (3)	\$ 802	\$2-\$7,950			
Total	\$	1,383,502							

⁽¹⁾ Excludes approximately \$470,000 and \$282.5 million of loans for which management considers the purchase price continues to reflect the fair value of such loans at December 31, 2019 and 2018, respectively.

⁽²⁾ Amounts are weighted based on the fair value of the underlying loan.

⁽³⁾ The simple average value of the properties underlying residential whole loans held at fair value valued via a liquidation model was approximately \$365,000 and \$400,000 as of December 31, 2019 and 2018, respectively.

Changes in market conditions, as well as changes in the assumptions or methodology used to determine fair value, could result in a significant increase or decrease in the fair value of residential whole loans. Loans valued using a discounted cash flow model are most sensitive to changes in the discount rate assumption, while loans valued using the liquidation model technique are most sensitive to changes in the current value of the underlying properties and the liquidation timeline. Increases in discount rates, default rates, loss severities, or liquidation timelines, either in isolation or collectively, would generally result in a lower fair value measurement, whereas increases in the current or expected value of the underlying properties, in isolation, would result in a higher fair value measurement. In practice, changes in valuation assumptions may not occur in isolation and the changes in any particular assumption may result in changes in other assumptions, which could offset or amplify the impact on the overall valuation.

The following table presents the carrying values and estimated fair values of the Company's financial instruments at December 31, 2019 and 2018:

	Level in Fair	Decembe	r 31, 2019	December 31, 2018				
(In Thousands)	Value Hierarchy	Carrying Value	Estimated Fair Value	Carrying Value	Estimated Fair Value			
Financial Assets:		-						
Agency MBS	2	\$ 1,664,582	\$ 1,664,582	\$ 2,698,213	\$ 2,698,213			
Non-Agency MBS	2	2,063,529	2,063,529	3,318,299	3,318,299			
CRT securities	2	255,408	255,408	492,821	492,821			
Residential whole loans, at carrying value	3	6,066,345	6,248,745	3,016,715	3,104,401			
Residential whole loans, at fair value	3	1,381,583	1,381,583	1,665,978	1,665,978			
MSR-related assets (1)	2 and 3	1,217,002	1,217,002	611,807	611,807			
Cash and cash equivalents	1	70,629	70,629	51,965	51,965			
Restricted cash	1	64,035	64,035	36,744	36,744			
Financial Liabilities (2):								
Repurchase agreements	2	9,139,821	9,156,209	7,879,087	7,896,672			
Securitized debt	2	570,952	575,353	684,420	680,209			
Convertible Senior Notes	2	223,971	244,088					
Senior Notes	1	96,862	103,231	96,816	99,951			

⁽¹⁾ Includes \$59.5 million of MSR-related assets that are measured at fair value on a non-recurring basis that are classified as Level 3 in the fair value hierarchy.

Other Assets Measured at Fair Value on a Nonrecurring Basis

The Company holds REO at the lower of the current carrying amount or fair value less estimated selling costs. During the years ended December 31, 2019 and 2018, the Company recorded REO with an aggregate estimated fair value, less estimated cost to sell, of \$257.7 million and \$215.0 million, respectively, at the time of foreclosure. The Company classifies fair value measurements of REO as Level 3 in the fair value hierarchy.

15. Use of Special Purpose Entities and Variable Interest Entities

A Special Purpose Entity ("SPE") is an entity designed to fulfill a specific limited need of the company that organized it. SPEs are often used to facilitate transactions that involve securitizing financial assets or resecuritizing previously securitized financial assets. The objective of such transactions may include obtaining non-recourse financing, obtaining liquidity or refinancing the underlying financial assets on improved terms. Securitization involves transferring assets to a SPE to convert all or a portion of those assets into cash before they would have been realized in the normal course of business, through the SPE's issuance of debt or equity instruments. Investors in a SPE usually have recourse only to the assets in the SPE and, depending on the overall structure of the transaction, may benefit from various forms of credit enhancement such as over-collateralization in the form of excess assets in the SPE, priority with respect to receipt of cash flows relative to holders of other debt or equity instruments issued

⁽²⁾ Carrying value of securitized debt, Convertible Senior Notes, Senior Notes and certain repurchase agreements is net of associated debt issuance costs.

by the SPE, or a line of credit or other form of liquidity agreement that is designed with the objective of ensuring that investors receive principal and/or interest cash flow on the investment in accordance with the terms of their investment agreement.

The Company has entered into several financing transactions that resulted in the Company consolidating as VIEs the SPEs that were created to facilitate these transactions. See Note 2(q) for a discussion of the accounting policies applied to the consolidation of VIEs and transfers of financial assets in connection with financing transactions.

The Company has engaged in loan securitizations primarily for the purpose of obtaining improved overall financing terms as well as non-recourse financing on a portion of its residential whole loan portfolio. Notwithstanding the Company's participation in these transactions, the risks facing the Company are largely unchanged as the Company remains economically exposed to the first loss position on the underlying assets transferred to the VIEs.

The following table summarizes the key details of the Company's loan securitization transactions as of December 31, 2019 and 2018:

(Dollars in Thousands)	D	ecember 2019	December 2018				
Aggregate unpaid principal balance of residential whole loans sold	\$	1,290,029	\$	1,290,029			
Face amount of Senior Bonds issued by the VIE and purchased by third-party investors	\$	802,817	\$	802,817			
Outstanding amount of Senior Bonds	\$	570,952 (7) \$	684,420 (1)			
Weighted average fixed rate for Senior Bonds issued		3.68% (2)	3.66% (2)			
Weighted average contractual maturity of Senior Bonds		30 years (2)	31 years <i>(2)</i>			
Face amount of Senior Support Certificates received by the Company (3)	\$	275,174	\$	275,174			
Cash received	\$	802,815	\$	802,815			

- (1) Net of \$2.9 million and \$3.8 million of deferred financing costs at December 31, 2019 and 2018, respectively.
- (2) At December 31, 2019 and 2018, \$493.2 million and \$582.8 million, respectively, of Senior Bonds sold in securitization transactions contained a contractual coupon step-up feature whereby the coupon increases by 300 basis points at 36 months from issuance if the bond is not redeemed before such date.
- (3) Provides credit support to the Senior Bonds sold to third-party investors in the securitization transactions.

As of December 31, 2019 and 2018, as a result of the transactions described above, securitized loans with a carrying value of approximately \$186.4 million and \$209.4 million are included in "Residential whole loans, at carrying value," securitized loans with a fair value of approximately \$567.4 million and \$694.7 million are included in "Residential whole loans, at fair value," and REO with a carrying value of approximately \$137.8 million and \$79.0 million are included in "Other assets" on the Company's consolidated balance sheets, respectively. As of December 31, 2019 and 2018, the aggregate carrying value of Senior Bonds issued by consolidated VIEs was \$571.0 million and \$684.4 million, respectively. These Senior Bonds are disclosed as "Securitized debt" and are included in Other liabilities on the Company's consolidated balance sheets. The holders of the securitized debt have no recourse to the general credit of the Company, but the Company does have the obligation, under certain circumstances to repurchase assets from the VIE upon the breach of certain representations and warranties with respect to the residential whole loans sold to the VIE. In the absence of such a breach, the Company has no obligation to provide any other explicit or implicit support to any VIE.

The Company concluded that the entities created to facilitate the loan securitization transactions are VIEs. The Company then completed an analysis of whether each VIE created to facilitate the securitization transactions should be consolidated by the Company, based on consideration of its involvement in each VIE, including the design and purpose of the SPE, and whether its involvement reflected a controlling financial interest that resulted in the Company being deemed the primary beneficiary of each VIE. In determining whether the Company would be considered the primary beneficiary, the following factors were assessed:

- whether the Company has both the power to direct the activities that most significantly impact the economic performance of the VIE; and
- whether the Company has a right to receive benefits or absorb losses of the entity that could be potentially significant to the VIE.

Based on its evaluation of the factors discussed above, including its involvement in the purpose and design of the entity, the Company determined that it was required to consolidate each VIE created to facilitate the loan securitization transactions.

Residential Whole Loans and REO (including Residential Whole Loans and REO transferred to consolidated VIEs)

Included on the Company's consolidated balance sheets as of December 31, 2019 and 2018 are a total of \$7.4 billion and \$4.7 billion, respectively, of residential whole loans, of which approximately \$6.1 billion and \$3.0 billion, respectively, are reported at carrying value and \$1.4 billion and \$1.7 billion, respectively, are reported at fair value. These assets, and certain of the Company's REO assets, are directly owned by certain trusts established by the Company to acquire the loans and entities established in connection with the Company's loan securitization transactions. The Company has assessed that these entities are required to be consolidated. (See Notes 4 and 5(a))

16. Summary of Quarterly Results of Operations (Unaudited)

	2019 Quarter Ended							
(In Thousands, Except per Share Amounts)		March 31 June		June 30	e 30 September 30		December 31	
Interest income	\$	140,952	\$	144,935	\$	142,721	\$	153,118
Interest expense		(79,026)		(85,044)		(85,823)		(82,463)
Net interest income		61,926		59,891		56,898		70,655
Net gain on residential whole loans measured at fair value through earnings		25,267		51,473		40,175		41,415
Net realized gain on sales of residential mortgage securities		24,609		7,710		17,708		11,975
Other income		1,293		(2,321)		4,546		2,007
Operating and other expense		(24,238)		(23,713)		(23,728)		(25,431)
Net income		88,857		93,040		95,599		100,621
Preferred stock dividends		(3,750)		(3,750)		(3,750)		(3,750)
Net income available to common stock and participating securities	\$	85,107	\$	89,290	\$	91,849	\$	96,871
Earnings per Common Share - Basic and Diluted	\$	0.19	\$	0.20	\$	0.20	\$	0.21

	2018 Quarter Ended							
(In Thousands, Except per Share Amounts)		March 31	rch 31 June 30		September 30		December 31	
Interest income	\$	103,752	\$	101,747	\$	117,432	\$	132,744
Interest expense		(50,554)		(51,810)		(58,878)		(70,944)
Net interest income		53,198		49,937		58,554		61,800
Net gain on residential whole loans measured at fair value through earnings		38,498		32,443		34,942		31,736
Net realized gain on sales of residential mortgage securities		8,817		7,429		16,415		28,646
Other income		345		1,134		(2,998)		(39,432)
Operating and other expense		(17,463)		(20,548)		(19,781)		(21,871)
Net income		83,395		70,395		87,132		60,879
Preferred stock dividends		(3,750)		(3,750)		(3,750)		(3,750)
Net income available to common stock and participating securities	\$	79,645	\$	66,645	\$	83,382	\$	57,129
Earnings per Common Share - Basic and Diluted	\$	0.20	\$	0.17	\$	0.19	\$	0.13

Schedule IV - Mortgage Loans on Real Estate

December 31, 2019

Asset Type	Number	Interest Rate	Maturity Date Range	Balance Sheet Reported Amount	<u> </u>	Principal Amount of Loans Subject to Delinquent Principal or Interest
(Dollars in Thousands)						
Residential Whole Loans, at Carrying Value						
Original loan balance \$0 - \$149,999	4,783	0.00% - 13.08%	9/1/2016-1/1/2060	\$ 426,999		\$ 19,807
Original loan balance \$150,000 - \$299,999	5,472	0.00% - 13.49%	11/1/2018-11/1/2064	1,059,013		49,221
Original loan balance \$300,000 - \$449,999	3,380	1.90% - 10.50%	12/1/2018-5/1/2062	1,168,588		49,674
Original loan balance greater than \$449,999	3,446	1.90% - 11.25%	10/1/2018-1/1/2060	3,414,526		81,617
	17,081			\$ 6,069,126	(1)	\$ 200,319
Residential Whole Loans, at Fair Value						
Original loan balance \$0 - \$149,999	2,329	0.00% - 14.99%	3/15/2010-11/1/2059	\$ 188,123		\$ 94,392
Original loan balance \$150,000 - \$299,999	2,170	1.92% - 11.53%	3/10/2013-11/1/2059	393,282		210,176
Original loan balance \$300,000 - \$449,999	1,364	0.00% - 10.75%	5/1/2020-11/1/2059	434,319		241,382
Original loan balance greater than \$449,999	592	2.00% - 10.20%	7/1/2017-7/1/2059	365,859	_	221,371
	6,455			\$ 1,381,583		\$ 767,321
	23,536			\$ 7,450,709	(2)	\$ 967,640

⁽¹⁾ Carrying value of Non-QM, Rehabilitation and Single-family rental loans excludes an allowance for loan losses of \$388,000, \$2.3 million and \$62,000, respectively, at December 31, 2019.

⁽²⁾ The federal income tax basis is approximately \$7.3 billion.

Reconciliation of Balance Sheet Reported Amounts of Mortgage Loans on Real Estate

The following table summarizes the changes in the carrying amounts of residential whole loans during the year ended December 31, 2019:

	For the Year Ended December 31, 2019							
(In Thousands)		tial Whole Loans, at arrying Value	Residential Whole Loans, a Fair Value					
Beginning Balance	\$	3,016,715	\$	1,665,978				
Additions during period:								
Purchases and capitalized advances		4,208,603		40,264				
Premium amortization/discount accretion, net		29,204		N/A				
Deductions during period:								
Cash collections for principal and liquidations		(1,161,375)		(152,012)				
Changes in fair value recorded in Net gain on residential whole loans measured at fair value through earnings		N/A		47,849				
Provision for loan loss		(2,057)		N/A				
Repurchases		(5,447)		(1,337)				
Transfer to REO		(19,298)		(219,159)				
Ending Balance	\$	6,066,345	\$	1,381,583				

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

None.

Item 9A. Controls and Procedures.

(a) Evaluation of Disclosure Controls and Procedures

Management, under the direction of its Chief Executive Officer and Chief Financial Officer, is responsible for maintaining disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the 1934 Act) that are designed to ensure that information required to be disclosed in reports filed or submitted under the 1934 Act is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms and that such information is accumulated and communicated to management, including the Company's Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosures.

In connection with the preparation of this Annual Report on Form 10-K, management reviewed and evaluated the Company's disclosure controls and procedures. The evaluation was performed under the direction of the Company's Chief Executive Officer and Chief Financial Officer to determine the effectiveness, as of December 31, 2019, of the design and operation of the Company's disclosure controls and procedures. Based on that review and evaluation, the Chief Executive Officer and the Chief Financial Officer have concluded that the Company's current disclosure controls and procedures, as designed and implemented, were effective as of December 31, 2019. Notwithstanding the foregoing, a control system, no matter how well designed, implemented and operated can provide only reasonable, not absolute, assurance that it will detect or uncover failures within the Company to disclose material information otherwise required to be set forth in the Company's periodic reports.

(b) Management's Report on Internal Control Over Financial Reporting

Management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting for the Company. Internal control over financial reporting is defined in Rules 13a-15(f) and 15d-15(f) promulgated under the 1934 Act as a process designed by, or under the supervision of, the Company's principal executive and principal financial officers and effected by the Company's board 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 U.S. GAAP, and includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risks that controls may become inadequate because of changes in conditions or that the degree of compliance with the policies or procedures may deteriorate.

The Company's management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2019. In making this assessment, the Company's management used criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in *Internal Control-Integrated Framework 2013* (the "2013 COSO Framework"). As a result of this assessment, management concluded that, as of December 31, 2019, the Company's internal control over financial reporting was effective in providing reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP.

The Company's independent registered public accounting firm, KPMG LLP, has issued an attestation report on the effectiveness of the Company's internal control over financial reporting. This report appears on page 141 of this Annual Report on Form 10-K.

(c) Changes in Internal Control Over Financial Reporting

There have been no changes in the Company's internal control over financial reporting that occurred during the fourth quarter of 2019 that materially affected, or are reasonably likely to materially affect, its internal control over financial reporting.

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors

MFA Financial, Inc.:

Opinion on Internal Control Over Financial Reporting

We have audited MFA Financial, Inc. and subsidiaries (the Company) internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2019 and 2018, the related consolidated statements of operations, comprehensive income/(loss), changes in stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2019, and the related notes and Schedule IV - Mortgage Loans on Real Estate as of December 31, 2019 (collectively, the consolidated financial statements), and our report dated February 21, 2020 expressed an unqualified opinion on those consolidated financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying *Management's Report on Internal Control Over Financial Reporting*. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ KPMG LLP

New York, New York February 21, 2020

Item 9B. Other Information.

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

We expect to file with the SEC, in April 2020 (and, in any event, not later than 120 days after the close of our last fiscal year), a definitive proxy statement (the "Proxy Statement"), pursuant to SEC Regulation 14A in connection with our Annual Meeting of Stockholders to be held on or about May 19, 2020. The information to be included in the Proxy Statement regarding the Company's directors, executive officers, and certain other matters required by Item 401 of Regulation S-K is incorporated herein by reference.

The information to be included in the Proxy Statement regarding compliance with Section 16(a) of the 1934 Act required by Item 405 of Regulation S-K is incorporated herein by reference.

The information to be included in the Proxy Statement regarding the Company's Code of Business Conduct and Ethics required by Item 406 of Regulation S-K is incorporated herein by reference.

The information to be included in the Proxy Statement regarding certain matters pertaining to the Company's corporate governance required by Item 407(c)(3), (d)(4) and (d)(5) of Regulation S-K is incorporated by reference.

We have adopted a set of Corporate Governance Guidelines, which together with the charters of the three standing committees of our Board of Directors (Audit, Compensation, and Nominating and Corporate Governance), and our Code of Business Conduct and Ethics (which constitutes the Company's code of ethics), provide the framework for the governance of the Company. A complete copy of our Corporate Governance Guidelines, the charters of each of the Board committees and the Code of Business Conduct and Ethics (which applies not only to our Chief Executive Officer, Chief Financial Officer and Chief Accounting Officer, but also to all other employees of the Company) may be found by clicking on the "Overview" link found at the top of our homepage at www.mfafinancial.com and then clicking on the "Corporate Governance" link (information from such site is not incorporated by reference into this Annual Report on Form 10-K). You may also obtain free copies of these materials by writing to our General Counsel at the Company's headquarters.

Item 11. Executive Compensation.

The information to be included in the Proxy Statement regarding executive compensation and other compensation related matters required by Items 402 and 407(e)(4) and (e)(5) of Regulation S-K is incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

The tables to be included in the Proxy Statement, which will contain information relating to the Company's equity compensation and beneficial ownership of the Company required by Items 201(d) and 403 of Regulation S-K, are incorporated herein by reference.

Item 13. Certain Relationships and Related Transactions and Director Independence.

The information to be included in the Proxy Statement regarding transactions with related persons, promoters and certain control persons and director independence required by Items 404 and 407(a) of Regulation S-K is incorporated herein by reference.

Item 14. Principal Accountant Fees and Services.

The information to be included in the Proxy Statement concerning principal accounting fees and services and the Audit Committee's pre-approval policies and procedures required by Item 14 is incorporated herein by reference.

PART IV

Item 15. Exhibits and Financial Statement Schedules.

(a) Documents filed as part of the report

The following documents are filed as part of this Annual Report on Form 10-K:

(1) Financial Statements. The consolidated financial statements of the Company, together with the independent registered public accounting firm's report thereon, are set forth on pages 79 through 136 of this Annual Report on Form 10-K and are incorporated herein by reference.

(b) Exhibits required by Item 601 of Regulation S-K

The information required by this Item is set forth on the Exhibit Index that follows the signature page of this report.

(c) Financial Statement Schedules required by Regulation S-X

Schedule IV - Mortgage Loans on Real Estate as of December 31, 2019.

All other financial statement schedules have been omitted because the required information is not applicable or deemed not material, or the required information is presented in the consolidated financial statements and/or in the notes to consolidated financial statements filed in response to Item 8 of this Annual Report on Form 10-K.

SPECIAL NOTE REGARDING EXHIBITS

In reviewing the agreements included as exhibits to this Annual Report on Form 10-K, please remember they are included to provide you with information regarding their terms and are not intended to provide any other factual or disclosure information about the Company or the other parties to the agreements. The agreements contain representations and warranties by each of the parties to the applicable agreement. These representations and warranties have been made solely for the benefit of the other parties to the applicable agreement and:

- should not in all instances be treated as categorical statements of fact, but rather as a way of allocating the risk to one of the parties if those statements proved to be inaccurate;
- have been qualified by disclosures that were made to the other party in connection with the negotiation of the applicable agreement, which disclosures are not necessarily reflected in the agreement;
- may apply standards of materiality in a way that is different from what may be viewed as material to you or other investors;
- were made only as of the date of the applicable agreement or such other date or dates as may be specified in the agreement and are subject to more recent developments.

Accordingly, these representations and warranties may not describe the actual state of affairs as of the date they were made or at any other time. Additional information about the Company may be found elsewhere in this Annual Report on Form 10-K and the Company's other public filings, which are available without charge through the SEC's website at http://www.sec.gov.

The Company acknowledges that, notwithstanding the inclusion of the foregoing cautionary statements, it is responsible for considering whether additional specific disclosures of material information regarding material contractual provisions are required to make the statements in this report not misleading.

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.

MFA Financial, Inc.

Date: February 21, 2020 By /s/ Stephen D. Yarad

Stephen D. Yarad Chief Financial Officer

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.

Date: February 21, 2020	By /s/ Craig L. Knutson Craig L. Knutson President, Chief Executive Officer and Director (Principal Executive Officer)	_
Date: February 21, 2020	By /s/ Stephen D. Yarad Stephen D. Yarad Chief Financial Officer (Principal Financial Officer)	_
Date: February 21, 2020	By /s/ Kathleen A. Hanrahan Kathleen A. Hanrahan Senior Vice President and Chief Accounting Officer (Principal Accounting Officer)	_
Date: February 21, 2020	By /s/ George H. Krauss George H. Krauss Chairman and Director	_
Date: February 21, 2020	By /s/ Stephen R. Blank Stephen R. Blank Director	_
Date: February 21, 2020	By /s/ James A. Brodsky James A. Brodsky Director	_
Date: February 21, 2020	By /s/ Laurie Goodman Laurie Goodman Director	_
Date: February 21, 2020	By /s/ Robin Josephs Robin Josephs Director	_
Date: February 21, 2020	By /s/ Francis J. Oelerich III Francis J. Oelerich III Director	_
Date: February 21, 2020	By /s/ Lisa Polsky Lisa Polsky Director	_

EXHIBIT INDEX

The following exhibits are filed as part of this Annual Report on Form 10-K. The exhibit numbers followed by an asterisk (*) indicate exhibits electronically filed herewith. All other exhibit numbers indicate exhibits previously filed and are hereby incorporated herein by reference. Exhibits numbered 10.1 through 10.22 are management contracts or compensatory plans or arrangements.

- 3.1 Amended and Restated Articles of Incorporation of the Company, dated April 8, 1998 (incorporated herein by reference to Exhibit 3.1 to the Company's Form 8-K, dated April 24, 1998 (Commission File No. 1-13991)).
- 3.2 Articles of Amendment to the Amended and Restated Articles of Incorporation of the Company, dated August 5, 2002 (incorporated herein by reference to Exhibit 3.1 to the Company's Form 8-K, dated August 13, 2002 (Commission File No. 1-13991)).
- 3.3 Articles of Amendment to the Amended and Restated Articles of Incorporation of the Company, dated August 13, 2002 (incorporated herein by reference to Exhibit 3.3 to the Company's Form 10-Q for the quarter ended September 30, 2002 (Commission File No. 1-13991)).
- 3.4 Articles of Amendment to the Amended and Restated Articles of Incorporation of the Company, dated December 29, 2008 (incorporated herein by reference to Exhibit 3.1 to the Company's Form 8-K, dated December 29, 2008 (Commission File No. 1-13991)).
- 3.5 Articles of Amendment (Articles Supplementary) to the Amended and Restated Articles of Incorporation of the Company, dated January 1, 2010 (incorporated herein by reference to Exhibit 3.1 to the Company's Form 8-K, dated January 5, 2010 (Commission File No. 1-13991)).
- 3.6 Articles Supplementary of the Company, dated March 8, 2011 (incorporated herein by reference to Exhibit 3.1 to the Company's Form 8-K, dated March 11, 2011 (Commission File No. 1-13991)).
- 3.7 Articles of Amendment to the Amended and Restated Articles of Incorporation of the Company, dated May 24, 2011 (incorporated by reference to Exhibit 3.1 to the Company's Form 8-K, dated May 26, 2011 (Commission File No. 1-13991)).
- 3.8 Articles Supplementary of the Company, dated April 22, 2004, designating the Company's 8.50% Series A Cumulative Redeemable Preferred Stock (incorporated herein by reference to Exhibit 3.4 to the Company's Form 8-A, dated April 23, 2004 (Commission File No. 1-13991)).
- 3.9 Articles Supplementary of the Company, dated April 12, 2013, designating the Company's 7.50% Series B Cumulative Redeemable Preferred Stock (incorporated herein by reference to Exhibit 3.1 to the Company's Form 8-K, dated April 15, 2013 (Commission File No. 1-13991)).
- 3.10 Amended and Restated Bylaws of the Company (as amended and restated through April 10, 2017) (incorporated herein by reference to Exhibit 3.1 to the Company's Form 8-K, dated April 12, 2017 (Commission File No. 1-13991)).
- 4.1* Description of the Company's securities registered pursuant to Section 12 of the Securities Exchange Act of 1934
- 4.2 Specimen of Common Stock Certificate of the Company (incorporated herein by reference to Exhibit 4.1 to the Company's Registration Statement on Form S-4, dated February 12, 1998 (Commission File No. 333-46179)).
- 4.3 Specimen of certificate representing the 7.50% Series B Cumulative Redeemable Preferred Stock (incorporated herein by reference to Exhibit 4.1 to the Company's Form 8-K, dated April 15, 2013 (Commission File No. 1-13991)).
- 4.4 Indenture, dated as of April 11, 2012, between the Company and Wilmington Trust, National Association, as Trustee (incorporated herein by reference to Exhibit 4.1 to the Company's Form 8-K, dated April 11, 2012 (Commission File No. 1-13991)).
- 4.5 First Supplemental Indenture, dated as of April 11, 2012, between the Company and Wilmington Trust, National Association, as Trustee (incorporated herein by reference to Exhibit 4.2 to the Company's Form 8-K, dated April 11, 2012 (Commission File No. 1-13991)).

- 4.6 Indenture, dated June 3, 2019, between the Company and Wilmington Trust, National Association, as Trustee (incorporated herein by reference to Exhibit 4.1 to the Company's Form 8-K, dated June 3, 2019 (Commission File No. 1-13991)).
- 4.7 First Supplemental Indenture, dated June 3, 2019, between the Company and Wilmington Trust, National Association, as Trustee (incorporated herein by reference to Exhibit 4.2 to the Company's Form 8-K, dated June 3, 2019 (Commission File No. 1-13991)).
- 4.8 Form of 8.00% Senior Notes due 2042 (incorporated herein by reference to Exhibit 4.3 to the Company's Form 8-K, dated April 11, 2012 (Commission File No. 1-13991)).
- 4.9 Form of 6.25% Convertible Senior Notes due 2024 (incorporated herein by reference to Exhibit 4.3 to the Company's Form 8-K, dated June 3, 2019 (Commission File No. 1-13991)).
- <u>10.1</u> Employment Agreement, entered into as of November 4, 2016, by and between the Company and Craig L. Knutson (incorporated herein by reference to Exhibit 10.2 to the Company's Form 8-K, dated November 4, 2016 (Commission File No. 1-13991)).
- <u>10.2</u> Amendment No. 1, dated March 28, 2018, to Employment Agreement, entered into as of November, 4, 2016, by and between the Company and Craig L. Knutson (incorporated herein by reference to Exhibit 10.1 to the Company's Form 8-K, filed April 2, 2018 (Commission File No. 1-13991).
- <u>10.3</u> Employment Agreement, entered into as of November 26, 2019, by and between the Company and Craig L. Knutson (incorporated herein by reference to Exhibit 10.1 to the Company's Form 8-K, dated November 26, 2019 (Commission File No. 1-13991)).
- <u>10.4</u> Employment Agreement, entered into as of March 28, 2018, by and between the Company and Gudmundur Kristjansson (incorporated herein by reference to Exhibit 10.2 to the Company's Form 8-K filed April 2, 2018 (Commission File No. 1-13991)).
- 10.5 Employment Agreement, entered into as of November 26, 2019, by and between the Company and Gudmundur Kristjansson (incorporated herein by reference to Exhibit 10.2 to the Company's Form 8-K, dated November 26, 2019 (Commission File No. 1-13991)).
- <u>10.6</u> Employment Agreement, entered into as of March 28, 2018, by and between the Company and Bryan Wulfsohn (incorporated herein by reference to Exhibit 10.3 to the Form 8-K filed April 2, 2018 (Commission File No. 1-13991)).
- <u>10.7</u> Employment Agreement, entered into as of November 26, 2019, by and between the Company and Bryan Wulfsohn (incorporated herein by reference to Exhibit 10.3 to the Company's Form 8-K, dated November 26, 2019 (Commission File No. 1-13991)).
- <u>10.8</u> Employment Agreement, entered into as of March 1, 2010, by and between the Company and Sunil Yadav (incorporated herein by reference to Exhibit 10.5 to the Company's Annual Report on Form 10-K for the year ended December 31, 2014 (Commission File No. 1-13991)).
- <u>10.9</u> Amendment No. 1, dated February 9, 2015, to Employment Agreement, entered into as of March 1, 2010, by and between the Company and Sunil Yadav (incorporated herein by reference to Exhibit 10.6 to the Company's Annual Report on Form 10-K for the year ended December 31, 2014 (Commission File No. 1-13991)).
- 10.10 MFA Financial, Inc. Equity Compensation Plan (incorporated herein by reference to Exhibit 10.1 to the Company's Form 8-K dated May 22, 2015 (Commission File No. 1-13991)).
- 10.11 Senior Officers Deferred Bonus Plan, dated December 10, 2008 (incorporated herein by reference to Exhibit 10.2 to the Company's Form 8-K, dated December 12, 2008 (Commission File No. 1-13991)).
- 10.12 Fourth Amended and Restated 2003 Non-Employee Directors Deferred Compensation Plan, as amended and restated through December 15, 2014 (incorporated herein by reference to Exhibit 10.10 to the Company's Annual Report on Form 10-K for the year ended December 31, 2015 (Commission File No. 1-13991)).

- 10.13 Form of Phantom Share Award Agreement (Time-Based Vesting) (Knutson) relating to the Company's Equity Compensation Plan (incorporated herein by reference to Exhibit 10.3 to the Company's Form 8-K, dated January 24, 2014 (Commission File No. 1-13991)).
- 10.14 Form of Phantom Share Award Agreement (Performance-Based Vesting) (Knutson) relating to the Company's Equity Compensation Plan (incorporated herein by reference to Exhibit 10.4 to the Company's Form 8-K, dated January 24, 2014 (Commission File No. 1-13991)).
- 10.15 Form of Phantom Share Award Agreement (Performance-Based Vesting) (Knutson) relating to the Company's Equity Compensation Plan (incorporated herein by reference to Exhibit 10.1 to the Company's Form 8-K, dated January 11, 2017 (Commission File No. 1-13991)).
- 10.16 Form of Phantom Share Award Agreement (Vested Award) relating to the Company's Equity Compensation Plan (incorporated herein by reference to Exhibit 10.5 to the Company's Form 8-K, dated January 24, 2014 (Commission File No. 1-13991)).
- <u>10.17</u> Form of Phantom Share Award Agreement (Time-Based Vesting) relating to the Company's Equity Compensation Plan (incorporated herein by reference to Exhibit 10.1 to the Company's Form 8-K, dated December 27, 2018 (Commission File No. 1-13991)).
- <u>10.18</u> Form of Phantom Share Award Agreement (Performance-Based Vesting) relating to the Company's Equity Compensation Plan (incorporated herein by reference to Exhibit 10.8 to the Company's Form 8-K, dated January 24, 2014 (Commission File No. 1-13991)).
- <u>10.19</u> Form of Phantom Share Award Agreement (Performance-Based Vesting) relating to the Company's Equity Compensation Plan (incorporated herein by reference to Exhibit 10.2 to the Company's Form 8-K, dated December 27, 2018 (Commission File No. 1-13991)).
- 10.20 Summary Description of Compensation Payable to Non-Employee Directors (incorporated herein by reference to Exhibit 10.1 to the Company's Form 10-Q for the quarter ended June 30, 2014 (Commission File No. 1-13991)).
- <u>10.21</u> Modification to Compensation Payable to the Non-Executive Chairman of the Board (incorporated herein by reference to Exhibit 10.1 to the Company's Form 10-Q for the quarter ended June 30, 2016 (Commission File No. 1-13991)).
- 10.22 Modification to Compensation Payable to Non-Employee Directors (incorporated herein by reference to Exhibit 10.1 to the Company's Form 10-Q for the quarter ended June 30, 2017 (Commission File No. 1-13991)).
 - **21*** Subsidiaries of the Company.
 - **23.1*** Consent of KPMG LLP.
- 31.1* Certification of the Chief Executive Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- <u>31.2</u>* Certification of the Chief Financial Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- <u>32.1</u>* Certification of the Chief Executive Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
- 32.2* Certification of the Chief Financial Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
- Interactive Data Files pursuant to Rule 405 of Regulation S-T formatted in iXBRL (Inline Extensible Business Reporting Language): (i) our Consolidated Balance Sheets as of December 31, 2019 and 2018; (ii) our Consolidated Statements of Operations for the years ended December 31, 2019, 2018 and 2017; (iii) our Consolidated Statements of Comprehensive Income/(Loss) for the years ended December 31, 2019, 2018 and 2017; (iv) Consolidated Statements of Changes in Stockholders' Equity for the years ended December 31, 2019, 2018 and 2017; (v) our Consolidated Statements of Cash Flows for the years ended December 31, 2019, 2018 and 2017; and (vi) the notes to our Consolidated Financial Statements.

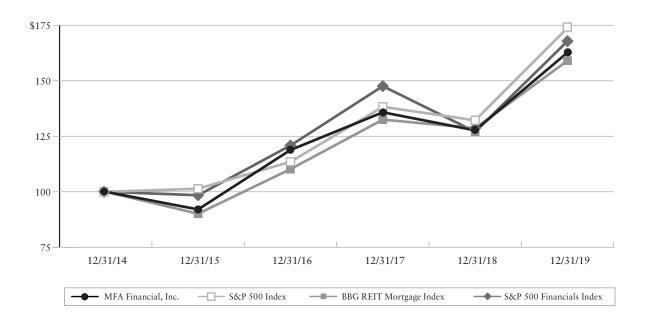
104 Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).

* Filed herewith.

STOCK PERFORMANCE GRAPH

The following graph and table provide a comparison of the cumulative total stockholder return on MFA's common stock, the S&P 500 Index, the Bloomberg REIT Mortgage Index (or BBG REIT Mortgage Index) and the S&P 500 Financials Index for the period from December 31, 2014 to December 31, 2019.

In determining the returns, it is assumed that \$100 was invested in MFA's common stock and each of the three other indices on December 31, 2014, and that all dividends were reinvested.



	12/31/2014	12/31/2015	12/31/2016	12/31/2017	12/31/2018	12/31/2019
MFA Financial, Inc.	\$100.00	\$92.05	\$118.82	\$135.79	\$127.67	\$162.72
S&P 500 Index	\$100.00	\$101.37	\$113.49	\$138.26	\$132.19	\$173.80
BBG REIT Mortgage Index	\$100.00	\$90.11	\$110.18	\$132.50	\$128.65	\$159.04
S&P 500 Financials Index	\$100.00	\$98.44	\$120.83	\$147.58	\$127.07	\$167.85

Source: Bloomberg

The information in the stock performance graph and table has been obtained from sources believed to be reliable, but neither its accuracy nor its completeness can be guaranteed. There can be no assurance that MFA's stock performance will continue in the future with trends that are the same or similar to those depicted in the graph or the table above. Accordingly, MFA does not and will not make or endorse any predictions as to future stock performance.

The stock performance graph and table shall not be deemed, under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, to be (i) "soliciting material" or "filed" or (ii) incorporated by reference by any general statement into any filing made by MFA with the Securities and Exchange Commission, except to the extent that MFA specifically incorporates such stock performance graph and table by reference.

DIRECTORS AND OFFICERS

Directors

George H. Krauss

Chairman of the Board Managing Director

The Burlington Capital Group LLC

Craig L. Knutson

Chief Executive Officer and President

MFA Financial, Inc.

Stephen R. Blank

Independent Director

James A. Brodsky

Member

Weiner Brodsky Kider PC

Laurie Goodman

Co-Director

Housing Finance Policy Center

Urban Institute

Robin Josephs

Independent Director

Francis J. Oelerich III

Managing Director

XMS Capital Partners

Lisa Polsky

Independent Director

Executive Officers

Craig L. Knutson

Chief Executive Officer and President

Gudmundur Kristjansson

Senior Vice President and Co-Chief Investment Officer

Brvan Wulfsohn

Senior Vice President and Co-Chief Investment Officer

Ronald A. Freydberg

Executive Vice President

Stephen D. Yarad

Chief Financial Officer

Kathleen A. Hanrahan

Senior Vice President and Chief Accounting Officer Terence B. Meyers

Senior Vice President and

Director of Tax

Harold E. Schwartz

Senior Vice President,

General Counsel and Secretary

Sunil Yadav

Senior Vice President

STOCKHOLDER INFORMATION

Executive Offices

MFA Financial, Inc. 350 Park Avenue, 20th Floor New York, NY 10022 (212) 207-6400

Registrar and Transfer Agent

Computershare Regular Mail: P.O. Box 505000 Louisville, KY 40233

For overnight correspondence: 462 South 4th Street, Suite 1600

Louisville, KY 40202

Toll Free: (866) 249-2610 Foreign Shareowners: (201) 680-6578

TDD for Hearing Impaired:

(800) 231-5469

Web Addresses:

General: www.computershare.com/investor

 $On line\ in quiries:\ https://www-us.computershare.com/investor/contact$

Stock Exchange Listing

New York Stock Exchange (Symbol: MFA)

Independent Registered Public Accounting Firm

KPMG LLP 345 Park Avenue New York, NY 10154

Corporate Governance

Copies of MFA Financial, Inc.'s governance documents, including its Corporate Governance Guidelines, as well as the charters of the standing committees of the Board of Directors and its Code of Business Conduct and Ethics, are available on the company's website at http://www.mfafinancial.com. Written copies of these materials are available without charge upon written request to the company's Secretary at the address above.

Information Available to Stockholders

Copies of the company's 2019 Annual Report on Form 10-K, as filed with the Securities and Exchange Commission, as well as its proxy statement, press releases and other documents, are available on the company's website at http://www.mfafinancial.com. Written copies of these materials are available without charge upon written request to the company's Secretary at the address above.



350 Park Avenue, New York, NY 10022

Telephone: 212.207.6400

Fax: 212.207.6420 www.mfafinancial.com

