REDWOOD TRUST INC Form 10-K March 01, 2019

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

FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)			
X OF THE SECURITIES EXCHANGE ACT OF 1934			
For the Fiscal Year Ended: December 31, 2018			
OR			
oTRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d)			
OF THE SECURITIES EXCHANGE ACT OF 1934			
For the Transition Period from to			
Commission File Number 1-13759			

REDWOOD TRUST, INC.

(Exact Name of Registrant as Specified in Its Charter)

Maryland 68-0329422 (State or Other Jurisdiction of Incorporation or Organization) Identification No.)

One Belvedere Place, Suite 300

94941

Mill Valley, California

(Address of Principal Executive Offices) (Zip Code)

(415) 389-7373

(Registrant's Telephone Number, Including Area Code) Securities Registered Pursuant to Section 12(b) of the Act:

Title of Each Class:

Name of Exchange on Which Registered:

Common Stock, par value \$0.01 per share 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 x No o

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

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 x No o 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 x No o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. x

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

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting Emerging growth x o o company o company o company o

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. o

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

At June 30, 2018, the aggregate market value of the registrant's common stock held by non-affiliates of the registrant was \$1,224,714,997 based on the closing sale price as reported on the New York Stock Exchange.

The number of shares of the registrant's Common Stock outstanding on February 25, 2019 was 96,609,827.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement to be filed with the Securities and Exchange Commission under Regulation 14A within 120 days after the end of registrant's fiscal year covered by this Annual Report are incorporated by reference into Part III.

REDWOOD TRUST, INC.

2018 ANNUAL REPORT ON FORM 10-K

TABLE OF CONTENTS

		Page
	PART I	
Item 1.	<u>Business</u>	<u>1</u>
Item 1A	Risk Factors	<u>6</u>
Item 1B	. <u>Unresolved Staff Comments</u>	1 6 43
Item 2.	<u>Properties</u>	<u>44</u>
Item 3.	<u>Legal Proceedings</u>	<u>45</u>
Item 4.	Mine Safety Disclosures (Not Applicable)	<u>46</u>
	PART II	
Item 5.	Market for Registrant's Common Equity, Related Stockholder Matters, and Issuer Purchases of Equity Securities	<u>47</u>
Item 6.	Selected Financial Data	<u>50</u>
Item 7.	Management's Discussion and Analysis of Financial Condition and Results of Operations	<u>51</u>
Item 7A	. Quantitative and Qualitative Disclosures about Market Risk	<u>101</u>
Item 8.	Financial Statements and Supplementary Data	<u>107</u>
Item 9.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	<u>107</u>
Item 9A	Controls and Procedures	<u>107</u>
Item 9B	. Other Information	<u>108</u>
	PART III	
Item 10.	. Directors, Executive Officers and Corporate Governance	<u>109</u>
Item 11.	. Executive Compensation	<u>109</u>
Item 12.	. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	<u>109</u>
	. Certain Relationships and Related Transactions, and Director Independence	<u>109</u>
Item 14.	. Principal Accounting Fees and Services	<u>109</u>
	PART IV	
	. Exhibits, Financial Statement Schedules	<u>110</u>
	. Form 10-K Summary	<u>115</u>
Consolio	dated Financial Statements	<u>F- 1</u>

i

PART I

ITEM 1. BUSINESS

Introduction

Redwood Trust, Inc., together with its subsidiaries, is a specialty finance company focused on making credit-sensitive investments in single-family residential and multifamily mortgages and related assets and engaging in mortgage banking activities. Our goal is to provide attractive returns to shareholders through a stable and growing stream of earnings and dividends, as well as through capital appreciation. We operate our business in two segments: Investment Portfolio and Mortgage Banking.

Our primary sources of income are net interest income from our investment portfolio and non-interest income from our mortgage banking activities. Net interest income consists of the interest income we earn on investments less the interest expense we incur on borrowed funds and other liabilities. Income from mortgage banking activities is generated through the acquisition of loans and their subsequent sale or securitization.

Redwood Trust, Inc. has elected to be taxed as a real estate investment trust ("REIT") under the Internal Revenue Code of 1986, as amended (the "Internal Revenue Code"), beginning with its taxable year ended December 31, 1994. We generally refer, collectively, to Redwood Trust, Inc. and those of its subsidiaries that are not subject to subsidiary-level corporate income tax as "the REIT" or "our REIT." We generally refer to subsidiaries of Redwood Trust, Inc. that are subject to subsidiary-level corporate income tax as "our operating subsidiaries" or "our taxable REIT subsidiaries" or "TRS." Our mortgage banking activities and investments in mortgage servicing rights ("MSRs") are generally carried out through our taxable REIT subsidiaries, while our portfolio of mortgage- and other real estate-related investments is primarily held at our REIT. We generally intend to retain profits generated and taxed at our taxable REIT subsidiaries, and to distribute as dividends at least 90% of the taxable income we generate at our REIT.

Redwood Trust, Inc. was incorporated in the State of Maryland on April 11, 1994, and commenced operations on August 19, 1994. Our executive offices are located at One Belvedere Place, Suite 300, Mill Valley, California 94941. References herein to "Redwood," the "company," "we," "us," and "our" include Redwood Trust, Inc. and its consolidated subsidiaries, unless the context otherwise requires.

Financial information concerning our business, both on a consolidated basis and with respect to each of our segments, is set forth in Financial Statements and Supplementary Data as well as in Management's Discussion and Analysis of Financial Condition and Results of Operations which are included in Part II, Items 8 and 7, respectively, of this Annual Report on Form 10-K.

Our Business Segments

Our Investment Portfolio segment includes a portfolio of investments in residential mortgage-backed securities ("RMBS") retained from our Sequoia securitizations, as well as RMBS issued by third parties and other credit risk-related investments. In addition, this segment includes a subsidiary of Redwood Trust that is a member of the Federal Home Loan Bank of Chicago ("FHLBC") and that utilizes long-term financing from the FHLBC to make long-term investments directly in residential mortgage loans. This segment also includes residential bridge loans, which are business purpose residential mortgage loans to investors rehabilitating and reselling or renting residential properties that we acquired from our affiliate, 5 Arches, LLC. The Investment Portfolio segment's main sources of revenue are interest income from investment portfolio securities and loans held-for-investment. Additionally, this segment may realize gains and losses upon the sale of securities. Funding expenses, hedging expenses, direct operating expenses, and tax provisions associated with these activities are also included in this segment. Our Mortgage Banking segment primarily consists of operating a mortgage loan conduit that acquires residential loans from third-party originators for subsequent sale, securitization, or transfer to our investment portfolio. We typically acquire prime, jumbo mortgages and the related mortgage servicing rights on a flow basis from our network of loan sellers and distribute those loans through our Sequoia private-label securitization program or to institutions that acquire pools of whole loans. We also supplement our flow purchases with bulk loan acquisitions. In addition, beginning in the third quarter of 2018, this segment began to acquire single-family rental loans from our affiliate 5 Arches, LLC, for subsequent sale or securitization. Single-family rental loans are business purpose residential mortgage loans to investors in single-family (1-4 unit) rental properties. This segment also includes various derivative

financial instruments that we utilize to manage certain risks associated with residential loans we acquire. Our Mortgage Banking segment's main source of revenue is income from mortgage banking activities, which includes valuation increases (or gains) on loans we acquire and subsequently sell or securitize, and from hedges used to manage risks associated with these activities. Additionally, this segment may generate interest income on loans held pending securitization or sale. Funding expenses, direct operating expenses, and tax expenses associated with these activities are also included in this segment.

Consolidated Securitization Entities

We sponsor our Sequoia securitization program, which we use for the securitization of residential mortgage loans. We are required under Generally Accepted Accounting Principles in the United States ("GAAP") to consolidate the assets and liabilities of certain securitization entities we have sponsored for financial reporting purposes. However, each of these entities is independent of Redwood and of each other, and the assets and liabilities of these entities are not owned by us or legal obligations of ours, respectively, although we are exposed to certain financial risks associated with our role as the sponsor or depositor of these entities and, to the extent we hold securities issued by, or other investments in, these entities, we are exposed to the performance of these entities and the assets they hold. We refer to certain of these securitization entities issued prior to 2012 as "consolidated Legacy Sequoia entities," and the securitization entities formed in connection with the securitization of Redwood Choice expanded-prime loans as the "consolidated Sequoia Choice entities." Additionally, during 2018, we consolidated certain third-party Freddie Mac K-Series and SLST securitization entities that we determined were VIEs and for which we determined we were the primary beneficiary. Where applicable, in analyzing our results of operations, we distinguish results from current operations "at Redwood" and from consolidated entities.

Information Available on Our Website

Our website can be found at www.redwoodtrust.com. We make available, free of charge through the investor information section of our website, access to our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the U.S. Securities Exchange Act of 1934, as well as proxy statements, as soon as reasonably practicable after we electronically file such material with, or furnish it to, the U.S. Securities and Exchange Commission ("SEC"). We also make available, free of charge, access to the charters for our Audit Committee, Compensation Committee, and Governance and Nominating Committee, our Corporate Governance Standards, and our Code of Ethics governing our directors, officers, and employees. Within the time period required by the SEC and the New York Stock Exchange, we will post on our website any amendment to the Code of Ethics and any waiver applicable to any executive officer, director, or senior officer (as defined in the Code). In addition, our website includes information concerning purchases and sales of our equity securities by our executive officers and directors, as well as disclosure relating to certain non-GAAP financial measures (as defined in the SEC's Regulation G) that we may make public orally, telephonically, by webcast, by broadcast, or by similar means from time to time. The information on our website is not part of this Annual Report on Form 10-K.

Our Investor Relations Department can be contacted at One Belvedere Place, Suite 300, Mill Valley, CA 94941, Attn: Investor Relations, telephone (866) 269-4976 or email investorrelations@redwoodtrust.com.

Cautionary Statement

This Annual Report on Form 10-K and the documents incorporated by reference herein contain forward-looking statements within the meaning of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements involve numerous risks and uncertainties. Our actual results may differ from our beliefs, expectations, estimates, and projections and, consequently, you should not rely on these forward-looking statements as predictions of future events. Forward-looking statements are not historical in nature and can be identified by words such as "anticipate," "estimate," "will," "should," "expect," "believe," "intend," "seek," "plan" and similar expressions or their forms, or by references to strategy, plans, or intentions. These forward-looking statements are subject to risks and uncertainties, including, among other things, those described in this Annual Report on Form 10-K under the caption "Risk Factors." Other risks, uncertainties, and factors that could cause actual results to differ materially from those projected are described below and may be described from time to time in reports we file with the SEC, including reports on Forms 10-Q and 8-K. We undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise.

Statements regarding the following subjects, among others, are forward-looking by their nature: (i) statements we make regarding Redwood's business strategy and strategic focus, including statements relating to our overall market position, strategy and long-term prospects (including trends driving the flow of capital in the housing finance market, our strategic initiatives designed to capitalize on those trends, our ability to attract capital to finance those initiatives, our approach to raising capital, our ability to pay higher sustainable dividends in the future, and the prospects for federal housing finance reform); (ii) statements related to our financial outlook and expectations for 2019, including with respect to our investment portfolio and mortgage banking activities; (iii) statements related to our mortgage banking activities, including our ability to leverage our platform to drive efficiencies and returns, and to continue to improve workflow efficiencies and capital turnover; (iv) statements related to our investment portfolio and investment opportunities, including that the breadth of our initiatives should enable us to continue sourcing investments that will drive net interest margins higher on a per share basis; (v) statements relating to acquiring residential mortgage loans in the future that we have identified for purchase or plan to purchase, including the amount of such loans that we identified for purchase during the fourth quarter of 2018 and at December 31, 2018, and expected fallout and the corresponding volume of residential mortgage loans expected to be available for purchase; (vi) statements relating to our estimate of our available capital (including that we estimate our available capital at December 31, 2018 was approximately \$85 million), and expectations relating to sourcing additional capital from continued optimization of our investment portfolio and from capital markets; (vii) statements we make regarding future dividends, including with respect to our regular quarterly dividends in 2019; and (viii) statements regarding our expectations and estimates relating to the characterization for income tax purposes of our dividend distributions, our expectations and estimates relating to tax accounting, tax liabilities and tax savings, and GAAP tax provisions, and our estimates of REIT taxable income and TRS taxable income.

Important factors, among others, that may affect our actual results include:

•he pace at which we redeploy our available capital into new investments;

interest rate volatility, changes in credit spreads, and changes in liquidity in the market for real estate securities and loans;

"Credit spreads" is used generally to refer to the market value yield on a loan or security less the relevant risk-free benchmark interest rate;

changes in the demand from investors for residential mortgages and investments, and our ability to distribute residential mortgages through our whole-loan distribution channel;

our ability to finance our investments in securities and our acquisition of residential mortgages with short-term debt; changes in the values of assets we own;

general economic trends, the performance of the housing, real estate, mortgage, credit, and broader financial markets, and their effects on the prices of earning assets and the credit status of borrowers;

the impact of changes to U.S. federal income tax laws on the U.S. housing market, mortgage finance markets, and our business:

changes to fiscal, tax, and other federal policies by Congress or President Trump's administration;

developments related to the fixed income and mortgage finance markets and the Federal Reserve's statements regarding its future open market activity and monetary policy;

federal and state legislative and regulatory developments, and the actions of governmental authorities, including the new U.S. presidential administration, and in particular those affecting the mortgage industry or our business (including, but not limited to, the Federal Housing Finance Agency's rules relating to FHLB membership requirements and the implications for our captive insurance subsidiary's membership in the FHLB);

strategic business and capital deployment decisions we make;

our exposure to credit risk and the timing of credit losses within our portfolio;

the concentration of the credit risks we are exposed to, including due to the structure of assets we hold and the geographical concentration of real estate underlying assets we own;

our exposure to adjustable-rate mortgage loans;

the efficacy and expense of our efforts to manage or hedge credit risk, interest rate risk, and other financial and operational risks;

changes in credit ratings on assets we own and changes in the rating agencies' credit rating methodologies;

changes in interest rates;

changes in mortgage prepayment rates;

changes in liquidity in the market for real estate securities and loans;

our ability to finance the acquisition of real estate-related assets with short-term debt;

the ability of counterparties to satisfy their obligations to us;

our involvement in securitization transactions, the profitability of those transactions, and the risks we are exposed to in engaging in securitization transactions;

exposure to claims and litigation, including litigation arising from our involvement in securitization transactions;

ongoing litigation against various trustees of RMBS transactions;

whether we have sufficient liquid assets to meet short-term needs;

our ability to successfully compete and retain or attract key personnel;

our ability to adapt our business model and strategies to changing circumstances;

changes in our investment, financing, and hedging strategies and new risks we may be exposed to if we expand our business activities:

our exposure to a disruption or breach of the security of our technology infrastructure and systems;

exposure to environmental liabilities;

our failure to comply with applicable laws and regulations;

our failure to maintain appropriate internal controls over financial reporting and disclosure controls and procedures;

the impact on our reputation that could result from our actions or omissions or from those of others; changes in accounting principles and tax rules;

our ability to maintain our status as a REIT for tax purposes;

limitations imposed on our business due to our REIT status and our status as exempt from registration under the Investment Company Act of 1940;

decisions about raising, managing, and distributing capital; and

other factors not presently identified.

This Annual Report on Form 10-K may contain statistics and other data that in some cases have been obtained from or compiled from information made available by servicers and other third-party service providers.

Certifications

Our Chief Executive Officer and Chief Financial Officer have executed certifications dated February 28, 2019, as required by Sections 302 and 906 of the Sarbanes-Oxley Act of 2002, and we have included those certifications as exhibits to this Annual Report on Form 10-K. In addition, our Chief Executive Officer certified to the New York Stock Exchange (NYSE) on June 7, 2018 that he was unaware of any violations by Redwood Trust, Inc. of the NYSE's corporate governance listing standards in effect as of that date. Employees

As of December 31, 2018, Redwood employed 149 people.

Item 1A. Risk Factors

Risks Related to Recent or Potential Economic, Strategic, and Legislative/Regulatory Developments Affecting our Industry

General economic developments and trends and the performance of the housing, real estate, mortgage finance, and broader financial markets may adversely affect our business and the value of, and returns on, real estate-related and other assets we own or may acquire and could also negatively impact our business and financial results.

Our level of business activity and the profitability of our business, as well as the values of, and the cash flows from, the assets we own, are affected by developments in the U.S. economy and the broader global economy. As a result, negative economic developments are likely to negatively impact our business and financial results. There are a number of factors that could contribute to negative economic developments, including, but not limited to, U.S. fiscal and monetary policy changes, including Federal Reserve policy shifts and changes in benchmark interest rates, changing U.S. consumer spending patterns, negative developments in the housing, multifamily, and real estate markets, rising unemployment, rising government debt levels, and changing expectations for inflation and deflation. For example, changes and uncertainty resulting from, and the impact of, President Trump's administration's approach to various international trade negotiations and the appropriation process for funding the operations of the U.S. federal government could negatively impact financial markets, as well as domestic and global economic growth. Also, the impending U.K. exit from the European Union is another factor that could adversely impact financial markets, as well as domestic and global economic growth. Personal income and unemployment levels affect borrowers' ability to repay residential mortgage loans underlying our investments in residential real estate-related assets (and renters' ability to meet rental obligations underlying our investments in multifamily securities and loans secured by non-owner occupied rental properties), and there is risk that economic growth and activity could be weaker than anticipated or negative.

The economic downturn that began in 2007 and the significant government interventions into the financial markets and fiscal stimulus spending that occurred in subsequent years have contributed to significantly increased U.S. budget deficits and overall debt levels, and the federal tax reform legislation signed into law in December 2017 is forecast to further increase budget deficits over the next decade. In addition, under President Trump's administration, further fiscal stimulus spending may occur relating to infrastructure, defense, or other areas that Congress and President Trump designate. These increases can put upward pressure on interest rates and could be among the factors that could lead to higher interest rates over the long-term future. Higher long-term interest rates could adversely affect our overall business, income, and our ability to pay dividends, as discussed further below under "Interest rate fluctuations can have various negative effects on us and could lead to reduced earnings and increased volatility in our earnings." Furthermore, our business and financial results may be harmed by our inability to accurately anticipate developments associated with changes in, or the outlook for, interest rates. In addition, near-term and long-term U.S. economic conditions could be impacted by changes in fiscal and tax policy.

Real estate values, and the ability to generate returns by owning or taking credit risk on loans secured by real estate, are important to our business. Following the financial crisis of 2007-2008, government intervention has been important in supporting real estate markets, the overall U.S. economy, and capital markets. Mortgage markets have also received substantial U.S. government support. In particular, the government's support of mortgage markets through its support of Fannie Mae and Freddie Mac expanded in late 2008, as the U.S. Treasury Department chose to backstop these government-sponsored enterprises. The governmental support for these entities has contributed to Fannie Mae's and Freddie Mac's continued dominance of residential mortgage finance and securitization activity, inhibiting the return of private sector mortgage securitization. This support may continue for some time and could have potentially negative consequences to us, since we have traditionally taken an active role in assuming credit risk in the private sector mortgage market, including through investments in Sequoia securitizations we sponsor. Both Congress and President Trump's administration have proposed various plans for reform of Fannie Mae and Freddie Mac (and the broader role of the government in the U.S. mortgage markets); however, it's unclear what type of reform

would be implemented, if any, and what the impact on our business would be.

Changes to the U.S. federal income tax laws could have an adverse impact on the U.S. housing market, mortgage finance markets, and our business.

On December 22, 2017, President Trump signed into law the Tax Cuts and Jobs Act (the "Tax Act"), which contains significant changes to the Internal Revenue Code for taxable years beginning in 2018. Among other things, the Tax Act reduced for individuals the annual residential mortgage-interest deduction for purchase money mortgage debt incurred after December 15, 2017, in taxable years beginning after December 31, 2017, and beginning before January 1, 2026, from \$1,000,000 (or \$500,000 in the case of married taxpayers filing separately) to \$750,000 (or \$375,000 in the case of married taxpayers filing separately), as well as eliminated for individuals the deduction for interest with respect to home equity indebtedness, with certain exceptions for indebtedness from refinancing existing indebtedness. The Tax Act also limits the state and local tax deduction for individuals to a combined \$10,000 for income, sales, and property taxes (for both single and married tax filers) in taxable years beginning after December 31, 2017, and beginning before January 1, 2026. The reduction or limitation of these tax deductions could contribute to reduced home affordability and adversely affect home prices nationally and/or in local markets, particularly in states with high state and local taxes and property values. In addition, such changes could increase taxes payable by certain borrowers, thereby reducing their available cash and adversely impacting their ability to make payment on the mortgage loans, which in turn, could cause a rise in delinquencies. The impact of these changes has yet to be determined, but the limitations on these deductions could have an adverse impact on the U.S. residential housing market, the market value of residential mortgage loans and residential mortgage-backed securities, and the volume of future originations of residential mortgage loans, particularly jumbo mortgage loans, all of which could negatively impact our business or financial results.

Congress and President Trump's administration have made and may continue to make substantial changes to fiscal, tax, and other federal policies that may adversely affect our business.

President Trump has called for and, in some cases, already signed into law substantial changes to U.S. fiscal and tax policies, including corporate and individual tax reform. In addition, President Trump has also called for, and, in some cases, already made, significant changes to U.S. trade, healthcare, immigration, foreign, and government regulatory policy. Some of the called-for changes would require Congressional approval, while others have already been, and may in the future be, carried out unilaterally by the executive branch of the U.S. government. To the extent Congress or President Trump implement changes to U.S. policy, those changes may impact, among other things, the U.S. economy, housing and housing finance markets, international trade, unemployment, immigration, the regulatory environment in the U.S. including banking regulations and the Dodd-Frank Act, international relations, inflation, unemployment, healthcare, and other areas. Although we cannot predict the impact, if any, of these changes to our business, they could adversely affect our business. Until we know what policy changes are made and how those changes impact our business and the business of our competitors over the long-term, we will not know if, overall, we will benefit from them or be negatively affected by them.

Changing benchmark interest rates, and the Federal Reserve's actions and statements regarding monetary policy, can affect the fixed income and mortgage finance markets in ways that could adversely affect our future business and financial results and the value of, and returns on, real estate-related investments and other assets we own or may acquire.

Statements by the Federal Reserve regarding monetary policy and the actions it takes to set or adjust monetary policy may affect the expectations and outlooks of market participants in ways that disrupt our business and adversely affect our financial results and the value of, and returns on, our portfolio of real-estate related investments and the pipeline of residential mortgage loans we own or may acquire. For example, since December 2015, the Federal Reserve has raised the target federal funds rate nine times, bringing it from near zero to the current target level between 2.25% and 2.50%, and the federal funds rate could be increased further over the next several years. The increase in the federal

funds rate has caused mortgage interest rates to rise from historically low levels, which has contributed to reducing the volume of new mortgages originated, in particular the volume of mortgage refinancings, in 2017 and 2018. As another example, from 2013 through 2018, statements made by the Chair and other members of the Board of Governors of the Federal Reserve System and by other Federal Reserve Bank officials regarding the U.S. economy, future economic growth, the Federal Reserve's future open market activity and monetary policy had a significant impact on, among other things, benchmark interest rates, the value of residential mortgage loans, and, more generally, the fixed income markets. These statements and the actions of the Federal Reserve, and other factors also significantly impacted many market participants' expectations and outlooks regarding future levels of benchmark interest rates and the expected yields these market participants would require to invest in fixed income instruments, including most residential mortgages and residential mortgage-backed securities (RMBS).

To the extent benchmark interest rates continue to rise, one of the immediate potential impacts on our business would be a reduction in the overall value of the pool of residential mortgage loans that we own and the overall value of the pipeline of residential mortgage loans that we have identified for purchase. Rising benchmark interest rates also generally have a negative impact on the overall cost of short- and long-term borrowings we use to finance our acquisitions and holdings of residential mortgage loans, including as a result of the requirement to post additional margin (or collateral) to lenders to offset any associated decline in value of the mortgage loans we finance with short- and long-term borrowings. The short- and long-term borrowings we use to finance our acquisitions and holdings of residential mortgage loans are uncommitted and have a limited term, which could result in these types of borrowings not being available in the future to fund our acquisitions and holdings and could result in our being required to sell holdings of residential mortgage loans and incur losses. Similar impacts would also be expected with respect to the short-term borrowings we use to finance our acquisitions and holdings of RMBS. In addition, any inability to fund acquisitions of mortgage loans could damage our reputation as a reliable counterparty in the mortgage finance markets.

To the extent benchmark interest rates continue to rise, it would also likely impact the volume of residential mortgage loans available for purchase in the marketplace and our ability to compete to acquire residential mortgage loans as part of our residential mortgage banking activities. These impacts could result from, among other things, a lower overall volume of mortgage refinance activity by mortgage borrowers and an increased level of competition from large commercial banks that may operate with a lower cost of capital than we do, including as a result of Federal Reserve monetary policies that impact banks more favorably than us and other non-bank institutions. These and other impacts of developments of the type described above have had, and may continue to have, a negative impact on our business and results of operations and we cannot accurately predict the full extent of these impacts or for how long they may persist.

Federal and state legislative and regulatory developments and the actions of governmental authorities and entities may adversely affect our business and the value of, and the returns on, mortgages, mortgage-related securities, and other assets we own or may acquire in the future.

As noted above, our business is affected by conditions in the housing, multifamily, and real estate markets and the broader financial markets, as well as by the financial condition and resources of other participants in these markets. These markets and many of the participants in these markets are subject to, or regulated under, various federal and state laws and regulations. In some cases, the government or government-sponsored entities, such as Fannie Mae and Freddie Mac, directly participate in these markets. In particular, because issues relating to residential real estate and housing finance can be areas of political focus, federal, state and local governments may be more likely to take actions that affect residential real estate, the markets for financing residential real estate, and the participants in residential real estate-related industries than they would with respect to other industries. As a result of the government's statutory and regulatory oversight of the markets we participate in and the government's direct and indirect participation in these markets, federal and state governmental actions, policies, and directives can have an adverse effect on these markets and on our business and the value of, and the returns on, mortgages, mortgage-related securities, and other assets we own or may acquire in the future, which effects may be material.

Furthermore, the financial crisis of 2007-2008 and subsequent financial turmoil prompted the federal government to put into place new statutory and regulatory frameworks and policies for reforming the U.S. financial system. These financial reforms are aimed at, among other things, promoting robust supervision and regulation of financial firms, establishing comprehensive supervision of financial markets, protecting consumers and investors from financial abuse, providing the U.S. government with additional tools to manage financial crises, and raising international regulatory standards and improving international cooperation, but their scope could be expanded beyond what has been currently enacted, implemented, and proposed. Certain financial reforms focused specifically on the issuance of asset-backed securities through securitization transactions include significantly enhanced disclosure requirements, risk

retention requirements, and rules restricting a broad range of conflicts of interests in regard to these transactions. Implementation of financial reforms, whether through law, regulations, or policy, including changes to the manner in which financial institutions, financial products, and financial markets operate and are regulated and any related changes in the accounting standards that govern them, could adversely affect our business and financial results by subjecting us to regulatory oversight, making it more expensive to conduct our business, reducing or eliminating any competitive advantage we may have, or limiting our ability to expand, or could have other adverse effects on us.

Alternatively, under President Trump's administration the scope of financial reforms and the regulatory framework governing the financial system has been, and could continue to be, reduced or refocused. Trump administration policies, federal legislation, or executive or regulatory actions aimed at weakening or dismantling the Dodd-Frank Act or its regulatory apparatus, including by reducing capital requirements on banking institutions or by weakening or redirecting the Consumer Financial Protection Bureau ("CFPB"), its leadership, or its enforcement capabilities or priorities, could result in increased competition from commercial banks and other large financial institutions that may have advantages due to their size and cost of capital.

During and since 2008, the federal government has also made available programs designed to provide homeowners with assistance in avoiding residential mortgage loan foreclosures, including through loan modification and refinancing programs. In addition, certain mortgage lenders and servicers have voluntarily, or as part of settlements with law enforcement authorities, established loan modification programs relating to the mortgages they hold or service and adopted new servicing standards intended to protect homeowners. Changes to servicing standards, whether resulting from a settlement or a change in regulation, are likely to have the effect of lengthening the time it takes for a servicer to foreclose on the property underlying a delinquent mortgage loan. Loan modification programs and changes to servicing standards and regulations, as well as future law enforcement and legislative or regulatory actions, may adversely affect the value of, and the returns on, the mortgage loans and mortgage securities we currently own or may acquire in the future.

Ultimately, we cannot assure you of the impact that governmental actions may have on our business or the financial markets and, in fact, they may adversely affect us, possibly materially. We cannot predict whether or when such actions may occur or what unintended or unanticipated impacts, if any, such actions could have on our business and financial results. Even after governmental actions have been taken and we believe we understand the impacts of those actions, we may not be able to effectively respond to them so as to avoid a negative impact on our business or financial results.

Federal regulations may limit, eliminate, or reduce the attractiveness of our subsidiary's ability to use borrowings from the Federal Home Loan Bank of Chicago to finance the mortgage loans and securities it holds and acquires, which could negatively impact our business and operating results.

In June 2014, we announced that our wholly-owned captive insurance company subsidiary, RWT Financial, LLC, was approved as a member of the Federal Home Loan Bank of Chicago ("FHLBC"). This membership has provided RWT Financial with access to attractive long-term collateralized financing for mortgage loans and securities it holds and acquires. RWT Financial currently has approximately \$2.00 billion of long-term borrowings from the FHLBC to finance its portfolio of jumbo residential mortgage loans. In January 2016, federal regulations were adopted by the Federal Housing Finance Agency ("FHFA"), which is the regulator of the Federal Home Loan Bank System, relating to captive insurance company membership in the Federal Home Loan Bank System. Under these regulations, RWT Financial is eligible to remain as a member of the FHLBC until the expiration of a five-year transition period and its existing \$2.00 billion of FHLB debt is permitted to remain outstanding until stated maturity (even though the scheduled maturity extends beyond the five-year transition period). As residential loans pledged as collateral for this debt pay down, RWT Financial is permitted to pledge additional loans or other eligible assets to collateralize this debt; however, we do not expect RWT Financial to be able to increase its FHLB debt above the existing \$2.00 billion outstanding.

The final regulations published by the FHFA could negatively impact us in a number of different ways, including, without limitation, by: limiting our ability to acquire (or the attractiveness of acquiring) residential mortgage loans to hold as long-term investments; limiting our ability to increase net interest income earned by RWT Financial; and, following the five-year transition period and the scheduled maturity of our currently outstanding advances, requiring us to arrange for alternative (and, likely, less attractive) financing sources for residential mortgage loans held as long-term investments or, if such alternative financing sources are not then available, requiring us to liquidate our portfolio of residential loans held as long-term investments, any of which could negatively impact our business and operating results. In addition, our increased reliance on long-term financing from the FHLBC exposes us to risks of the type described below in Part II, Item 7 of this Annual Report on Form 10-K under the heading, "Risks Relating to Debt Incurred under Short- and Long-Term Borrowing Facilities."

Decisions we make about our business strategy and investments, as well as decisions about raising capital or returning capital to shareholders (through dividends or common stock repurchases), could fail to improve our business and results of operations.

Since December 2017, we have announced several new initiatives to expand our mortgage banking activities and grow our investment portfolio, including by exploring opportunities to provide expanded financing options to non-bank mortgage loan originators, expanding our mortgage loan purchase activity to include, for example, loans secured by non-owner occupied rental properties generally made up of one to four units and residential bridge loans (which we collectively refer to as "business purpose real estate loans"), and increasing the size and optimizing the target returns of our investment portfolio. As one example, we recently announced that we have exercised our purchase option to complete the acquisition of 5 Arches, LLC ("5 Arches"), an originator of business-purpose real estate loans, following our minority equity investment in 5 Arches in May 2018. As another example, we recently announced our participation in a multifamily whole loan investment fund created to acquire \$1 billion of floating rate, light-renovation multifamily loans from Freddie Mac. Other new investment initiatives include investing in residential securities collateralized by re-performing and non-performing mortgage loans, multifamily securities, and investments in excess mortgage servicing rights ("MSRs") and servicer advance investments related to pools of residential and small-balance multifamily mortgage loans.

These new initiatives are intended to grow our mortgage banking business and investment portfolio, as well as to allocate capital to profitable business and investment opportunities. These initiatives are premised on our outlook for economic and market conditions, secular trends in consumer demand for housing, as well as competitive considerations. Over the long-term, the assumptions underlying these trends and changes, or assumptions regarding the risk profile of these initiatives and investments, could turn out to be incorrect or economic and market conditions could develop in a manner that is not consistent with our assumptions. As a result, these new initiatives could fail to improve the long-term profitability of Redwood, could fail to result in capital being available for or deployed into more profitable businesses and investments, could result in dilutive issuances of equity or debt securities convertible into equity to fund our business and investment activities, or could otherwise damage our business, our reputation, our ability to access financing, and our ability to raise capital, or could have other unforeseen consequences, any or all of which could result in a material adverse effect on our business and results of operations in the future. Decisions we make in the future about our business strategy and investments, as well as decisions about raising capital or returning capital to shareholders (through dividends or common stock repurchases), could also fail to improve our business and results of operations.

In February 2016 and again in February 2018, our Board of Directors approved authorizations for the purchase of Redwood common stock and also authorized the repurchase of other securities issued by Redwood, including convertible and exchangeable debt securities. Subsequently, since 2016, we have repurchased approximately \$50 million of our common stock at an average price per share of \$13.87 and approximately \$41 million of our outstanding debt securities. At December 31, 2018, approximately \$100 million of this current authorization remained available for the repurchase of shares of our common stock. If we repurchase shares of Redwood common stock or other securities issued by Redwood, it is because at the time we believe the shares or securities are trading at attractive levels relative to other uses of capital or investment opportunities then available to us; however, it is possible that other uses of this capital could have been more accretive to our earnings or book value or that subsequent capital needs arise that were not contemplated at the time we made these decisions. Our past and future decisions relating to the repurchases of Redwood common stock or other securities issued by Redwood could fail to improve our results of operations or could negatively impact our ability to execute our business plans, meet financial obligations, access financing, or raise additional capital, any or all of which could result in a material adverse effect on our business and results of operations in the future.

In addition, in June 2018, we issued \$200 million of convertible senior notes (convertible into common stock), and between June 2018 and February 2019, we issued approximately 20 million shares of common stock for aggregate net proceeds of approximately \$325 million through underwritten public offerings, from time to time in at-the-market ("ATM") offerings, and under our direct stock purchase and dividend reinvestment plan. We may issue additional shares of common stock (or debt securities convertible into common stock) in subsequent public offerings or private placements. In addition, we may issue additional shares of common stock pursuant to our ATM offering program, upon conversion of our convertible debt or upon exchange of our exchangeable debt, to participants in our direct stock purchase and dividend reinvestment plan, to our directors, officers and employees under our employee stock purchase plan and our incentive plan, including upon the exercise of, or in respect of, distributions on equity awards previously granted thereunder, and in connection with our acquisition of 5 Arches. It may not be possible for existing stockholders to participate in future share issuances, which may dilute existing stockholders' interests in us. To the extent we raise capital to fund our operations and investment activities, our approach to raising capital is based on what we believe to be in the best interest of our shareholders. However, it is possible that our use of the proceeds of such capital raising transactions may not yield a significant return or any return at all for our stockholders.

Risks Related to our Investments and Investing Activity

The nature of the assets we hold and the investments we make expose us to credit risk that could negatively impact the value of those assets and investments, our earnings, dividends, cash flows, and access to liquidity, or otherwise negatively affect our business.

Overview of credit risk

We assume credit risk primarily through the ownership of securities backed by residential, multifamily, and other real estate loans and through direct investments in residential real estate loans and other real estate loans. We may also assume similar credit risks through other types of transactions with counterparties who are seeking to reduce their exposure to credit risk or who are seeking financing for their own holdings of residential real estate loans or servicing rights relating to residential real estate loans. Credit losses on real estate loans can occur for many reasons, including: fraud; poor underwriting; poor servicing practices; weak economic conditions; increases in payments required to be made by borrowers; declines in the value of real estate; declining rents on single- and multifamily residential rental properties; natural disasters, the effects of climate change (including flooding, drought, wildfires, and severe weather) and other natural events; uninsured property loss; over-leveraging of the borrower; costs of remediation of environmental conditions, such as indoor mold; changes in zoning or building codes and the related costs of compliance; acts of war or terrorism; changes in legal protections for lenders and other changes in law or regulation; and personal events affecting borrowers, such as reduction in income, job loss, divorce, or health problems. In addition, the amount and timing of credit losses could be affected by loan modifications, delays in the liquidation process, documentation errors, and other action by servicers. Weakness in the U.S. economy or the housing market could cause our credit losses to increase beyond levels that we currently anticipate.

In addition, rising interest rates may increase the credit risks associated with certain residential real estate loans. For example, the interest rate is adjustable for many of the loans held at securitization entities we have sponsored and for a portion of the loans underlying residential securities we have acquired from securitizations sponsored by others. In addition, a portion of the loans we have pledged to secure short-term warehouse borrowings and a portion of the loans underlying multifamily securities we have acquired may have adjustable interest rates. Accordingly, when short-term interest rates rise, required monthly payments from homeowners will rise under the terms of these adjustable-rate mortgages, and this may increase borrowers' delinquencies and defaults.

Credit losses on business purpose real estate loans and real estate loans collateralizing multifamily securities can occur for many of the reasons noted above for residential real estate loans. Moreover, these types of real estate loans may not be fully amortizing and, therefore, the borrower's ability to repay the principal when due may depend upon the ability of the borrower to refinance or sell the property at maturity. Business purpose real estate loans and real estate loans collateralizing multifamily securities are particularly sensitive to conditions in the rental housing market and to demand for rental residential properties.

We may have heightened credit losses associated with certain securities and investments we own.

Within a securitization of residential, multifamily, or business purpose real estate loans, various securities are created, each of which has varying degrees of credit risk. We may own the securities in which there is more (or the most) concentrated credit risk associated with the underlying real estate loans.

In general, losses on an asset securing a residential, multifamily, or business purpose real estate loan included in a securitization will be borne first by the owner of the property (i.e., the owner will first lose any equity invested in the property) and, thereafter, by the first-loss security holder, and then by holders of more senior securities. In the event the losses incurred upon default on the loan exceed any classes of securities junior to those in which we invest (if any), we may not be able to recover all of our investment in the securities we hold. In addition, if the underlying

properties have been overvalued by the originating appraiser or if the values subsequently decline and, as a result, less collateral is available to satisfy interest and principal payments due on the related security, then the first-loss securities may suffer a total loss of principal, followed by losses on the second-loss and then third-loss securities (or other residential and commercial securities that we own). In addition, with respect to residential securities we own, we may be subject to risks associated with the determination by a loan servicer to discontinue servicing advances (advances of mortgage interest payments not made by a delinquent borrower) if they deem continued advances to be unrecoverable, which could reduce the value of these securities or impair our ability to project and realize future cash flows from these securities.

For loans or other investments we own directly (not through a securitization structure), we will most likely be in a position to incur credit losses - should they occur - only after losses are borne by the owner of the property (e.g., by a reduction in the owner's equity stake in the property). Similar to our exposure to credit losses on loans we own directly, we have committed to assume credit losses - but only up to a specified amount - on certain conforming residential mortgage loans that we acquired and then sold to Fannie Mae and Freddie Mac pursuant to risk-sharing arrangements we entered into with those entities, to the extent any such losses exceed the owner's equity investment in the property. We may take actions available to us in an attempt to protect our position and mitigate the amount of credit losses, but these actions may not prove to be successful and could result in our increasing the amount of credit losses we ultimately incur on a loan.

The nature of the assets underlying some of the securities and investments we hold could increase the credit risk of those securities.

For certain types of loans underlying securities we may own or acquire, the loan rate or borrower payment rate may increase over time, increasing the potential for default. For example, securities may be backed by residential real estate loans that have negative amortization features. The rate at which interest accrues on these loans may change more frequently or to a greater extent than payment adjustments on an adjustable-rate loan, and adjustments of monthly payments may be subject to limitations or may be limited by the borrower's option to pay less than the full accrual rate. As a result, the amount of interest accruing on the remaining principal balance of the loans at the applicable adjustable mortgage loan rate may exceed the amount of the monthly payment. To the extent we are exposed to it, this is particularly a risk in a rising interest rate environment. Negative amortization occurs when the resulting excess (of interest owed over interest paid) is added to the unpaid principal balance of the related adjustable mortgage loan. For certain loans that have a negative amortization feature, the required monthly payment is increased after a specified number of months or after a maximum amount of negative amortization has occurred in order to amortize fully the loan by the end of its original term. Other negative amortizing loans limit the amount by which the monthly payment can be increased, which results in a larger final payment at maturity. As a result, negatively amortizing loans have performance characteristics similar to those of balloon loans. Negative amortization may result in increases in delinquencies, loan loss severity, and loan defaults, which may, in turn, result in payment delays and credit losses on our investments. Other types of loans and investments to which we are exposed, such as hybrid loans and adjustable-rate loans, may also have greater credit risk than more traditional amortizing fixed-rate mortgage loans.

Many of the real estate loans collateralizing multifamily securities and business purpose real estate loans we own or may acquire are only partially amortizing or do not provide for any principal amortization prior to a balloon principal payment at maturity. Commercial loans that only partially amortize or that have a balloon principal payment at maturity may have a higher risk of default at maturity than fully amortizing loans. In addition, since most of the principal of these loans is repaid at maturity, the amount of loss upon default is generally greater than on other loans that provide for more principal amortization.

We have concentrated credit risk in certain geographical regions and may be disproportionately affected by an economic or housing downturn, natural disaster, terrorist event, climate change, or any other adverse event specific to those regions.

A decline in the economy or difficulties in certain real estate markets, such as a high level of foreclosures in a particular area, are likely to cause a decline in the value of residential and multifamily properties. This, in turn, will increase the risk of delinquency, default, and foreclosure on real estate underlying securities and loans we hold with properties in those regions, and it will increase the risk of loss on other investments we own. This may then adversely affect our credit loss experience and other aspects of our business, including our ability to securitize (or otherwise sell) real estate loans and securities.

The occurrence of a natural disaster (such as an earthquake, tornado, hurricane, flood, landslide, or wildfire), or the effects of climate change (including flooding, drought, and severe weather), may cause decreases in the value of real estate (including sudden or abrupt changes) and would likely reduce the value of the properties collateralizing real estate loans we own or those underlying the securities or other investments we own. For example, in 2017 and 2018, hurricanes caused widespread flooding in Florida and Texas and wildfires and mudslides in northern and southern California destroyed or damaged thousands of homes. Since certain natural disasters may not typically be covered by the standard hazard insurance policies maintained by borrowers, the borrowers may have to pay for repairs due to the disasters. Borrowers may not repair their property or may stop paying their mortgage loans under those circumstances, especially if the property is damaged. This would likely cause foreclosures to increase and lead to higher credit losses on our loans or investments or on the pool of mortgage loans underlying securities we own.

A significant number of residential real estate loans that we own, or that underlie the securities we own, are secured by properties in California and, thus, we have a higher concentration of credit risk within California than in other states. Additional states where we have concentrations of residential loan credit risk are set forth in Note 6 to the Financial Statements within this Annual Report on Form 10-K. Balances on real estate loans collateralizing multifamily securities and business purpose real estate loans we own and may acquire are larger than residential loans and in the past we have had, and may have in the future, a geographically concentrated portfolio of such loans and securities. Real estate loans collateralizing multifamily securities and business purpose real estate loans we currently own are generally concentrated in California, Texas, Florida, Georgia, and Arizona.

The timing of credit losses can harm our economic returns.

The timing of credit losses can be a material factor in our economic returns from real estate loans, investments, and securities. If unanticipated losses occur within the first few years after a loan is originated, an investment is made, or a securitization is completed, those losses could have a greater negative impact on our investment returns than unanticipated losses on more seasoned loans, investments, or securities. In addition, higher levels of delinquencies and cumulative credit losses within a securitized loan pool can delay our receipt of principal and interest that is due to us under the terms of the securities backed by that pool. This would also lower our economic returns. The timing of credit losses could be affected by the creditworthiness of the borrower, the borrower's willingness and ability to continue to make payments, and new legislation, legal actions, or programs that allow for the modification of loans or ability for borrowers to get relief through bankruptcy or other avenues.

Our efforts to manage credit risks may fail.

We attempt to manage risks of credit losses by continually evaluating our investments for impairment indicators and establishing reserves under GAAP for credit and other risks based upon our assessment of these risks. We cannot establish credit reserves for tax accounting purposes. The amount of reserves that we establish may prove to be insufficient, which would negatively impact our financial results and would result in decreased earnings. In addition, cash and other capital we hold to help us manage credit and other risks and liquidity issues may prove to be insufficient. If these increased credit losses are greater than we anticipated and we need to increase our credit reserves, our GAAP earnings might be reduced. Increased credit losses may also adversely affect our cash flows, ability to invest, dividend distribution requirements and payments, asset fair values, access to short-term borrowings, and ability to securitize or finance assets.

Despite our efforts to manage credit risk, there are many aspects of credit risk that we cannot control. Our quality control and loss mitigation policies and procedures may not be successful in limiting future delinquencies, defaults, and losses, or they may not be cost effective. Our underwriting reviews may not be effective. The securitizations in which we have invested may not receive funds that we believe are due from mortgage insurance companies and other counterparties. Loan servicing companies may not cooperate with our loss mitigation efforts or those efforts may be ineffective. Service providers to securitizations, such as trustees, loan servicers, bond insurance providers, and custodians, may not perform in a manner that promotes our interests. Delay of foreclosures could delay resolution and increase ultimate loss severities, as a result.

The value of the homes or properties collateralizing or underlying real estate loans or investments may decline, and rents on single- and multifamily rental properties may decline. The frequency of default and the loss severity on loans upon default may be greater than we anticipate. Interest-only loans, negative amortization loans, adjustable-rate loans, larger balance loans, reduced documentation loans, subprime loans, Alt-A quality loans, second lien loans, loans in certain locations, residential mortgage loans that are not "qualified mortgages" under regulations promulgated by the CFPB, re-performing and non-performing loans, and loans or investments that are partially collateralized by non-real estate assets may have increased risks and severity of loss. If property securing or underlying loans becomes real

estate owned as a result of foreclosure, we bear the risk of not being able to sell the property and recovering our investment and of being exposed to the risks attendant to the ownership of real property.

Changes in consumer behavior, bankruptcy laws, tax laws, regulation of the mortgage industry, and other laws may exacerbate loan or investment losses. Changes in rules that would cause loans owned by a securitization entity to be modified may not be beneficial to our interests if the modifications reduce the interest we earn and increase the eventual severity of a loss. In some states and circumstances, the securitizations in which we invest have recourse as owner of the loan against the borrower's other assets and income in the event of loan default. However, in most cases, the value of the underlying property will be the sole effective source of funds for any recoveries. Other changes or actions by judges or legislators regarding mortgage loans and contracts, including the voiding of certain portions of these agreements, may reduce our earnings, impair our ability to mitigate losses, or increase the probability and severity of losses. Any expansion of our loss mitigation efforts could increase our operating costs and the expanded loss mitigation efforts may not reduce our future credit losses.

Credit ratings assigned to debt securities by the credit rating agencies may not accurately reflect the risks associated with those securities. Furthermore, downgrades in credit ratings could increase our credit risk, reduce our cash flows, or otherwise adversely affect our business and operations.

We generally do not consider credit ratings in assessing our estimates of future cash flows and desirability of our investments (although our assessment of the quality of an investment may prove to be inaccurate and we may incur credit losses in excess of our initial expectations). The assignment of an "investment grade" rating to a security by a rating agency does not mean that there is not credit risk associated with the security or that the risk of a credit loss with respect to such security is necessarily remote. Many of the securities we own do have credit ratings and, to the extent we securitize loans and securities, we expect to retain credit rating agencies to provide ratings on the securities created by these securitization entities (as we have in the past).

Rating agencies rate debt securities based upon their assessment of the safety of the receipt of principal and interest payments. Rating agencies do not consider the risks of fluctuations in fair value or other factors that may influence the value of debt securities and, therefore, any assigned credit rating may not fully reflect the true risks of an investment in securities. Also, rating agencies may fail to make timely adjustments to credit ratings based on available data or changes in economic outlook or may otherwise fail to make changes in credit ratings in response to subsequent events, so that our investments may be better or worse than the ratings indicate. Credit rating agencies may change their methods of evaluating credit risk and determining ratings on securities backed by real estate loans and securities. These changes may occur quickly and often. The market's ability to understand and absorb these changes and the impact to the securitization market in general are difficult to predict. Such changes may have an impact on the amount of investment-grade and non-investment-grade securities that are created or placed on the market in the future. Downgrades to the ratings of securities could have an adverse effect on the value of some of our investments and our cash flows from those investments.

Changes in prepayment rates of mortgage loans could reduce our earnings, dividends, cash flows, and access to liquidity.

The economic returns we earn from most of the real estate securities and loans we own (directly or indirectly) are affected by the rate of prepayment of the underlying mortgage loans. Prepayments are difficult to accurately predict and adverse changes in the rate of prepayment could reduce our cash flows, earnings, and dividends. Adverse changes in cash flows would likely reduce the fair values of many of our assets, which could reduce our ability to borrow against our assets and may cause market valuation adjustments for GAAP purposes, which could reduce our reported earnings. While we estimate prepayment rates to determine the effective yield of our assets and valuations, these estimates are not precise and prepayment rates do not necessarily change in a predictable manner as a function of interest rate changes. Prepayment rates can change rapidly. As a result, changes can cause volatility in our financial results, affect our ability to securitize assets, affect our ability to fund acquisitions, and have other negative impacts on our ability to generate earnings.

We may own securities backed by residential loans that are particularly sensitive to changes in prepayments rates. These securities include interest-only securities (IOs) that we acquire from third parties and from our Sequoia entities. Faster prepayments than we anticipated on the underlying loans backing these IOs will have an adverse effect on our returns on these investments and may result in losses. Similarly, we own mortgage servicing rights, or MSRs, associated with residential mortgage loans, and excess MSR investments associated with residential and multifamily mortgage loans, all of which are particularly sensitive to changes in prepayments rates. As the owner of an MSR (or excess MSR investment), we are entitled to a portion of the interest payments made by the borrower in respect of the associated loan and, in the case of MSRs, we are responsible for hiring and compensating a sub-servicer to directly service the associated loan. Faster prepayments than we anticipate on loans associated with MSRs and excess MSR investments we own will have an adverse effect on our returns from these MSRs and may result in losses.

Interest rate fluctuations can have various negative effects on us and could lead to reduced earnings and increased volatility in our earnings.

Changes in interest rates, the interrelationships between various interest rates, and interest rate volatility could have negative effects on our earnings, the fair value of our assets and liabilities, loan prepayment rates, and our access to liquidity. Changes in interest rates can also harm the credit performance of our assets. We generally seek to hedge some but not all interest rate risks. Our hedging may not work effectively and we may change our hedging strategies or the degree or type of interest rate risk we assume.

Some of the loans and securities we own or may acquire have adjustable-rate coupons (i.e., they may earn interest at a rate that adjusts periodically based on an interest rate index). The cash flows we receive from these assets may vary as a function of interest rates, as may the reported earnings generated by these assets. We also acquire loans and securities for future sale, as assets we are accumulating for securitization, or as a longer-term investment. We expect to fund assets with a combination of equity, fixed rate debt and adjustable rate debt. To the extent we use adjustable rate debt to fund assets that have a fixed interest rate (or use fixed rate debt to fund assets that have an adjustable interest rate), an interest rate mismatch could exist and we could, for example, earn less (and fair values could decline) if interest rates rise, at least for a time. We may or may not seek to mitigate interest rate mismatches for these assets with hedges such as interest rate agreements and other derivatives and, to the extent we do use hedging techniques, they may not be successful.

Higher interest rates generally reduce the fair value of many of our assets, with the exception of our IOs, MSRs, excess MSR investments, and adjustable-rate assets. This may affect our earnings results, reduce our ability to securitize, re-securitize, or sell our assets, or reduce our liquidity. Higher interest rates could reduce the ability of borrowers to make interest payments or to refinance their loans. Higher interest rates could reduce property values and increased credit losses could result. Higher interest rates could reduce mortgage originations, thus reducing our opportunities to acquire new assets.

When short-term interest rates are high relative to long-term interest rates, an increase in adjustable-rate residential loan prepayments may occur, which would likely reduce our returns from owning interest-only securities backed by adjustable-rate residential loans.

It can be difficult to predict the impact on interest rates of unexpected and uncertain global political and economic events, such as the election of President Trump, the U.K. vote to exit the European Union, or changes in the credit rating of the U.S. government, the United Kingdom, or one or more Eurozone nations; however, increased uncertainty or changes in the economic outlook for, or rating of, the creditworthiness of the U.S. government, the United Kingdom, or Eurozone nations may have adverse impacts on, among other things, the U.S. economy, financial markets, the cost of borrowing, the financial strength of counterparties we transact business with, and the value of assets we hold. Any such adverse impacts could negatively impact the availability to us of short-term debt financing, our cost of short-term debt financing, our business, and our financial results.

We have significant investment and reinvestment risks.

New assets we acquire may not generate yields as attractive as yields on our current assets, which could result in a decline in our earnings per share over time.

Assets we acquire or invest in may not generate the economic returns and GAAP yields we expect. Realized cash flow could be significantly lower than expected and returns from new investments and acquisitions could be negative. In order to maintain our portfolio size and our earnings, we must reinvest in new assets a portion of the cash flows we receive from principal, interest, and sales. We receive monthly payments from many of our assets, consisting of principal and interest. In addition, occasionally some of our residential securities are called (effectively sold). We may also sell assets from time to time as part of our portfolio and capital management strategies. Principal payments, calls, and sales reduce the size of our current portfolio and generate cash for us.

If the assets we invest in or acquire in the future earn lower GAAP yields than do the assets we currently own, our reported earnings per share could decline over time as the older assets are paid down, are called, or are sold, assuming comparable expenses, credit costs, and market valuation adjustments. Under the effective yield method of accounting that we use for GAAP purposes for some of our assets, we recognize yields on assets based on our assumptions regarding future cash flows. A portion of the cash flows we receive may be used to reduce our basis in these assets. As

a result of these various factors, our basis for GAAP amortization purposes may be lower than the current fair values of these assets. Assets with a lower GAAP basis than current fair values generate higher GAAP yields, and such yields are not necessarily available on newly acquired assets. Future economic conditions, including credit results, prepayment patterns, and interest rate trends, are difficult to project with accuracy over the life of the assets we acquire, so there will be volatility in the reported returns over time.

Our growth may be limited if assets are not available or not available at attractive prices.

To reinvest the proceeds from principal repayments we receive on our existing investments and deploy capital we raise, we must invest in or acquire new assets. If the availability of new assets is limited, we may not be able to invest in or acquire assets that will generate attractive returns. Generally, asset supply can be reduced if originations of a particular product are reduced or if there are fewer sales in the secondary market of seasoned product from existing portfolios. In particular, assets we believe have a favorable risk/reward ratio may not be available for purchase.

We do not originate residential loans; rather, we rely on the origination market to supply the types of loans we seek to invest in. At times, due to increases in interest rates, heightened credit concerns, strengthened underwriting standards, increased regulation, and/or concerns about economic growth or housing values, the volume of originations may decrease significantly. For example, in recent years residential mortgage interest rates were generally declining, with the result that a significant portion of industry-wide origination volumes were related to residential borrowers refinancing existing mortgage loans. As interest rates have increased, particularly in 2017 and 2018, the volume of refinance loans has declined, and to the extent interest rates continue to increase, refinance loan volume is likely to decline further, and this volume may not return to previous levels. A reduced volume of loan originations may make it difficult for us to acquire loans and securities.

The supply of new issue RMBS collateralized by jumbo mortgage loans available for purchase could be adversely affected if the economics of executing securitizations are not favorable or if the regulations governing the execution of securitizations discourage or preclude certain potential market participants from engaging in these transactions. In addition, if there is not a robust market for triple-A rated securities, the supply of real estate subordinate securities could be significantly diminished.

In 2014, we began entering into risk-sharing arrangements with Fannie Mae and Freddie Mac and more recently we have been purchasing credit risk transfer (CRT) securities issued by Fannie Mae and Freddie Mac under which we are compensated for agreeing to absorb credit losses on new conforming loans or for engaging in similar types of credit risk-sharing or -transfer structures. Since December 2017, we have announced several other new initiatives to grow our investment portfolio. While these initiatives represent potential opportunities for future capital deployment, ultimately these initiatives may not produce sizable investment opportunities due to competition from other investors, regulatory issues, or federal housing finance reform initiatives that impact Fannie Mae and Freddie Mac.

Investments in diverse types of assets and businesses could expose us to new, different, or increased risks.

We have invested in and may in the future invest in a variety of real estate and non-real estate related assets that may not be closely related to the types of investments we have traditionally made. Additionally, we may enter into or engage in various types of securitizations, transactions, services, and other operating businesses that are different than the types we have traditionally entered into or engaged in. For example, in 2014 our FHLBC-member subsidiary established a borrowing facility with the FHLBC that provides a source of long-term financing for residential mortgage loans that our subsidiary buys and holds, as a result of which its holdings of residential whole loans have increased. Also, as noted above, we began entering into risk-sharing arrangements with Fannie Mae and Freddie Mac in 2014 and more recently we have been purchasing CRT securities issued by Fannie Mae and Freddie Mac under which we are compensated for agreeing to absorb credit losses on new conforming loans or for engaging in similar types of credit risk-sharing or -transfer structures. As another example, we recently began exploring opportunities to provide expanded financing options to non-bank mortgage loan originators and expanding our mortgage loan purchase activity to include, for example, business purpose loans secured by non-owner occupied rental properties and residential bridge loans. We also recently completed investments in subordinate securities backed by re-performing and non-performing residential loans, excess MSR investments collateralized by residential and multifamily loans, servicer advance investments related to residential mortgage loans, and a whole loan investment fund created to acquire light-renovation multifamily loans. Additionally, we exercised our purchase option to complete the acquisition of 5 Arches.

Any of these actions may expose us to new, different, or increased investment, operational, financial, or management risks. Several of these investments were complex, highly structured, and involve partnerships and joint ventures with co-investors, any or all of which may limit the liquidity of such investments. Additionally, when investing in transactions with complex or novel structures, the risks associated with the transactions and structures may not be fully known to buyers and sellers. For example, we have limited control of our investment in a whole loan investment

fund created to acquire light-renovation multifamily loans from Freddie Mac, and there are contingent liabilities associated with this investment that are not reflected on our balance sheet.

For another example, one of our excess MSR investments includes an associated investment in servicer advances financed with non-recourse debt. Non-recourse financing generally limits our exposure to losses to the value of the collateral securing the financing (i.e., the servicer advances). However, a default on such non-recourse financing of servicer advances could result in a complete loss of our servicer advance investments and the related excess MSRs. Additionally, this non-recourse financing is short-term. We may not be able to renew this financing on favorable terms, or at all, which may have a negative impact on the value of our investment. A more detailed discussion of the risks related to this servicer advance financing is described below in Part II, Item 7 of this Annual Report on Form 10-K under the heading, "Risks Relating to Debt Incurred under Short- and Long-Term Borrowing Facilities."

As another example, in connection with our pending acquisition of 5 Arches, we made assumptions about the cash flows and investments that will be generated from the acquisition. There may be risks and challenges associated with the integration of the 5 Arches platform and workforce that we did not anticipate or may not be able to mitigate. If our assumptions are wrong, or if market conditions change, it could have a negative impact on our financial or operational results related to this acquisition and to our business as a whole.

We may invest in non-real estate asset-backed securities (ABS), corporate debt, or equity. We have invested in diverse types of IOs from residential and commercial securitizations sponsored by us or by others. The higher credit and prepayment risks associated with these types of investments may increase our exposure to losses. We may invest in non-U.S. assets that may expose us to currency risks (which we may choose not to hedge) and different types of credit, prepayment, hedging, interest rate, liquidity, legal, and other risks. These types of investments could expose us to new, different, or increased risks that we did not anticipate, which could have a negative impact on the financial returns generated.

In addition, when investing in assets or businesses we are exposed to the risk that those assets, or interest income or revenue generated by those assets or businesses, result in our not meeting the requirements to maintain our REIT status or our status as exempt from registration under the Investment Company Act of 1940, as amended (Investment Company Act), as further described in the risk factors titled "We have elected to be taxed as a REIT and, as such, are required to meet certain tests in order to maintain our REIT status. This adds complexity and costs to running our business and exposes us to additional risks" and "Conducting our business in a manner so that we are exempt from registration under, and in compliance with, the Investment Company Act may reduce our flexibility and could limit our ability to pursue certain opportunities. At the same time, failure to continue to qualify for exemption from the Investment Company Act could adversely affect us."

We may change our investment strategy or financing plans, which may result in riskier investments and diminished returns.

We may change our investment strategy or financing plans at any time, which could result in our making investments that are different from, and possibly riskier than, the investments we have previously made or described. A change in our investment strategy or financing plans may increase our exposure to interest rate and default risk and real estate market fluctuations. Decisions to employ additional leverage could increase the risk inherent in our investment strategy. Additionally, a portion of our recent investment activity has included financing that is either short-term securitization debt or is incurred by entities that we do not control and thus is not reflected on our balance sheet. Furthermore, a change in our investment strategy could result in our making investments in new asset categories or in different proportions among asset categories than we previously have. For example, as noted above, since December 2017, we have announced several new initiatives to expand our mortgage banking and investment activities, including by exploring opportunities to provide expanded financing options to non-bank mortgage loan originators, expanding our mortgage loan purchase activity to include, for example, business purpose real estate loans secured by non-owner occupied rental properties and residential bridge loans, and increasing the size and optimizing the target returns of our investment portfolio. We also recently completed investments in subordinate securities backed by re-performing and non-performing residential loans, excess MSR investments collateralized by residential and multifamily loans, and a whole loan investment fund created to acquire light-renovation multifamily loans. Additionally, we exercised our purchase option to complete the acquisition of 5 Arches. As another example, in the future, we could determine to invest a greater proportion of our assets in securities backed by non-prime or subprime residential mortgage loans. These changes could result in our making riskier investments, which could ultimately have an adverse effect on our financial returns. Alternatively, we could determine to change our investment strategy or financing plans to be more risk averse, resulting in potentially lower returns, which could also have an adverse effect on our financial returns.

The performance of the assets we own and the investments we make will vary and may not meet our earnings or cash flow expectations. In addition, the cash flows and earnings from, and market values of, securities, loans, and other assets we own may be volatile.

We seek to manage certain of the risks associated with acquiring, holding, selling, and managing real estate loans and securities and other real estate-related investments. No amount of risk management or mitigation, however, can change the variable nature of the cash flows of, fair values of, and financial results generated by these loans, securities, and other assets. Changes in the credit performance of, or the prepayments on, these investments, including real estate loans and the loans underlying real estate securities, and changes in interest rates impact the cash flows on these securities and investments, and the impact could be significant for our loans, securities, and other assets with concentrated risks. Changes in cash flows lead to changes in our return on investment and also to potential variability in and level of reported income. The revenue recognized on some of our assets is based on an estimate of the yield over the remaining life of the asset. Thus, changes in our estimates of expected cash flow from an asset will result in changes in our reported earnings on that asset in the current reporting period. We may be forced to recognize adverse changes in expected future cash flows as a current expense, further adding to earnings volatility. Additionally, our non-GAAP measures of financial performance and our earnings calculated in accordance with GAAP may be subject to volatility. Moreover, the Securities and Exchange Commission has increasingly been focused on the use of non-GAAP financial metrics and may require us to change the presentation or method of calculation of our non-GAAP metrics which may result in variability and volatility.

Changes in the fair values of our assets, liabilities, and derivatives can have various negative effects on us, including reduced earnings, increased earnings volatility, and volatility in our book value.

Fair values for our assets and liabilities, including derivatives, can be volatile and our revenue and income can be impacted by changes in fair values. The fair values can change rapidly and significantly and changes can result from changes in interest rates, perceived risk, supply, demand, and actual and projected cash flows, prepayments, and credit performance. A decrease in fair value may not necessarily be the result of deterioration in future cash flows. Fair values for illiquid assets can be difficult to estimate, which may lead to volatility and uncertainty of earnings and book value.

For example, real estate-related securities in our investment portfolio may be subject to changes in credit spreads. Credit spreads measure the yield demanded on securities by the market based on their credit relative to a specific benchmark, and is a measure of the perceived risk of the investment. Fixed rate securities are valued based on a market credit spread over the rate payable on fixed rate swaps or fixed rate U.S. Treasuries of like maturity. Floating rate securities are typically valued based on a market credit spread over LIBOR and are affected similarly by changes in LIBOR spreads. Excessive supply of these securities or reduced demand may 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 securities would tend to decline. Conversely, if the spread used to value such securities were to decrease, or "tighten," the value of our real estate and other securities portfolio would tend to increase. Such changes in the market value of our real estate-related securities portfolio may affect our net equity, net income or cash flow directly through their impact on unrealized gains or losses on available-for-sale securities, and therefore our ability to realize gains on such securities, or indirectly through their impact on our ability to borrow and access capital. Widening credit spreads could cause the net unrealized gains on our securities and derivatives, recorded in accumulated other comprehensive income or retained earnings, and therefore our book value per share, to decrease and result in net losses.

For GAAP purposes, we mark to market most of the assets and some of the liabilities on our consolidated balance sheet. In addition, valuation adjustments on certain consolidated assets and many of our derivatives are reflected in our consolidated statement of income. Assets that are funded with certain liabilities and hedges may have differing

mark-to-market treatment than the liability or hedge. If we sell an asset that has not been marked to market through our consolidated statement of income at a reduced market price relative to its cost basis, our reported earnings will be reduced.

Our loan sale profit margins are generally reflective of gains (or losses) over the period from when we identify a loan for purchase until we subsequently sell or securitize the loan. These profit margins may encompass elements of positive or negative market valuation adjustments on loans, hedging gains or losses associated with related risk management activities, and any other related transaction expenses; however, under GAAP, the differing elements may be realized unevenly over the course of one or more quarters for financial reporting purposes, with the result that our financial results may be more volatile and less reflective of the underlying economics of our business activity.

Our calculations of the fair value of the securities, loans, MSRs, derivatives, and certain other assets we own or consolidate are based upon assumptions that are inherently subjective and involve a high degree of management judgment.

We report the fair values of securities, loans, MSRs, derivatives, and certain other assets on our consolidated balance sheets. In computing the fair values for these assets we may make a number of market-based assumptions, including assumptions regarding future interest rates, prepayment rates, discount rates, credit loss rates, and the timing of credit losses. These assumptions are inherently subjective and involve a high degree of management judgment, particularly for illiquid securities and other assets for which market prices are not readily determinable. For further information regarding our assets recorded at fair value see Note 5 to the Financial Statements within this Annual Report on Form 10-K. Use of different assumptions could materially affect our fair value calculations and our financial results. Further discussion of the risk of our ownership and valuation of illiquid securities is set forth in the immediately following risk factor.

Changes in banks' inter-bank lending rate reporting practices or the method pursuant to which LIBOR is determined may adversely affect the value of the financial obligations to be held or issued by us that are linked to LIBOR.

LIBOR and other indices which are deemed "benchmarks" are 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. It currently appears that, over time, U.S. Dollar LIBOR may be replaced by the Secured Overnight Financing Rate ("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. For example, switching existing financial instruments and hedging transactions from LIBOR to SOFR requires calculations of a spread. Industry organizations are attempting to structure the spread calculation in a manner that minimizes the possibility of value transfer between counterparties, borrowers, and lenders by virtue of the transition, but there is no assurance that the calculated spread will be fair and accurate or that all asset types and all types of securitization vehicles will use the same spread. 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. Uncertainty as to the nature of such potential changes, alternative reference rates or other reforms may adversely affect the market for or value of any securities on which the interest or dividend is determined by reference to LIBOR, loans, derivatives and other financial obligations or on our overall financial condition or results of operations. More generally, any of the above changes or any other consequential changes to LIBOR or any other "benchmark" as a result of international, national or other proposals for reform or other initiatives, or any further uncertainty in relation to the timing and manner of implementation of such changes, could have a material adverse effect on the value of and return on any securities based on or linked to a "benchmark."

Investments we make, hedging transactions that we enter into, and the manner in which we finance our investments and operations expose us to various risks, including liquidity risk, risks associated with the use of leverage, market risks, and counterparty risk.

Many of our investments have limited liquidity.

Many of the residential, multifamily, and other securities we own or may own are generally illiquid - that is, there is not a significant pool of potential investors that are likely to invest in these, or similar, securities. This illiquidity can also exist for the real estate loans we may hold. At times, the vast majority of the assets we own are illiquid. In turbulent markets, it is likely that the securities, loans, and other assets we own may become even less liquid. As a result, we may not be able to sell certain assets at opportune times or at attractive prices or we may incur significant losses upon sale of these assets, should we want or need to sell them.

Our level of indebtedness and liabilities could limit cash flow available for our operations, expose us to risks that could adversely affect our business, financial condition and results of operations and impair our ability to satisfy our obligations under our convertible notes and other debt instruments.

At December 31, 2018, our total consolidated liabilities (excluding indebtedness associated with asset-backed securities issued and other liabilities of consolidated entities, for which we are not liable) was \$4.88 billion. We may also incur additional indebtedness to meet future financing needs. Our indebtedness could have significant negative consequences for our business, results of operations and financial condition, including:

increasing our vulnerability to adverse economic and industry conditions;

4 imiting our ability to obtain additional financing;

requiring the dedication of a substantial portion of our cash flow from operations to service our indebtedness, thereby reducing the amount of our cash flow available for other purposes;

requiring asset sales to fund the repayment of maturing debt;

4 imiting our flexibility in planning for, or reacting to, changes in our business;

dilution experienced by our existing stockholders as a result of the conversion of the convertible notes or exchangeable securities into shares of common stock; and

placing us at a possible competitive disadvantage with less leveraged competitors and competitors that may have better access to capital resources.

We cannot assure you that we will be able to continue to maintain sufficient cash reserves or continue to generate cash flow from operations at levels sufficient to permit us to pay principal, premium, if any, and interest on our indebtedness, or that our cash needs will not increase. If we are unable to generate sufficient cash flow or otherwise obtain funds necessary to make required payments, or if we fail to comply with the various requirements of our indebtedness then outstanding, we would be in default, which would permit the holders of the affected indebtedness to accelerate the maturity of such indebtedness and could cause defaults under our other indebtedness. Any default under any indebtedness could have a material adverse effect on our business, results of operations and financial condition. For an additional discussion of our outstanding indebtedness, see Part II, Item 7 of this Annual Report on Form 10-K under the heading "Risks Relating to Debt Incurred under Short- and Long-Term Borrowing Facilities."

Our use of financial leverage could expose us to increased risks.

We fund the residential loans we acquire in anticipation of a future sale or securitization with a combination of equity and short-term debt. In addition, we also make investments in securities and loans financed with short- and long-term debt. By incurring this debt (i.e., by applying financial leverage), we expect to generate more attractive returns on our invested equity capital. However, as a result of using financial leverage (whether for the accumulation of loans or related to longer-term investments), we could also incur significant losses if our borrowing costs increase relative to the earnings on our assets and costs of any related hedges. Financing facility creditors may also force us to sell assets pledged as collateral under adverse market conditions to meet margin calls, for example, in the event of a decrease in the fair values of the assets pledged as collateral. Liquidation of the collateral could create negative tax consequences and raise REIT qualification issues. Further discussion of the risk associated with maintaining our REIT status is set forth in the risk factor titled "We have elected to be taxed as a REIT and, as such, are required to meet certain tests in order to maintain our REIT status. This adds complexity and costs to running our business and exposes us to

additional risks." In addition, we make financial covenants to creditors in connection with incurring short- and long-term debt, such as covenants relating to our maintaining a minimum amount of tangible net worth or stockholders' equity and/or a minimum amount of liquid assets, and a maximum ratio of recourse debt to stockholders' equity. If we fail to comply with these financial covenants we would be in default under our financing facilities, which could result in, among other things, the liquidation of collateral we have pledged pursuant to these facilities under adverse market conditions and the inability to incur additional borrowings to finance our business activities. A further discussion of financial covenants we are subject to and related risks associated with our use of short-term debt is set forth in Part II, Item 7 of this Annual Report on Form 10-K under the heading, "Risks Relating to Debt Incurred Under Short- and Long-Term Borrowing Facilities." Additionally, our ability to increase our borrowing limits under our debt financing facilities (and therefore increase our investment capacity) may be limited by our ability to raise equity capital, which we may not be able to raise at attractive prices or at all.

The inability to access financial leverage through warehouse and repurchase facilities, credit facilities, our FHLB-member subsidiary's borrowing facility with the FHLBC, or other forms of debt financing may inhibit our ability to execute our business plan, which could have a material adverse effect on our financial results, financial condition, and business.

Our ability to fund our business and our investment strategy depends on our securing warehouse, repurchase, or other forms of debt financing (or leverage) on acceptable terms. For example, pending the sale or securitization of a pool of mortgage loans or other assets we generally fund the acquisition of those mortgage loans or other assets through borrowings from warehouse, repurchase, and credit facilities, and other forms of short-term financing.

We cannot assure you that we will be successful in establishing sufficient sources of short-term debt when needed. In addition, because of its short-term nature, lenders may decline to renew our short-term debt upon maturity or expiration, and it may be difficult for us to obtain continued short-term financing. During certain periods, lenders may curtail their willingness to provide financing, as liquidity in short-term debt markets, including repurchase facilities and commercial paper markets, can be withdrawn suddenly, making it difficult or expensive to renew short-term borrowings as they mature. To the extent our business or investment strategy calls for us to access financing and counterparties are unable or unwilling to lend to us, then our business and financial results will be adversely affected. In addition, it is possible that lenders who provide us with financing could experience changes in their ability to advance funds to us, independent of our performance or the performance of our investments, in which case funds we had planned to be able to access may not be available to us. Additionally, federal regulations were adopted by the Federal Housing Finance Agency in January 2016 relating to captive insurance company membership in the Federal Home Loan Bank System. Under these regulations, our captive insurance company subsidiary, RWT Financial, LLC, which is currently a member of the Federal Home Loan Bank of Chicago (FHLBC), is only eligible to remain as a member of the FHLBC for a five-year transition period and may not be able to obtain additional advances or increases to its borrowing capacity from the FHLBC. Although FHLBC is permitted to allow advances that were outstanding to RWT Financial prior to effectiveness of the regulations to remain outstanding until scheduled maturity (even if that scheduled maturity extends beyond the five-year transition period), these regulations may limit RWT Financial's ability to increase the size of its portfolio of residential mortgage loans and thereby may impact the ability to increase net interest income generated by RWT Financial's portfolio of held-for-investment loans, and could otherwise have an adverse effect on our business and results of operations, as further described under the risk factor titled "Federal regulations may limit, eliminate, or reduce the attractiveness of our subsidiary's ability to use borrowings from the Federal Home Loan Bank of Chicago to finance the mortgage loans and securities it holds and acquires, which could negatively impact our business and operating results." Additionally, our ability to increase borrowing limits under our debt financing facilities (and therefore increase our investment capacity) may be limited by our ability to raise equity capital, which we may not be able to raise at attractive prices or at all.

Hedging activities may reduce earnings, may fail to reduce earnings volatility, and may fail to protect our capital in difficult economic environments.

We attempt to hedge certain interest rate risks (and, at times, prepayment risks and fair values) by balancing the characteristics of our assets and associated (existing and anticipated) liabilities with respect to those risks and entering into various interest rate agreements. The number and scope of the interest rate agreements we utilize may vary significantly over time. We generally seek to enter into interest rate agreements that provide an appropriate and efficient method for hedging certain risks related to changes in interest rates.

The use of interest rate agreements and other instruments to hedge certain of our risks may have the effect over time of lowering long-term earnings to the extent these risks do not materialize. To the extent that we hedge, it is usually to seek to protect us from some of the effects of short-term interest rate volatility, to lower short-term earnings volatility, to stabilize liability costs or fair values, to stabilize our economic returns from, or meet rating agency requirements

with respect to, a securitization transaction, or to stabilize the future cost of anticipated issuance of securities by a securitization entity. Hedging may not achieve our desired goals. Hedging with respect to the pipeline of loans we plan to purchase may not be effective due to loan fallout or other reasons. Using interest rate agreements as a hedge may increase short-term earnings volatility, especially if we do not elect certain accounting treatments for our hedges. Reductions in fair values of interest rate agreements may not be offset by increases in fair values of the assets or liabilities being hedged. Conversely, increases in fair values of interest rate agreements may not fully offset declines in fair values of assets or liabilities being hedged. Changes in fair values of interest rate agreements may require us to pledge significant amounts of cash or other acceptable forms of collateral.

We also may hedge by taking short, forward, or long positions in U.S. Treasuries, mortgage securities, or other cash instruments. We may take both long and short positions in credit derivative transactions linked to real estate assets. These derivatives may have additional risks to us, such as: liquidity risk, due to the fact that there may not be a ready market into which we could sell these derivatives if needed; basis risk, which could result in a decline in value or a requirement to make a cash payment as a result of changes in interest rates; and the risk that a counterparty to a derivative is not willing or able to perform its obligations to us due to its financial condition or otherwise.

Our earnings may be subject to fluctuations from quarter to quarter as a result of the accounting treatment for certain derivatives or for assets or liabilities whose terms do not necessarily match those used for derivatives, or as a result of our inability to meet the requirements necessary to obtain specific hedge accounting treatment for certain derivatives.

We enter into derivative contracts that may expose us to contingent liabilities and those contingent liabilities may not appear on our balance sheet. We may invest in synthetic securities, credit default swaps, and other credit derivatives, which expose us to additional risks.

We enter into derivative contracts, including interest rate swaps, options, and futures, that could require us to make cash payments in certain circumstances. Additionally, we may be required to make capital contributions to an investment fund in certain circumstances, including if debt covenants relating to financing incurred by the investment fund are not maintained. Such potential payment or capital call obligations would be contingent liabilities and may not appear on our balance sheet. Our ability to satisfy these contingent liabilities depends on the liquidity of our assets and our access to capital and cash. The need to fund these contingent liabilities could adversely impact our financial condition.

We may in the future invest in synthetic securities, credit default swaps, and other credit derivatives that reference other real estate securities or indices. These investments may present risks in excess of those resulting from the referenced security or index. These investments are typically contractual relationships with counterparties and not acquisitions of referenced securities or other assets. In these types of investments, we have no right directly to enforce compliance with the terms of the referenced security or other assets and we have no voting or other consensual rights of ownership with respect to the referenced security or other assets. In the event of insolvency of a counterparty, we will be treated as a general creditor of the counterparty and will have no claim of title with respect to the referenced security.

Hedging activities may subject us to increased regulation.

Under the Dodd-Frank Act, there is increased regulation of companies, such as Redwood and certain of our subsidiaries, that enter into interest rate hedging agreements and other hedging instruments and derivatives. This increased regulation could result in Redwood or certain of our subsidiaries being required to register and be regulated as a commodity pool operator or a commodity trading advisor. If we are not able to maintain an exemption from these regulations, it could have a negative impact on our business or financial results. Moreover, rules requiring central clearing of certain interest rate swap and other transactions, as well as rules relating to margin and capital requirements for swap transactions and regulated participants in the swap markets, as well as other swap market regulatory reforms, may increase the cost or decrease the availability to us of hedging transactions, and may also limit our ability to include swaps in our securitization transactions.

Our results could be adversely affected by counterparty credit risk.

We have credit risks that are generally related to the counterparties with which we do business. There is a risk that counterparties will fail to perform under their contractual arrangements with us and this risk is usually more pronounced during an economic downturn. Counterparties may seek to eliminate credit exposure by entering into

offsetting, or "back-to-back," hedging transactions, and the ability of a counterparty to settle a synthetic transaction may be dependent on whether the counterparties to the back-to-back transactions perform their delivery obligations. Those risks of non-performance may differ materially from the risks entailed in exchange-traded transactions, which generally are backed by clearing organization guarantees, daily mark-to-market and settlement of positions, and segregation and minimum capital requirements applicable to intermediaries. Transactions entered into directly between parties generally do not benefit from those protections, and expose the parties to the risk of counterparty default. Furthermore, there may be practical and timing problems associated with enforcing our rights to assets in the case of an insolvency of a counterparty.

In the event a counterparty to our short-term borrowings becomes insolvent, we may fail to recover the full value of our pledged collateral, thus reducing our earnings and liquidity. In the event a counterparty to our interest rate agreements or other derivatives becomes insolvent or interprets our agreements with it in a manner unfavorable to us, our ability to realize benefits from the hedge transaction may be diminished, any cash or collateral we pledged to the counterparty may be unrecoverable, and we may be forced to unwind these agreements at a loss. In the event a counterparty that sells us residential mortgage loans becomes insolvent or is acquired by a third party, we may be unable to enforce our loan repurchase rights in connection with a breach of loan representations and warranties and we may suffer losses if we must repurchase delinquent loans. In the event that one of our sub-servicers becomes insolvent or fails to perform, loan delinquencies and credit losses may increase and we may not receive the funds to which we are entitled. We attempt to diversify our counterparty exposure and (except with respect to loan representations and warranties) attempt to limit our counterparty exposure to counterparties with investment-grade credit ratings, although we may not always be able to do so. Our counterparty risk management strategy may prove ineffective and, accordingly, our earnings and cash flows could be adversely affected.

Business, Operational and Other Risks

Through certain of our wholly-owned subsidiaries we have engaged in the past, and plan to continue to engage, in acquiring mortgage loans with the intent to sell these loans to third parties or hold them as investments. Similarly, we have engaged in the past, and may continue to engage, in acquiring residential MSRs. These types of transactions and investments expose us to potentially material risks.

Acquiring mortgage loans with intent to sell these loans to third parties generally requires us to incur short-term debt, either on a recourse or non-recourse basis, to finance the accumulation of loans or other assets prior to sale. This type of debt may not be available to us, or may only be available to us on an uncommitted basis, including in circumstances where a line of credit had previously been made available or committed to us. In addition, the terms of any available debt may be unfavorable to us or impose restrictive covenants that could limit our business and operations or the violation of which could lead to losses and inhibit our ability to borrow in the future. We expect to pledge assets we acquire to secure the short-term debt we incur. To the extent this debt is recourse to us, if the fair value of the assets pledged as collateral declines, we would be required to increase the amount of collateral pledged to secure the debt or to repay all or a portion of the debt. In addition, when we acquire assets for a sale, we make assumptions about the cash flows that will be generated from those assets and the market value of those assets. If these assumptions are wrong, or if market values change or other conditions change, it could result in a sale that is less favorable to us than initially assumed, which would typically have a negative impact on our financial results.

Furthermore, if we are unable to complete the sale of these types of assets, it could have a negative impact on our business and financial results. We have a limited capacity to hold residential loans on our balance sheet as investments, and our business is not structured to buy-and-hold the full volume of loans that we routinely acquire with the intent to sell. If demand for buying whole-loans weakens, we may be forced to incur additional debt on unfavorable terms or may be unable to borrow to finance these assets, which may in turn impact our ability to continue acquiring loans over the short or long term.

Prior to acquiring loans or other assets for sale, we may undertake underwriting and due diligence efforts with respect to various aspects of the loan or asset. When underwriting or conducting due diligence, we rely on resources and data available to us, which may be limited, and we rely on investigations by third parties. We may also only conduct due diligence on a sample of a pool of loans or assets we are acquiring and assume that the sample is representative of the entire pool. Our underwriting and due diligence efforts may not reveal matters which could lead to losses. If our underwriting process is not robust enough or if we do not conduct adequate due diligence, or the scope of our underwriting or due diligence is limited, we may incur losses. Losses could occur due to the fact that a counterparty that sold us a loan or other asset refuses or is unable (e.g., due to its financial condition) to repurchase that loan or asset or pay damages to us if we determine subsequent to purchase that one or more of the representations or

warranties made to us in connection with the sale was inaccurate.

In addition, when selling mortgage loans or acquiring servicing rights associated with residential mortgage loans, we typically make representations and warranties to the purchaser or to other third parties regarding, among other things, certain characteristics of those assets, including characteristics we seek to verify through our underwriting and due diligence efforts. If our representations and warranties are inaccurate with respect to any asset, we may be obligated to repurchase that asset or pay damages, which may result in a loss. We generally only establish reserves for potential liabilities relating to representations and warranties we make if we believe that those liabilities are both probable and estimable, as determined in accordance with GAAP. As a result, we may not have reserves relating to these potential liabilities or any reserves we may establish could be inadequate. Even if we obtain representations and warranties from the counterparties from whom we acquired the loans or other assets, they may not parallel the representations and warranties we make or may otherwise not protect us from losses, including, for example, due to the fact that the counterparty may be insolvent or otherwise unable to make a payment to us at the time we claim damages for a breach of representation or warranty. Furthermore, to the extent we claim that counterparties we have acquired loans from have breached their representations and warranties to us, it may adversely impact our business relationship with those counterparties, including by reducing the volume of business we conduct with those counterparties, which could negatively impact our ability to acquire loans and our business. To the extent we have significant exposure to representations and warranties made to us by one or more counterparties we acquire loans from, we may determine, as a matter of risk management, to reduce or discontinue loan acquisitions from those counterparties, which could reduce the volume of residential loans we acquire and negatively impact our business and financial results.

RWT Financial, our FHLB-member subsidiary, maintains a portfolio of residential mortgage loans it holds for investment with long-term financing provided by the FHLBC. At December 31, 2018, RWT Financial had approximately \$2.00 billion of long-term borrowings outstanding from the FHLBC, which were collateralized by residential mortgage loans. RWT Financial has effectively reached its maximum borrowing capacity from the FHLBC of \$2.00 billion, and it does not expect to be able to obtain any increase in its borrowing capacity in the future. FHLBC financing has enabled RWT Financial to earn attractive returns on loans held as long-term investments, contributing a significant amount to our 2018 earnings. RWT Financial's ability to increase the size of its portfolio of residential mortgage loans may be limited by the lack of availability of attractive financing and this may impact the ability to increase net interest income generated by RWT Financial, as further described under the risk factor titled "Federal regulations may limit, eliminate, or reduce the attractiveness of our subsidiary's ability to use borrowings from the Federal Home Loan Bank of Chicago to finance the mortgage loans and securities it holds and acquires, which could negatively impact our business and operating results." Additionally, the portfolio of residential mortgage loans held as long-term investments exposes us to the risk of loss on the full balance of those loans, which is typically not the case with respect to securities we retain from securitization transactions we sponsor. The materialization of any of these risks related to RWT Financial's investment activity and FHLB financing could significantly impact our financial and operating results.

Through certain of our wholly-owned subsidiaries we have engaged in the past, and expect to continue to engage in, securitization transactions relating to real estate mortgage loans. In addition, we have invested in and continue to invest in mortgage-backed securities and other ABS issued in securitization transactions sponsored by other companies. These types of transactions and investments expose us to potentially material risks.

Engaging in securitization transactions and other similar transactions generally requires us to incur short-term debt on a recourse basis to finance the accumulation of loans or other assets prior to securitization. If demand for investing in securitization transactions weakens, we may be unable to complete the securitization of loans accumulated for that purpose, which may hurt our business or financial results. In addition, in connection with engaging in securitization transactions, we engage in due diligence with respect to the loans or other assets we are securitizing and make representations and warranties relating to those loans and assets. The risks associated with incurring this type of debt in connection with securitization activity, the risks related to our ability to complete securitization transactions after we have accumulated loans for that purpose, and the risks associated with the due diligence we conduct, and the

representations and warranties we make, in connection with securitization activity are similar to the risks associated with acquiring loans with the intent to sell them to third parties, as described in the immediately preceding risk factor titled "Through certain of our wholly-owned subsidiaries we have engaged in the past, and plan to continue to engage, in acquiring residential mortgage loans with the intent to sell these loans to third parties or hold them as investments. Similarly, we have engaged in the past, and continue to engage, in acquiring residential MSRs. These types of transactions and investments expose us to potentially material risks."

When engaging in securitization transactions, we also prepare marketing and disclosure documentation, including term sheets, offering documents, and prospectuses, that include disclosures regarding the securitization transactions and the assets being securitized. If our marketing and disclosure documentation are alleged or found to contain inaccuracies or omissions, we may be liable under federal and state securities laws (or under other laws) for damages to third parties that invest in these securitization transactions, including in circumstances where we relied on a third party in preparing accurate disclosures, or we may incur other expenses and costs in connection with disputing these allegations or settling claims. We have also engaged in selling or contributing commercial real estate loans, and may in the future sell or contribute multifamily loans, to third parties who, in turn, have securitized those loans. In these circumstances, we have in the past and may in the future also prepare marketing and disclosure documentation, including documentation that is included in term sheets, offering documents, and prospectuses relating to those securitization transactions. We could be liable under federal and state securities laws (or under other laws) for damages to third parties that invest in these securitization transactions, including liability for disclosures prepared by third parties or with respect to loans that we did not sell or contribute to the securitization. Additionally, we typically retain various third-party service providers when we engage in securitization transactions, including underwriters or initial purchasers, trustees, administrative and paying agents, and custodians, among others. We frequently contractually agree to indemnify these service providers against various claims and losses they may suffer in connection with the provision of services to us and/or the securitization trust. To the extent any of these service providers are liable for damages to third parties that have invested in these securitization transactions, we may incur costs and expenses as a result of these indemnities.

In recent years there has also been debate as to whether there are defects in the legal process and legal documents governing transactions in which securitization trusts and other secondary purchasers take legal ownership of residential mortgage loans and establish their rights as first priority lien holders on underlying mortgaged property. To the extent there are problems with the manner in which title and lien priority rights were established or transferred, securitization transactions that we sponsored and third-party sponsored securitizations that we hold investments in may experience losses, which could expose us to losses and could damage our ability to engage in future securitization transactions.

In connection with our operating and investment activity, we rely on third parties to perform certain services, comply with applicable laws and regulations, and carry out contractual covenants and terms, the failure of which by any of these third parties may adversely impact our business and financial results.

In connection with our business of acquiring loans, engaging in securitization transactions, and investing in third-party issued securities and other assets, we rely on third party service providers to perform certain services, comply with applicable laws and regulations, and carry out contractual covenants and terms. As a result, we are subject to the risks associated with a third party's failure to perform, including failure to perform due to reasons such as fraud, negligence, errors, miscalculations, or insolvency. For example, if loan servicers experience higher volumes of delinquent loans than they have in the past, there is a risk that, as a result, their operational infrastructures may not be able to properly process this increased volume. Many loan servicers have been accused of improprieties in the handling of the loan modification or foreclosure process with respect to residential mortgage loans that have gone into default. To the extent a third-party loan servicer fails to fully and properly perform its obligations, loans and securities that we hold as investments may experience losses and securitizations that we have sponsored may experience poor performance, and our ability to engage in future securitization transactions could be harmed.

For some of the loans that we hold and for some of the loans we sell or securitize, we hold the right to service those loans and we retain a sub-servicer to service those loans. In these circumstances we are exposed to certain risks, including, without limitation, that we may not be able to enter into subservicing agreements on favorable terms to us or at all, or that the sub-servicer may not properly service the loan in compliance with applicable laws and regulations or the contractual provisions governing their sub-servicing role, and that we would be held liable for the sub-servicer's

improper acts or omissions. Additionally, in its capacity as a servicer of residential mortgage loans, a sub-servicer will have access to borrowers' non-public personal information, and we could incur liability in connection with a data breach relating to a sub-servicer, as discussed further below under the risk factor titled "Maintaining cybersecurity is important to our business and a breach of our cybersecurity could have a material adverse impact. Our technology infrastructure and systems are important and any significant disruption or breach of the security of this infrastructure or these systems could have an adverse effect on our business. We also rely on technology infrastructure and systems of third parties who provide services to us and with whom we transact business." When we retain a sub-servicer we are generally also obligated to fund any obligation of the sub-servicer to make advances on behalf of a delinquent loan obligor. To the extent any one sub-servicer counterparty services a significant percentage of the loans with respect to which we own the servicing rights, the risks associated with our use of that sub-servicer are concentrated around this single sub-servicer counterparty. To the extent that there are significant amounts of advances that need to be funded in respect of loans where we own the servicing right, it could have a material adverse effect on our business and financial results.

In addition, we have recently participated in various investments structured as joint ventures or partnerships with unaffiliated third parties. Some of these joint venture entities rely, in part, on their members or partners to make committed capital contributions in order to pay the purchase price for investments or to fund shortfalls in capital under related financing agreements. A failure by one of the members to make such capital contributions for amounts required could result in events of default under the terms of the investment or the related financing and a loss of our investment in the joint venture entity and its related investments. For example, in connection with our servicer advance investments, we consolidate an entity that was formed to finance servicing advances and for which we, through our control of an affiliated partnership entity (the "SA Buyer") formed to invest in servicer advance investments and excess MSRs, are the primary beneficiary. SA Buyer has agreed to purchase all future arising servicer advances under certain residential mortgage servicing agreements, SA Buyer relies, in part, on its members to make committed capital contributions in order to pay the purchase price for future servicer advances. A failure by any or all of the members to make such capital contributions for amounts required to fund servicer advances could result in an event of default under our servicer advance financing and a complete loss of our investment in SA Buyer and its servicer advance investments and excess MSRs. Additionally, to the extent that the servicer of the underlying mortgage loans (who is unaffiliated with us except through their co-investment in SA Buyer and the related financing entity) fails to recover the servicer advances in which we have invested, or takes longer than we expect to recover such advances, the value of our investment could be adversely affected and we could fail to achieve our expected return and suffer losses.

We also rely on corporate trustees to act on behalf of us and other holders of ABS in enforcing our rights as security holders. Under the terms of most ABS we hold, we do not have the right to directly enforce remedies against the issuer of the security, but instead must rely on a trustee to act on behalf of us and other security holders. Should a trustee not be required to take action under the terms of the securities, or fail to take action, we could experience losses.

Our ability to execute or participate in future securitization transactions, including, in particular, securitizations of residential mortgage loans, could be delayed, limited, or precluded by legislative and regulatory reforms applicable to asset-backed securities and the institutions that sponsor, service, rate, or otherwise participate in or contribute to the successful execution of a securitization transaction. Other factors could also limit, delay, or preclude our ability to execute securitization transactions. These legislative, regulatory, and other factors could also reduce the returns we would otherwise expect to earn in connection with executing securitization transactions.

In July 2010, the Dodd-Frank Act was enacted. Provisions of the Dodd-Frank Act require, among other things, significant revisions to the legal and regulatory framework under which ABS, including residential mortgage-backed securities (RMBS), are issued through the execution of securitization transactions. Some of the provisions of the Dodd-Frank Act have become effective or been implemented. In addition, prior to the passage of the Dodd-Frank Act, the Securities and Exchange Commission (SEC) and the Federal Deposit Insurance Corporation had already published proposed and final regulations under already existing legislative authority relating to the issuance of ABS, including RMBS. Additional federal or state laws and regulations that could affect our ability to execute future securitization transactions could be proposed, enacted, or implemented. In addition, various federal and state agencies and law enforcement authorities, as well as private litigants, have initiated and may, in the future, initiate additional broad-based enforcement actions or claims, the resolution of which may include industry-wide changes to the way residential mortgage loans are originated, transferred, serviced, and securitized, and any of these changes could also affect our ability to execute future securitization transactions. For an example, please refer to the risk factor titled "Federal and state legislative and regulatory developments and the actions of governmental authorities and entities may adversely affect our business and the value of, and the returns on, mortgages, mortgage-related securities, and other assets we own or may acquire in the future."

Rating agencies can affect our ability to execute or participate in a securitization transaction, or reduce the returns we would otherwise expect to earn from executing securitization transactions, not only by deciding not to publish ratings for our securitization transactions (or deciding not to consent to the inclusion of those ratings in the prospectuses or other documents we file with the SEC relating to securitization transactions), but also by altering the criteria and process they follow in publishing ratings. Rating agencies could alter their ratings processes or criteria after we have accumulated loans or other assets for securitization in a manner that effectively reduces the value of those previously acquired loans or requires that we incur additional costs to comply with those processes and criteria. For example, to the extent investors in a securitization transaction would have significant exposure to representations and warranties made by us or by one or more counterparties we acquire loans from, rating agencies may determine that this exposure increases investment risks relating to the securitization transaction. Rating agencies could reach this conclusion either because of our financial condition or the financial condition of one or more counterparties we acquire loans from, or because of the aggregate amount of residential loan-related representations and warranties (or other contingent liabilities) we, or one or more counterparties we acquire loans from, have made or have exposure to. In addition, our ability to continue to securitize residential mortgage loans in the future will depend, in part, on the rating agencies' assessment of the investment risks that result from the ability-to-repay regulations and the TILA-RESPA Integrated Disclosure Rule (TRID). This includes, for example, how they assess investment risks associated with (a) non-material errors in loan-related disclosures made to mortgage borrowers, (b) residential mortgage loans that have an interest-only payment feature, or (c) loans under which the borrower has a debt-to-income ratio of more than 43%. These types of loans have historically accounted for a significant amount of the loans we have securitized, but they are not considered "qualified mortgages" under the ability-to-repay regulations. Since these provisions were implemented over the past several years, the rating agencies' assessment of these risks has generally been consistent with ours, but to the extent their assessments diverge from ours, this could negatively impact our ability to execute securitization transactions. If, as a result of any of the foregoing issues, rating agencies place limitations on our ability to execute future securitization transactions or impose unfavorable ratings levels or conditions on our securitization transactions, it could reduce the returns we would otherwise expect to earn from executing these transactions and negatively impact our business and financial results.

Furthermore, other matters, such as (i) accounting standards applicable to securitization transactions and (ii) capital and leverage requirements applicable to banks' and other regulated financial institutions' holdings of ABS, could result in less investor demand for securities issued through securitization transactions we execute or increased competition from other institutions that originate, acquire, and hold commercial real estate loans, residential mortgage loans, and other types of assets and execute securitization transactions.

Our ability to profitably execute or participate in future securitizations transactions, including, in particular, securitizations of residential mortgage loans, is dependent on numerous factors and if we are not able to achieve our desired level of profitability or if we incur losses in connection with executing or participating in future securitizations it could have a material adverse impact on our business and financial results.

There are a number of factors that can have a significant impact on whether a securitization transaction that we execute or participate in is profitable to us or results in a loss. One of these factors is the price we pay for the mortgage loans that we securitize, which, in the case of residential mortgage loans, is impacted by the level of competition in the marketplace for acquiring mortgage loans and the relative desirability to originators of retaining mortgage loans as investments or selling them to third parties such as us. Another factor that impacts the profitability of a securitization transaction is the cost to us of the short-term debt that we use to finance our holdings of mortgage loans prior to securitization, which cost is affected by a number of factors including the availability of this type of financing to us, the interest rate on this type of financing, the duration of the financing we incur, and the percentage of our mortgage loans for which third parties are willing to provide short-term financing.

After we acquire mortgage loans that we intend to securitize, we can also suffer losses if the value of those loans declines prior to securitization. Declines in the value of a mortgage loan, for example, can be due to, among other things, changes in interest rates, changes in the credit quality of the loan, and changes in the projected yields required by investors to invest in securitization transactions. To the extent we seek to hedge against a decline in loan value due to changes in interest rates, there is a cost of hedging that also affects whether a securitization is profitable. Other factors that can significantly affect whether a securitization transaction is profitable to us include the criteria and conditions that rating agencies apply and require when they assign ratings to the mortgage-backed securities issued in our securitization transactions, including the percentage of mortgage-backed securities issued in a securitization transaction that the rating agencies will assign a triple-A rating to, which is also referred to as a rating agency subordination level. Rating agency subordination levels can be impacted by numerous factors, including, without limitation, the credit quality of the loans securitized, the geographic distribution of the loans to be securitized, and the structure of the securitization transaction and other applicable rating agency criteria. All other factors being equal, the greater the percentage of the mortgage-backed securities issued in a securitization transaction that the rating agencies will assign a triple-A rating to, the more profitable the transaction will be to us.

The price that investors in mortgage-backed securities will pay for securities issued in our securitization transactions also has a significant impact on the profitability of the transactions to us, and these prices are impacted by numerous market forces and factors. In addition, the underwriter(s) or placement agent(s) we select for securitization transactions, and the terms of their engagement, can also impact the profitability of our securitization transactions. Also, transaction costs incurred in executing transactions impact the profitability of our securitization transactions and any liability that we may incur, or may be required to reserve for, in connection with executing a transaction can cause a loss to us. To the extent that we are not able to profitably execute future securitizations of residential mortgage loans or other assets, including for the reasons described above or for other reasons, it could have a material adverse impact on our business and financial results.

Our past and future securitization activities or other past and future business or operating activities or practices could expose us to litigation, which may adversely affect our business and financial results.

Through certain of our wholly-owned subsidiaries we have in the past engaged in or participated in securitization transactions relating to residential mortgage loans, commercial mortgage loans, commercial real estate loans, and other types of assets. In the future we expect to continue to engage in or participate in securitization transactions, including, in particular, securitization transactions relating to residential mortgage loans, and may also engage in other types of securitization transactions or similar transactions. Sequoia securitization entities we sponsored issued ABS backed by residential mortgage loans held by these Sequoia entities. In Acacia securitization transactions we participated in, Acacia securitization entities issued ABS backed by securities and other assets held by these Acacia entities. As a result of declining property values, increasing defaults, changes in interest rates, and other factors, the aggregate cash flows from the loans held by the Sequoia entities and the securities and other assets held by the Acacia entities may be insufficient to repay in full the principal amount of ABS issued by these securitization entities. We are not directly liable for any of the ABS issued by these entities. Nonetheless, third parties who hold the ABS issued by these entities may try to hold us liable for any losses they experience, including through claims under federal and state securities laws or claims for breaches of representations and warranties we made in connection with engaging in these securitization transactions.

For example, as discussed below in Part I, Item 3 of this Annual Report on Form 10-K, on December 23, 2009, the Federal Home Loan Bank of Seattle filed a claim in the Superior Court for the State of Washington against us and our subsidiary, Sequoia Residential Funding, Inc. The complaint related in part to residential mortgage-backed securities that were issued by a Sequoia securitization entity and alleged that, at the time of issuance, we, Sequoia Residential Funding, Inc. and the underwriters made various misstatements and omissions about these securities in violation of Washington state law. We have also been named in other similar lawsuits. A further discussion of these lawsuits is set forth in Note 15 to the Financial Statements within this Annual Report on Form 10-K. For another example, refer to the risk factor below, titled "Litigation of the type initiated against various trustees of residential mortgage-backed securitization transactions issued prior to financial crisis of 2007-2008 ("RMBS trustee litigation") negatively impacted, and could further negatively impact, the value of securities we hold, could expose us to indemnification claims, and could impact the profitability of our participation in future securitization transactions."

Other aspects of our business operations or practices could also expose us to litigation. In the ordinary course of our business we enter into agreements relating to, among other things, loans we acquire and investments we make, assets and loans we sell, financing transactions, third parties we retain to provide us with goods and services, and our leased office space. We also regularly enter into confidentiality agreements with third parties under which we receive confidential information. If we breach any of these agreements, we could be subject to claims for damages and related litigation. We are also subject to various laws and regulations relating to our business and operations, including, without limitation, privacy laws and regulations and labor and employment laws and regulations, and if we fail to comply with these laws and regulations we could also be subjected to claims for damages and litigation. In particular, if we fail to maintain the confidentiality of consumers' personal or financial information we obtain in the course of our

business (such as social security numbers), we could be exposed to losses. A further discussion of some of these risks is set forth in the risk factor titled "Maintaining cybersecurity is important to our business and a breach of our cybersecurity could have a material adverse impact. Our technology infrastructure and systems are important and any significant disruption or breach of the security of this infrastructure or these systems could have an adverse effect on our business. We also rely on technology infrastructure and systems of third parties who provide services to us and with whom we transact business."

Defending a lawsuit can consume significant resources and may divert management's attention from our operations. We may be required to establish or increase reserves for potential losses from litigation, which could be material. To the extent we are unsuccessful in our defense of any lawsuit, we could suffer losses which could be in excess of any reserves established relating to that lawsuit) and these losses could be material.

Litigation of the type initiated against various trustees of residential mortgage-backed securitization transactions issued prior to financial crisis of 2007-2008 ("RMBS trustee litigation") during 2017 negatively impacted, and could further negatively impact, the value of securities we hold, could expose us to indemnification claims, and could impact the profitability of our participation in future securitization transactions.

Litigation against RMBS trustees has related to, among other things, claims by certain investors in the RMBS issued in those transactions that the trustees of those transactions breached their obligations to investors by, among other things, not appropriately investigating and pursuing remedies against the originators and servicers of the underlying mortgage loans. We are not a party to any RMBS trustee litigation; however, RMBS trustee litigation during 2017 negatively impacted the value of certain residential mortgage-backed securities issued prior to the crisis ("legacy RMBS") that were held in our investment portfolio during the year ended December 31, 2018. The value of other legacy RMBS we continue to hold or acquire could be impacted in the future. In particular, trustees of various legacy RMBS transactions that are the subject of the ongoing RMBS trustee litigation have withheld funds from investors in the RMBS issued in those transactions by asserting that, pursuant to their indemnification rights against the securitization trusts established under the applicable transaction documents, they are entitled to apply those funds to offset litigation expenses - and one trustee asserted that its indemnification rights entitle it to withhold large lump sum amounts to hold and apply to anticipated future litigation expenses. During the year ended December 31, 2018, this holdback resulted in an aggregate loss to the value of our portfolio of securities of approximately \$0.6 million, and other or similar holdbacks by that trustee or other trustees of legacy RMBS transactions could result in further losses to the value of our portfolio of securities in the future, which losses could be material.

Our cash balances and cash flows may be insufficient relative to our cash needs.

We need cash to make interest payments, to post as collateral to counterparties and lenders who provide us with short-term debt financing and who engage in other transactions with us, for working capital, to fund REIT dividend distribution requirements, to comply with financial covenants and regulatory requirements, and for other needs and purposes. We may also need cash to repay short-term borrowings when due or in the event the fair values of assets that serve as collateral for that debt decline, the terms of short-term debt become less attractive, or for other reasons. In addition, we may need to use cash to post in response to margin calls relating to various derivative instruments we hold as the values of these derivatives change. Over the near and longer term, we may need cash to fund the repayment of outstanding convertible notes and exchangeable securities that mature in 2019, 2023, and 2024.

Our sources of cash flow include the principal and interest payments on the loans and securities we own, asset sales, securitizations, short-term borrowing, issuing long-term debt, and issuing stock. Our sources of cash may not be sufficient to satisfy our cash needs. Cash flows from principal repayments could be reduced if prepayments slow or if credit quality deteriorates. For example, for some of our assets, cash flows are "locked-out" and we receive less than our pro-rata share of principal payment cash flows in the early years of the investment.

Our minimum dividend distribution requirements could exceed our cash flows if our income as calculated for tax purposes significantly exceeds our net cash flows. This could occur when taxable income (including non-cash income such as discount amortization and interest accrued on negative amortizing loans) exceeds cash flows received. The Internal Revenue Code provides a limited relief provision concerning certain items of non-cash income; however, this provision may not sufficiently reduce our cash dividend distribution requirement. In the event that our liquidity needs exceed our access to liquidity, we may need to sell assets at an inopportune time, thus reducing our earnings. In an adverse cash flow situation, we may not be able to sell assets effectively and our REIT status or our solvency could be threatened. Further discussion of the risk associated with maintaining our REIT status is set forth in the risk factor titled "We have elected to be taxed as a REIT and, as such, are required to meet certain tests in order to maintain our REIT status. This adds complexity and costs to running our business and exposes us to additional risks."

We are subject to competition and we may not compete successfully.

We are subject to competition in seeking investments, acquiring and selling loans, engaging in securitization transactions, and in other aspects of our business. Our competitors include commercial banks, other mortgage REITs, Fannie Mae, Freddie Mac, regional and community banks, broker-dealers, insurance companies, and other financial institutions, as well as investment funds and other investors in real estate-related assets. In addition, other companies may be formed that will compete with us. Some of our competitors have greater resources than us and we may not be able to compete successfully with them. Furthermore, competition for investments, making loans, acquiring and selling loans, and engaging in securitization transactions may lead to a decrease in the opportunities and returns available to us.

In addition, there are significant competitive threats to our business from governmental actions and initiatives that have already been undertaken or which may be undertaken in the future. Sustained competition from governmental actions and initiatives could have a material adverse effect on us. For example, Fannie Mae and Freddie Mac are, among other things, engaged in the business of acquiring loans and engaging in securitization transactions. Until 2008, competition from Fannie Mae and Freddie Mac was limited to some extent due to the fact that they were statutorily prohibited from purchasing loans for single unit residences in the continental United States with a principal amount in excess of \$417,000, while much of our business had historically focused on acquiring residential loans with a principal amount in excess of that amount. In February 2008, Congress passed an economic stimulus package that temporarily increased the size of certain loans these entities could purchase to up to \$729,750, if the loans were made to secure real estate purchases in certain high-cost areas of the U.S. Since 2008, the loan size limits for Fannie Mae and Freddie Mac purchases have been adjusted up and down, and as of December 31, 2018, the maximum loan size limit was \$ \$726,525, which is an amount that continues to be above the historical loan size limit. In addition, in September 2008, Fannie Mae and Freddie Mac were placed into conservatorship and have become, in effect, instruments of the U.S. federal government.

Furthermore, it is unclear whether the Trump administration's policies, and any future federal legislation or executive or regulatory actions, regarding Fannie Mae and Freddie Mac will continue to maintain, or increase, the role of those entities in the housing finance market. As long as there is governmental support for these entities to continue to operate and provide financing to a significant portion of the mortgage finance market, they will represent significant business competition due to, among other things, their large size and low cost of funding. Additionally, Trump administration policies, federal legislation, or executive or regulatory actions aimed at weakening or dismantling the Dodd-Frank Act and its regulatory apparatus, including by reducing capital requirements on banking institutions or by weakening the CFPB, its leadership, or its enforcement capabilities or priorities, could result in increased competition from commercial banks and other large financial institutions that may have similar advantages due to their size and cost of capital. Further discussion is set forth in the risk factor titled "Congress and President Trump's administration have made and may continue to make substantial changes to fiscal, tax, and other federal policies that may adversely affect our business."

To the extent that laws, regulations, or policies governing the business activities of Fannie Mae and Freddie Mac are not changed to limit their role in housing finance (such as a change in these loan size limits or in the guarantee fees they charge), or the competition from these two governmental entities will remain significant or could increase. In addition, to the extent that property values decline while these loan size limits remain the same, it may have the same effect as an increase in this limit, as a greater percentage of loans would likely be within the size limit. Any increase in the loan size limit, or in the overall percentage of loans that are within the limit, allows Fannie Mae and Freddie Mac to compete against us to a greater extent than they had been able to compete previously and our business could be adversely affected. Additionally, the Federal Housing Administration (FHA) and the Department of Veterans Affairs (VA) guarantee qualified residential mortgages, and FHA and VA loans accounted for approximately 24% of the aggregate dollar value of residential loans originated in the U.S. in 2017. The federal government's ability to provide financing to a significant portion of the mortgage finance market through these entities represents significant business competition due to, among other things, their size and low cost of funding.

Our business model and business strategies, and the actions we take (or fail to take) to implement them and adapt them to changing circumstances involve risk and may not be successful.

U.S. real estate markets, the mortgage industry and the related capital markets have undergone significant changes since the U.S. financial crisis, including due to the significant governmental interventions in these areas and changes to the laws and regulations that govern the banking and mortgage finance industry. Additionally, it remains unclear how the Trump administration's policies, and any future federal legislation or executive or regulatory actions, regarding Fannie Mae and Freddie Mac and the housing finance market more broadly will impact that market and our

business. Additional factors, including a rising or steady interest rate environment, which may cause the volume of refinance loans to decline, and secular trends in consumer demand for renting versus owning a residence, may also contribute to evolving conditions in the mortgage industry and capital markets. Our methods of, and model for, doing business and financing our investments are changing and if we fail to develop, enhance, and implement strategies to adapt to changing conditions in the mortgage industry and capital markets, our business and financial results may be adversely affected. Furthermore, changes we make to our business to respond to changing circumstances may expose us to new or different risks than we were previously exposed to and we may not effectively identify or manage those risks. Further discussion is set forth in the risk factor titled "Decisions we make about our business strategy and investments, as well as decisions about raising capital or returning capital to shareholders (through dividends or common stock repurchases), could fail to improve our business and results of operations."

Similarly, the competitive landscape in which we operate and the products and investments for which we compete are also affected by changing conditions. There may be trends or sudden changes in our industry or regulatory environment, changes in the role of government-sponsored entities, such as Fannie Mae and Freddie Mac, changes in the role of credit rating agencies or their rating criteria or processes, or changes in the U.S. economy more generally. If we do not effectively respond to these changes or if our strategies to respond to these changes are not successful, our ability to effectively compete in the marketplace may be negatively impacted, which would likely result in our business and financial results being adversely affected.

We have historically depended upon the issuance of mortgage-backed securities by the securitization entities we sponsor as a funding source for our residential real estate-related business. However, due to market conditions, we did not engage in residential mortgage securitization transactions in 2008 or 2009 and we only engaged in one residential mortgage securitization transaction in 2010 and two residential mortgage securitization transactions in 2011. While we engaged in numerous residential mortgage securitization transactions from 2012 through 2018, we do not know if market conditions will allow us to continue to regularly engage in these types of securitization transactions and any disruption of this market may adversely affect our earnings and growth. For example, in each of 2014 and 2015, we completed four securitization transactions, and in 2016 we completed three securitization transactions, as compared to 12 securitizations in 2013, nine securitizations in 2017, and 12 securitizations in 2018. Even if regular residential mortgage securitization activity continues among market participants other than government-sponsored entities, we do not know if it will continue to be on terms and conditions that will permit us to participate or be favorable to us. Even if conditions are favorable to us, we may not be able to return to or sustain the volume of securitization activity we previously conducted.

Initiating new business activities or significantly expanding existing business activities may expose us to new risks and will increase our cost of doing business.

Initiating new business activities or significantly expanding existing business activities are two ways to grow our business and respond to changing circumstances in our industry; however, they may expose us to new risks and regulatory compliance requirements. We cannot be certain that we will be able to manage these risks and compliance requirements effectively. Furthermore, our efforts may not succeed and any revenues we earn from any new or expanded business initiative may not be sufficient to offset the initial and ongoing costs of that initiative, which would result in a loss with respect to that initiative.

For example, since December 2017, we have announced several new initiatives to expand our mortgage banking and investment activities, including by exploring opportunities to provide expanded financing options to non-bank mortgage loan originators and expanding our mortgage loan purchase activity to include, for example, business purpose loans secured by non-owner occupied rental properties and residential bridge loans, and increasing the size and optimizing the target returns of our investment portfolio. We also recently completed investments in subordinate securities backed by re-performing and non-performing residential loans, excess MSR investments collateralized by residential and multifamily loans, and a whole loan investment fund created to acquire light-renovation multifamily loans. Additionally, we exercised our purchase option to complete the acquisition of 5 Arches, an originator of business-purpose real estate loans, following a minority equity investment in 5 Arches in May 2018. Further discussion of these business changes is set forth in the risk factor titled "Decisions we make about our business strategy and investments, as well as decisions about raising capital or returning capital to shareholders (through dividends or common stock repurchases), could fail to improve our business and results of operations."

In connection with initiating new business activities or expanding existing business activities, or for other business reasons, we may create new subsidiaries. Frequently, these subsidiaries would be wholly-owned, directly or indirectly, by Redwood, but we may also create or participate in partnerships and joint ventures with third-party co-investors and in those cases, the entities may be partially-owned by Redwood. The creation of those subsidiaries may increase our

administrative costs and expose us to other legal and reporting obligations, including, for example, because they may be incorporated in states other than Maryland or may be established in a foreign jurisdiction. Any new subsidiary we create may elect, together with us, to be treated as our taxable REIT subsidiary. Taxable REIT subsidiaries are wholly-owned or partially-owned subsidiaries of a REIT that pay corporate income tax on the income they generate. A taxable REIT subsidiary is not able to deduct its dividends paid to its parent in determining its taxable income and any dividends paid to the parent are generally recognized as income at the parent level.

Our future success depends on our ability to attract and retain key personnel.

Our future success depends on the continued service and availability of skilled personnel, including members of our executive management team such as our Chief Executive Officer, President, General Counsel, Chief Financial Officer, Chief Investment Officer, Managing Director-Head of Residential, and Chief Human Resources Officer. To the extent personnel we attempt to hire are concerned that economic, regulatory, or other factors could impact our ability to maintain or expand our current level of business, it could negatively impact our ability to hire the personnel we need to operate our business. We cannot assure you that we will be able to attract and retain key personnel.

Additionally, in May 2018, our then-Chief Executive Officer retired from that position, at which time each of our then-President and then-Executive Vice President were promoted to the positions of Chief Executive Officer and President, respectively. If this leadership transition causes instability or is ultimately not successful, our business and financial results may be adversely impacted.

We may not be able to obtain or maintain the governmental licenses required to operate our business and we may fail to comply with various state and federal laws and regulations applicable to our business of acquiring residential mortgage loans and servicing rights. We are approved to service residential mortgage loans sold to Freddie Mac and Fannie Mae and failure to maintain our status as an approved servicer could harm our business.

While we are not required to obtain licenses to purchase mortgage-backed securities, the purchase of residential mortgage loans and certain business purpose mortgage loans in the secondary market may, in some circumstances, require us to maintain various state licenses. Acquiring the right to service residential mortgage loans and certain business purpose mortgage loans may also, in some circumstances, require us to maintain various state licenses even though we currently do not expect to directly engage in loan servicing ourselves. As a result, we could be delayed in conducting certain business if we were first required to obtain a state license. We cannot assure you that we will be able to obtain all of the licenses we need or that we would not experience significant delays in obtaining these licenses. Furthermore, once licenses are issued we are required to comply with various information reporting and other regulatory requirements to maintain those licenses, and there is no assurance that we will be able to satisfy those requirements or other regulatory requirements applicable to our business of acquiring mortgage loans on an ongoing basis. Our failure to obtain or maintain required licenses or our failure to comply with regulatory requirements that are applicable to our business of acquiring mortgage loans may restrict our business and investment options and could harm our business and expose us to penalties or other claims.

For example, under the Dodd-Frank Act, the CFPB also has regulatory authority over certain aspects of our business as a result of our residential mortgage banking activities, including, without limitation, authority to bring an enforcement action against us for failure to comply with regulations promulgated by the Bureau that are applicable to our business. One of the CFPB's areas of focus has been on whether companies like Redwood take appropriate steps to ensure that business arrangements with service providers do not present risks to consumers. The sub-servicers we retain to directly service residential mortgage loans (when we own the associated MSRs) are among our most significant service providers with respect to our residential mortgage banking activities and our failure to take steps to ensure that these sub-servicers are servicing these residential mortgage loans in accordance with applicable law and regulation could result in enforcement action by the CFPB against us that could restrict our business, expose us to penalties or other claims, negatively impact our financial results, and damage our reputation.

As another example, rules under the Home Mortgage Disclosure Act (HMDA) that took effect in January 2018 impose expanded data collection requirements and additional reporting obligations on mortgage lenders and purchasers of residential mortgage loans. The expanded data collection requirements may result in a higher frequency of data errors, which in turn could be perceived by regulators as an indication of inadequate controls and poor compliance processes, and could lead to monetary civil penalties. Additionally, the availability of increased amounts

of data may increase regulatory scrutiny of our mortgage loan purchasing patterns. In addition, the Equal Credit Opportunity Act, and other Federal and state laws and regulations that apply to certain of our investment and business activities, include consumer protections relating to discrimination, abusive and deceptive practices, and other consumer-related matters. To the extent these laws and regulations apply to us, our failure to comply with them, even if not intentional, could give rise to liabilities, fines, and remediation requirements, which could be material. Failure to comply with these laws and regulations could also result for incorrectly concluding that certain aspects of our investment and business activities are not subject to certain laws or regulations.

In addition, we are a servicer approved to service residential mortgage loans sold to Freddie Mac and Fannie Mae. As an approved servicer, we are required to conduct certain aspects of our operations in accordance with applicable policies and guidelines published by Freddie Mac and Fannie Mae. Failure to maintain our status as an approved servicer would mean we would not be able to service mortgage loans for these entities, or could otherwise restrict our business and investment options and could harm our business and expose us to losses or other claims.

With respect to mortgage loans we own, or which we have purchased and subsequently sold, we may be subject to liability for potential violations of the CFPB's TILA-RESPA Integrated Disclosure rule (also referred to as "TRID") or other similar consumer protection laws and regulations, which could adversely impact our business and financial results.

Federal consumer protection laws and regulations have been enacted and promulgated that are designed to regulate residential mortgage loan underwriting and originators' lending processes, standards, and disclosures to borrowers. These laws and regulations include the CFPB's "TRID", "ability-to-repay" and "qualified mortgage" regulations. In addition, there are various other federal, state, and local laws and regulations that are intended to discourage predatory lending practices by residential mortgage loan originators. For example, the federal Home Ownership and Equity Protection Act of 1994 (HOEPA) prohibits inclusion of certain provisions in residential mortgage loans that have mortgage rates or origination costs in excess of prescribed levels and requires that borrowers be given certain disclosures prior to origination. Some states have enacted, or may enact, similar laws or regulations, which in some cases may impose restrictions and requirements greater than those in place under federal laws and regulations. In addition, under the anti-predatory lending laws of some states, the origination of certain residential mortgage loans, including loans that are classified as "high cost" loans under applicable law, must satisfy a net tangible benefits test with respect to the borrower. This test, as well as certain standards set forth in the "ability-to-repay" and "qualified mortgage" regulations, may be highly subjective and open to interpretation. As a result, a court may determine that a residential mortgage loan did not meet the standard or test even if the originator reasonably believed such standard or test had been satisfied. Failure of residential mortgage loan originators or servicers to comply with these laws and regulations could subject us, as an assignee or purchaser of these loans (or as an investor in securities backed by these loans), to monetary penalties and defenses to foreclosure, including by recoupment or setoff of finance charges and fees collected, and could result in rescission of the affected residential mortgage loans, which could adversely impact our business and financial results.

Environmental protection laws that apply to properties that secure or underlie our loan and investment portfolio could result in losses to us. We may also be exposed to environmental liabilities with respect to properties we become direct or indirect owners of or to which we take title, which could adversely affect our business and financial results.

Under the laws of several states, contamination of a property may give rise to a lien on the property to secure recovery of the cleanup costs. In certain of these states, such a lien has priority over the lien of an existing mortgage against the property, which could impair the value of an investment in a security we own backed by such a property or could reduce the value of such a property that underlies loans we have made or own. In addition, under the laws of some states and under the federal Comprehensive Environmental Response, Compensation and Liability Act of 1980, we may be liable for costs of addressing releases or threatened releases of hazardous substances that require remedy at a property securing or underlying a loan we hold if our agents or employees have become sufficiently involved in the hazardous waste aspects of the operations of the borrower of that loan, regardless of whether or not the environmental damage or threat was caused by us or the borrower.

In the course of our business, we may take title to real estate or may otherwise become direct or indirect owners of real estate. If we do take title or become a direct or indirect owner, we could be subject to environmental liabilities with respect to the property, including liability to a governmental entity or third parties for property damage, personal injury, investigation, and clean-up costs. In addition, we may be required to investigate or clean up hazardous or toxic substances or chemical releases at a property. The costs associated with investigation or remediation activities could be substantial. If we ever become subject to significant environmental liabilities, our business and financial results could be materially and adversely affected.

Maintaining cybersecurity is important to our business and a breach of our cybersecurity could have a material adverse impact. Our technology infrastructure and systems are important and any significant disruption or breach of the security of this infrastructure or these systems could have an adverse effect on our business. We also rely on technology infrastructure and systems of third parties who provide services to us and with whom we transact business.

When we acquire real estate mortgage loans, or the rights to service mortgage loans, we come into possession of borrower non-public personal information that an identity thief could utilize in engaging in fraudulent activity or theft. We may share this information with third party service providers, including loan sub-servicers, or with third parties interested in acquiring such loans from us. We have acquired more than 100,000 residential mortgage loans and rights to service residential mortgage loans since 2010 and also acquired thousands of residential mortgage loans prior to 2010. While we have security measures in place to protect this information and prevent security breaches, these security measures may be compromised as a result of third-party action, including intentional misconduct by computer hackers, cyber-attacks, service provider or vendor error, or malfeasance or other intentional or unintentional acts by third parties, including third-party service providers. Furthermore, borrower data, including personally identifiable information, may be lost, exposed, or subject to unauthorized access or use as a result of accidents, errors, or malfeasance by our employees, independent contractors, or others working with us or on our behalf. Our servers and systems, and those of our service providers, may be vulnerable to computer malware, break-ins, denial-of-service attacks, and similar disruptions from unauthorized tampering with our computer systems, which could result in someone obtaining unauthorized access to borrowers' data or our data, including other confidential business information. Because the techniques used to obtain unauthorized access to, or to sabotage, systems change frequently and often are not recognized until launched against a target, we may be unable to anticipate these techniques or implement adequate preventative measures. We may also experience security breaches that may remain undetected for an extended period.

We may be liable for losses suffered by individuals whose identities are stolen as a result of a breach of the security of the systems that we or third-party service providers of ours store this information on, and any such liability could be material. Even if we are not liable for such losses, any breach of these systems could expose us to material costs in notifying affected individuals and providing credit monitoring services to them, as well as regulatory fines or penalties. In addition, any breach of these systems could disrupt our normal business operations and expose us to reputational damage and lost business, revenues, and profits. Any insurance we maintain against the risk of this type of loss may not be sufficient to cover actual losses, or may not apply to the circumstances relating to any particular breach.

In addition, in order to analyze, acquire, and manage our investments, manage the operations and risks associated with our business, assets, and liabilities, and prepare our financial statements we rely upon computer hardware and software systems. Some of these systems are located at our offices and some are maintained by third party vendors or located at facilities maintained by third parties. We also rely on technology infrastructure and systems of third parties who provide services to us and with whom we transact business. Any significant interruption in the availability or functionality of these systems could impair our access to liquidity, damage our reputation, and have an adverse effect on our operations and on our ability to timely and accurately report our financial results.

In addition, any breach of the security of these systems could have an adverse effect on our operations and the preparation of our financial statements. Steps we have taken to provide for the security of our systems and data may not effectively prevent others from obtaining improper access to our systems data. Improper access could expose us to risks of data loss, reputational damage, increased regulatory scrutiny, litigation, and liabilities to third parties, and otherwise disrupt our operations.

Our business could be adversely affected by deficiencies in our disclosure controls and procedures or internal controls over financial reporting.

The design and effectiveness of our disclosure controls and procedures and internal controls over financial reporting may not prevent all errors, misstatements, or misrepresentations. While management continues to review the effectiveness of our disclosure controls and procedures and internal controls over financial reporting, there can be no assurance that our disclosure controls and procedures or internal controls over financial reporting will be effective in accomplishing all control objectives all of the time. Deficiencies, particularly material weaknesses or significant deficiencies, in internal controls over financial reporting which have occurred or which may occur in the future could result in misstatements of our financial results, restatements of our financial statements, a decline in our stock price, or an otherwise material and adverse effect on our business, reputation, financial results, or liquidity and could cause investors and creditors to lose confidence in our reported financial results.

Our risk management efforts may not be effective.

We could incur substantial losses and our business operations could be disrupted if we are unable to effectively identify, manage, monitor, and mitigate financial risks, such as credit risk, interest rate risk, prepayment risk, liquidity risk, and other market-related risks, as well as operational risks related to our business, assets, and liabilities. Our risk management policies, procedures, and techniques may not be sufficient to identify all of the risks we are exposed to, mitigate the risks we have identified for mitigation, or to identify additional risks to which we may become subject in the future. Expansion of our business activities may also result in our being exposed to risks that we have not previously been exposed to or may increase our exposure to certain types of risks and we may not effectively identify, manage, monitor, and mitigate these risks as our business activity changes or increases. Further discussion is set forth in the risk factor titled "Initiating new business activities or significantly expanding existing business activities may expose us to new risks and will increase our cost of doing business."

We could be harmed by misconduct or fraud that is difficult to detect.

We are exposed to risks relating to misconduct by our employees, contractors we use, or other third parties with whom we have relationships. For example, our employees could execute unauthorized transactions, use our assets improperly or without authorization, perform improper activities, use confidential information for improper purposes, or mis-record or otherwise try to hide improper activities from us. This type of misconduct could also relate to assets we manage for others through our investment advisory subsidiary. This type of misconduct can be difficult to detect and if not prevented or detected could result in claims or enforcement actions against us or losses. Accordingly, misconduct by employees, contractors, or others could subject us to losses or regulatory sanctions and seriously harm our reputation. Our controls may not be effective in detecting this type of activity.

Inadvertent errors, including, for example, errors in the implementation of information technology systems, could subject us to financial loss, litigation, or regulatory action.

Our employees, contractors we use, or other third parties with whom we have relationships may make inadvertent errors that could subject us to financial losses, claims, or enforcement actions. These types of errors could include, but are not limited to, mistakes in executing, recording, or reporting transactions we enter into for ourselves or with respect to assets we manage for others. Errors in the implementation of information technology systems, compliance systems and procedures, or other operational systems and procedures could also interrupt our business or subject us to financial losses, claims, or enforcement actions. Errors could also result in the inadvertent disclosure of mortgage-borrower non-public personal information. Inadvertent errors expose us to the risk of material losses until the errors are detected and remedied prior to the incurrence of any loss. The risk of errors may be greater for business activities that are new for us or have non-standardized terms, for areas of our business that we are expanding, or for areas of our business that rely on new employees or on third parties that we have only recently established relationships with.

Our business may be adversely affected if our reputation is harmed.

Our business is subject to significant reputational risks. If we fail, or appear to fail, to address various issues that may affect our reputation, our business could be harmed. Issues could include real or perceived legal or regulatory violations or be the result of a failure in governance, risk-management, technology, or operations. Similarly, market rumors and actual or perceived association with counterparties whose own reputation is under question could harm our business. Lawsuits brought against us (or the resolution of lawsuits brought against us), claims of employee misconduct, claims of wrongful termination, adverse publicity, conflicts of interest, ethical issues, or failure to maintain the security of our information technology systems or to protect non-public personal information could also cause significant reputational damages. Such reputational damage could result not only in an immediate financial loss,

but could also result in a loss of business relationships, the ability to raise capital, and the ability to access liquidity through borrowing facilities.

Our financial results are determined and reported in accordance with generally accepted accounting principles (and related conventions and interpretations), or GAAP, and are based on estimates and assumptions made in accordance with those principles, conventions, and interpretations. Furthermore, the amount of dividends we are required to distribute as a REIT is driven by the determination of our income in accordance with the Internal Revenue Code rather than GAAP.

Our reported GAAP financial results differ from the taxable income results that drive our dividend distribution requirements and, therefore, our GAAP results may not be an accurate indicator of taxable income and dividend distributions.

Generally, the cumulative income we report relating to an investment asset will be the same for GAAP and tax purposes, although the timing of this recognition over the life of the asset could be materially different. There are, however, certain permanent differences in the recognition of certain expenses under the respective accounting principles applied for GAAP and tax purposes and these differences could be material. Thus, the amount of GAAP earnings reported in any given period may not be indicative of future dividend distributions. A further explanation of differences between our GAAP and taxable income is presented in "Management's Discussion and Analysis of Financial Condition and Results of Operations," which is set forth in Part II, Item 7 of this Annual Report on Form 10-K.

Our minimum dividend distribution requirements are determined under the REIT tax laws and are based on our REIT taxable income as calculated for tax purposes pursuant to the Internal Revenue Code. Our Board of Directors may also decide to distribute more dividends than required based on these determinations. One should not expect that our retained GAAP earnings will equal cumulative distributions, as the Board of Directors' dividend distribution decisions, permanent differences in GAAP and tax accounting, and even temporary differences may result in material differences in these balances.

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 taxable income and our dividend distribution requirements. Predicting and planning for these changes can be difficult.

Risks Related to Redwood's Capital, REIT and Legal/Organizational Structure
We have elected to be taxed as a REIT and, as such, are required to meet certain tests in order to maintain our REIT status. This adds complexity and costs to running our business and exposes us to additional risks.

Failure to qualify as a REIT could adversely affect our net income and dividend distributions and could adversely affect the value of our common stock.

We have elected to be taxed as a REIT for federal income tax purposes for all tax years since 1994. However, many of the requirements for qualification as a REIT are highly technical and complex and require an analysis of particular facts and an application of the legal requirements to those facts in situations where there is only limited judicial and administrative guidance. Thus, we cannot assure you that the Internal Revenue Service (the "IRS") or a court would agree with our conclusion that we have qualified as a REIT historically, or that changes to our investments or business or the law will not cause us to fail to qualify as a REIT in the future. Furthermore, in an environment where assets may quickly change in value, previous planning for compliance with REIT qualification rules may be disrupted. If we failed to qualify as a REIT for federal income tax purposes and did not meet the requirements for statutory relief, we

would be subject to federal corporate income tax on our taxable income, and we would not be allowed a deduction for distributions to shareholders in computing our taxable income. In such a case, we may need to borrow money or sell assets in order to pay the taxes due, even if the market conditions are not favorable for such sales or borrowings. In addition, unless we are entitled to relief under applicable statutory provisions, we could not elect to be taxed as a REIT for four years thereafter. Failure to qualify as a REIT could adversely affect our dividend distributions and could adversely affect the value of our common stock.

Maintaining REIT status and avoiding the generation of excess inclusion income at Redwood Trust, Inc. and certain of our subsidiaries may reduce our flexibility and could limit our ability to pursue certain opportunities. Failure to appropriately structure our business and transactions to comply with laws and regulations applicable to REITs could have adverse consequences.

To maintain REIT status, we must follow certain rules and meet certain tests. In doing so, our flexibility to manage our operations may be reduced. For instance:

Compliance with the REIT income and asset rules, or uncertainty about the application of those rules to certain investments, may result in our holding investments in our taxable REIT subsidiaries (where any income they produce is subject to corporate-level taxation) when we would prefer to hold those investments in an entity that is taxed as a REIT (where they would not be subject to corporate-level taxation).

Compliance with the REIT income and asset rules may limit the type or extent of financing or hedging that we can undertake.

Our ability to own non-real estate assets and earn non-real estate related income is limited, and the rules for classifying assets and income are complicated. Our ability to own equity interests in other entities is also limited. If we fail to comply with these limits, we may be forced to liquidate attractive investments on short notice on unfavorable terms in order to maintain our REIT status.

We generally use taxable REIT subsidiaries to own non-real estate assets and engage in activities that may give rise to non-real estate related income under the REIT rules. However, our ability to invest in taxable REIT subsidiaries is \{\frac{1}{2}\} imited under the REIT rules. No more than 20% of the value of our total assets can be represented by securities of one or more taxable REIT subsidiaries. Maintaining compliance with this limit could require us to constrain the growth of our taxable REIT subsidiaries (and the business and investing activities they conduct) in the future.

Meeting minimum REIT dividend distribution requirements could reduce our liquidity. We may earn non-cash REIT taxable income due to timing and/or character mismatches between the computation of our income for tax and accounting purposes. Earning non-cash REIT taxable income could necessitate our selling assets, incurring debt, or raising new equity in order to fund dividend distributions.

• We could be viewed as a "dealer" with respect to certain transactions and become subject to a 100% prohibited transaction tax or other entity-level taxes on income from such transactions.

Furthermore, the rules we must follow and the tests we must satisfy to maintain our REIT status may change, or the interpretation of these rules and tests by the IRS may change.

In addition, our stated goal has been to not generate excess inclusion income at Redwood Trust, Inc. and certain of its subsidiaries that would be taxable as unrelated business taxable income ("UBTI") to our tax-exempt shareholders. Achieving this goal has limited, and may continue to limit, our flexibility in pursuing certain transactions or has resulted in, and may continue to result in, our having to pursue certain transactions through a taxable REIT subsidiary, which would reduce the net returns on these transactions by the associated tax liabilities payable by such subsidiary. Despite our efforts to do so, we may not be able to avoid creating or distributing UBTI to our shareholders.

To maintain our REIT status, we may be forced to borrow funds during unfavorable market conditions, and the unavailability of such capital on favorable terms at the desired times, or at all, may cause us to curtail our investment activities and/or to dispose of assets at inopportune times, which could adversely affect our financial condition, results of operations, cash flow and per share trading price of our common stock.

To qualify as a REIT, we generally must distribute to our shareholders at least 90% of our net taxable income each year (excluding any net capital gains), and we will be subject to regular corporate income taxes to the extent that we distribute less than 100% of our net taxable income each year. In addition, we will be subject to a 4% nondeductible excise tax on the amount, if any, by which distributions we pay in any calendar year are less than the sum of 85% of our ordinary income, 95% of our net capital gains, and 100% of our undistributed income from prior years. To maintain our REIT status and avoid the payment of federal income and excise taxes, we may need to borrow funds to meet the REIT distribution requirements, even if the then-prevailing market conditions are not favorable for these borrowings. These borrowing needs could result from differences in timing between the actual receipt of income and inclusion of income for federal income tax purposes. For example, we may be required to accrue interest and discount income on mortgage loans, MBS, and other types of debt securities or interests in debt securities before we receive any payments of interest or principal on such assets. Our access to third-party sources of capital depends on a number of factors, including the market's perception of our growth potential, our current debt levels, the market price of our common stock, and our current and potential future earnings. We cannot assure you that we will have access to such capital on favorable terms at the desired times, or at all, which may cause us to curtail our investment activities and/or to dispose of assets at inopportune times, and could adversely affect our financial condition, results of operations, cash flow and per share trading price of our common stock.

Dividends payable by REITs, including us, generally do not qualify for the reduced tax rates available for some dividends.

The maximum U.S. federal income tax rate for qualified dividends paid by domestic non-REIT corporations to U.S. stockholders that are individuals, trust or estates is generally 20%. Although dividends paid by REITs to such stockholders are generally not eligible for that rate (subject to limited exceptions), under the Tax Act, such stockholders may deduct up to 20% of ordinary dividends from a REIT for taxable years beginning after December 31, 2017 and before January 1, 2026. Although this deduction reduces the effective tax rate applicable to certain dividends paid by REITs, such tax rate is still higher than the tax rate applicable to regular corporate qualified dividends. This may cause investors to view REIT investments as less attractive than investments in non-REIT corporations, which in turn may adversely affect the value of shares of REITs, including the shares of our common stock.

The failure of mortgage loans or MBS subject to a repurchase agreement or a mezzanine loan to qualify as a real estate asset would adversely affect our ability to qualify as a REIT.

When we enter into short-term financing arrangements in the form of repurchase agreements, we will sell certain of our assets to a counterparty and simultaneously enter into an agreement to repurchase the sold assets. We believe that we will be treated for U.S. federal income tax purposes as the owner of the assets that are the subject of any such agreements notwithstanding that such agreements 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 repurchase agreement, in which case we could fail to qualify as a REIT.

In addition, although we no longer originate commercial mezzanine loans and we sold our commercial mezzanine loan portfolio, in the past we have originated and retained as investments commercial mezzanine loans. Commercial mezzanine loans are loans secured by equity interests in a partnership or limited liability company that directly or indirectly owns commercial real estate. In Revenue Procedure 2003-65, the IRS provided a safe harbor pursuant to

which a mezzanine loan, if it meets each of the requirements contained in the Revenue Procedure, will be treated by the IRS as a real estate asset for purposes of the REIT asset tests, and interest derived from the mezzanine loan will be treated as qualifying mortgage interest for purposes of the REIT 75% gross income test. Although the Revenue Procedure provides a safe harbor on which taxpayers may rely, it does not prescribe rules of substantive tax law. We believe that the mezzanine loans that we have treated as real estate assets generally met all of the requirements for reliance on this safe harbor. However, there can be no assurance that the IRS will not challenge the tax treatment of these mezzanine loans, and if such a challenge were sustained, we could in certain circumstances be required to pay a penalty tax or fail to qualify as a REIT.

Changes in tax rules could adversely affect REITs and could adversely affect the value of our common stock.

The rules addressing federal income taxation are constantly under review by persons involved in the legislative process and by the IRS and the U.S. Department of the Treasury. Any such future changes in the regulations or tax laws applicable to REITs or to mortgage related financial products could negatively impact our operations or reduce any competitive advantages we may have relative to non-REIT entities, either of which could reduce the value of our common stock.

The Tax Act has significantly changed the U.S. federal income taxation of U.S. businesses and their owners, including REITs and their stockholders. Changes made by the Tax Act that could affect us and our stockholders include:

temporarily reducing individual U.S. federal income tax rates on ordinary income - the highest individual U.S. federal income tax rate has been reduced from 39.6% to 37% for taxable years beginning after December 31, 2017 and before January 1, 2026;

permanently eliminating the progressive corporate tax rate structure, which previously imposed a maximum corporate tax rate of 35%, and replacing it with a flat corporate tax rate of 21%;

permitting a deduction for certain pass-through business income, including dividends received by our stockholders from us that are not designated by us as capital gain dividends or qualified dividend income, which will generally allow individuals, trusts, and estates to deduct up to 20% of such amounts for taxable years beginning after December 31, 2017 and before January 1, 2026;

reducing the highest rate of withholding with respect to our distributions to non-U.S. stockholders that are treated as attributable to gains from the sale or exchange of U.S. real property interests from 35% to 21%;

limiting our deduction for net operating losses arising in taxable years beginning after December 31, 2017 to 80% of REIT taxable income (determined without regard to the dividends paid deduction);

generally limiting the deduction for net business interest expense in excess of 30% of a business's "adjusted taxable income;" and

eliminating the corporate alternative minimum tax.

Many of these changes that are applicable to us are effective beginning with our 2018 taxable year, without any transition periods or grandfathering for existing transactions. The legislation is unclear in many respects and could be subject to potential amendments and technical corrections, as well as interpretations and implementing regulations by the Treasury and IRS, any of which could lessen or increase the impact of the legislation. In addition, it is unclear how these U.S. federal income tax changes will affect state and local taxation, which often uses federal taxable income as a starting point for computing state and local tax liabilities. Some of the changes made by the tax legislation may adversely affect us in one or more reporting periods and prospectively. We continue to work with our tax advisors and auditors to determine the full impact that the Tax Act as a whole will have on us.

The application of the tax laws to our business is complicated, and we may not interpret and apply some of the rules and regulations correctly. In addition, we may not make all available elections, which could result in our not being able to fully benefit from available deductions or benefits. Furthermore, the elections, interpretations and applications we do make could be deemed by the IRS to be incorrect and could have adverse impacts on our GAAP earnings and potentially on our REIT status.

The Internal Revenue Code may change and/or the interpretation of the rules and regulations by the IRS may change. In circumstances where the application of these rules and regulations affecting our business is not clear, we may have to interpret them and their application to us. We seek the advice of outside tax advisors in arriving at these interpretations, but our interpretations may prove to be wrong, which could have adverse consequences.

Our tax payments and dividend distributions, which are intended to meet the REIT distribution requirements, are based in large part on our estimate of taxable income which includes the application and interpretation of a variety of tax rules and regulations. While there are some relief provisions should we incorrectly interpret certain rules and regulations, we may not be able to fully take advantage of these provisions, and this could have an adverse effect on our REIT status. In addition, our GAAP earnings include tax provisions and benefits based on our estimates of taxable income and should our estimates prove to be wrong, we could have to make an adjustment to our tax provisions and this adjustment could be material.

Our decisions about raising, managing, and distributing our capital may adversely affect our business and financial results. Furthermore, our growth may be limited if we are not able to raise additional capital.

We are required to distribute at least 90% of our REIT taxable income as dividends to shareholders. Thus, we do not generally have the ability to retain all of the earnings generated by our REIT and, to a large extent, we rely on our ability to raise capital to grow. We may raise capital through the issuance of new shares of our common stock, either through our direct stock purchase and dividend reinvestment plan or through public or private offerings. We may also raise capital by issuing other types of securities, such as preferred stock, convertible or exchangeable debt, or other types of debt securities. As of February 25, 2019, we had approximately 83 million unissued shares of stock authorized for issuance under our charter (although approximately 57 million of these shares are reserved for issuance under our equity compensation plans, dividend reinvestment and stock purchase plan, ATM offering program, and outstanding convertible notes and exchangeable notes). The number of our unissued shares of stock authorized for issuance establishes a limit on the amount of capital we can raise through issuances of shares of stock or securities convertible into, or exchangeable for, shares of stock, unless we seek and receive approval from our shareholders to increase the authorized number of our shares in our charter. Also, certain stock change of ownership tests may limit our ability to raise significant amounts of equity capital or could limit our future use of tax losses to offset income tax obligations if we raise significant amounts of equity capital.

In addition, we may not be able to raise capital at times when we need capital or see opportunities to invest capital. Many of the same factors that could make the pricing for investments in real estate loans and securities attractive, such as the availability of assets from distressed owners who need to liquidate them at reduced prices, and uncertainty about credit risk, housing, and the economy, may limit investors' and lenders' willingness to provide us with additional capital on terms that are favorable to us, if at all. There may be other reasons we are not able to raise capital and, as a result, may not be able to finance growth in our business and in our portfolio of assets. If we are unable to raise capital and expand our business and our portfolio of investments, our growth may be limited, we may have to forgo attractive business and investment opportunities, and our operating expenses may increase significantly relative to our capital base. Alternatively, we may need to raise capital on unfavorable terms, which may lead to greater dilution of existing shareholders, higher interest costs, or higher transaction costs.

To the extent we have capital that is available for investment, we have broad discretion over how to invest that capital and our shareholders and other investors will be relying on the judgment of our management regarding its use. To the extent we invest capital in our business or in portfolio assets, we may not be successful in achieving favorable returns.

Conducting our business in a manner so that we are exempt from registration under, and in compliance with, the Investment Company Act may reduce our flexibility and could limit our ability to pursue certain opportunities. At the same time, failure to continue to qualify for exemption from the Investment Company Act could adversely affect us.

Under the Investment Company Act, an investment company is required to register with the SEC and is subject to extensive restrictive and potentially adverse regulations relating to, among other things, operating methods, management, capital structure, dividends, and transactions with affiliates. However, companies primarily engaged in the business of acquiring mortgages and other liens on and interests in real estate are generally exempt from the requirements of the Investment Company Act. We believe that we have conducted our business so that we are not subject to the registration requirements of the Investment Company Act. In order to continue to do so, however, Redwood and each of our subsidiaries must either operate so as to fall outside the definition of an investment company under the Investment Company Act or satisfy its own exclusion under the Investment Company Act. For example, to avoid being defined as an investment company, an entity may limit its ownership or holdings of investment securities to less than 40% of its total assets. In order to satisfy an exclusion from being defined as an investment company, other entities, among other things, maintain at least 55% of their assets in certain qualifying real estate assets (the 55% Requirement) and also maintain an additional 25% of their assets in such qualifying real estate

assets or certain other types of real estate-related assets (the 25% Requirement). Rapid changes in the values of assets we own, however, can disrupt prior efforts to conduct our business to meet these requirements.

If Redwood or one of our subsidiaries fell within the definition of an investment company under the Investment Company Act and failed to qualify for an exclusion or exemption, including, for example, if it was required to and failed to meet the 55% Requirement or the 25% Requirement, it could, among other things, be required either (i) to change the manner in which it conducts operations to avoid being required to register as an investment company or (ii) to register as an investment company, either of which could adversely affect us by, among other things, requiring us to dispose of certain assets or to change the structure of our business in ways that we may not believe to be in our best interests. Legislative or regulatory changes relating to the Investment Company Act or which affect our efforts to qualify for exclusions or exemptions, including our ability to comply with the 55% Requirement and the 25% Requirement, could also result in these adverse effects on us.

If we were deemed an unregistered investment company, we could be subject to monetary penalties and injunctive relief and we could be unable to enforce contracts with third parties and third parties could seek to obtain rescission of transactions undertaken during the period we were deemed an unregistered investment company, unless the court found that under the circumstances, enforcement (or denial of rescission) would produce a more equitable result than no enforcement (or grant of rescission) and would not be inconsistent with the Investment Company Act.

Provisions in our charter and bylaws and provisions of Maryland law may limit a change in control or deter a takeover that might otherwise result in a premium price being paid to our shareholders for their shares in Redwood.

In order to maintain our status as a REIT, not more than 50% in value of our outstanding capital stock may be owned, actually or constructively, by five or fewer individuals (defined in the Internal Revenue Code to include certain entities). In order to protect us against the risk of losing our status as a REIT due to concentration of ownership among our shareholders and for other reasons, our charter generally prohibits any single shareholder, or any group of affiliated shareholders, from beneficially owning more than 9.8% of the outstanding shares of any class of our stock, unless our Board of Directors waives or modifies this ownership limit. This limitation may have the effect of precluding an acquisition of control of us by a third party without the consent of our Board of Directors. Our Board of Directors has granted a limited number of waivers to institutional investors to own shares in excess of this 9.8% limit, which waivers are subject to certain terms and conditions. Our Board of Directors may amend these existing waivers to permit additional share ownership or may grant waivers to additional shareholders at any time.

Certain other provisions contained in our charter and bylaws and in the Maryland General Corporation Law ("MGCL") may have the effect of discouraging a third party from making an acquisition proposal for us and may therefore inhibit a change in control. For example, our charter includes provisions granting our Board of Directors the authority to issue preferred stock from time to time and to establish the terms, preferences, and rights of the preferred stock without the approval of our shareholders. Provisions in our charter and the MGCL also restrict our shareholders' ability to remove directors and fill vacancies on our Board of Directors and restrict unsolicited share acquisitions. These provisions and others may deter offers to acquire our stock or large blocks of our stock upon terms attractive to our shareholders, thereby limiting the opportunity for shareholders to receive a premium for their shares over then-prevailing market prices.

The ability to take action against our directors and officers is limited by our charter and bylaws and provisions of Maryland law and we may (or, in some cases, are obligated to) indemnify our current and former directors and officers against certain losses relating to their service to us.

Our charter limits the liability of our directors and officers to us and to shareholders for pecuniary damages to the fullest extent permitted by Maryland law. In addition, our charter and bylaws together require us to indemnify our officers and directors (and those of our subsidiaries and affiliates) to the maximum extent permitted by Maryland law in the defense of any proceeding to which he or she is made, or threatened to be made, a party because of his or her service to us. In addition, we have entered into, and may in the future enter into, indemnification agreements with our directors and certain of our officers and the directors and certain of the officers of certain of our subsidiaries and affiliates which obligate us to indemnify them against certain losses relating to their service to us and the related costs of defense.

Other Risks Related to Ownership of Our Common Stock

Investing in our common stock may involve a high degree of risk. Investors in our common stock may experience losses, volatility, and poor liquidity, and we may reduce our dividends in a variety of circumstances.

An investment in our common stock may involve a high degree of risk, particularly when compared to other types of investments. Risks related to the economy, the financial markets, our industry, our investing activity, our other

business activities, our financial results, the amount of dividends we distribute, the manner in which we conduct our business, and the way we have structured our operations could result in a reduction in, or the elimination of, the value of our common stock. The level of risk associated with an investment in our common stock may not be suitable for the risk tolerance of many investors. Investors may experience volatile returns and material losses. In addition, the trading volume of our common stock (i.e., its liquidity) may be insufficient to allow investors to sell their common stock when they want to or at a price they consider reasonable.

Our earnings, cash flows, book value, and dividends can be volatile and difficult to predict. Investors in our common stock should not rely on our estimates, projections, or predictions, or on management's beliefs about future events. In particular, the sustainability of our earnings and our cash flows will depend on numerous factors, including our level of business and investment activity, our access to debt and equity financing, the returns we earn, the amount and timing of credit losses, prepayments, the expense of running our business, and other factors, including the risk factors described herein. As a consequence, although we seek to pay a regular common stock dividend that is sustainable, we may reduce our regular dividend rate, or stop paying dividends, in the future for a variety of reasons. We may not provide public warnings of dividend reductions prior to their occurrence. Although we have paid special dividends in the past, we have not paid a special dividend since 2007 and we may not do so in the future. Changes to the amount of dividends we distribute may result in a reduction in the value of our common stock.

A limited number of institutional shareholders own a significant percentage of our common stock, which could have adverse consequences to other holders of our common stock.

As of February 28, 2019, based on filings of Schedules 13D and 13G with the SEC, we believe that five institutional shareholders each owned approximately 5% or more of our outstanding common stock (and we believe one of these shareholders owned approximately 18% of our outstanding common stock) and we believe based on data obtained from other public sources that, overall, institutional shareholders owned, in the aggregate, more than 90% of our outstanding common stock. Furthermore, one or more of these investors or other investors could significantly increase their ownership of our common stock, including through the conversion of outstanding convertible or exchangeable notes into shares of common stock. Significant ownership stakes held by these individual institutions or other investors could have adverse consequences for other shareholders because each of these shareholders will have a significant influence over the outcome of matters submitted to a vote of our shareholders, including the election of our directors and transactions involving a change in control. In addition, should any of these significant shareholders determine to liquidate all or a significant portion of their holdings of our common stock, it could have an adverse effect on the market price of our common stock.

Although, under our charter, shareholders are generally precluded from beneficially owning more than 9.8% of our outstanding common stock, our Board of Directors may amend existing ownership-limitation waivers or grant waivers to other shareholders in the future, in each case in a manner which may allow for increases in the concentration of the ownership of our common stock held by one or more shareholders.

Future sales of our common stock by us or by our officers and directors may have adverse consequences for investors.

We may issue additional shares of common stock, or securities convertible into, or exchangeable for, shares of common stock, in public offerings or private placements, and holders of our outstanding convertible notes or exchangeable securities may convert those securities into shares of common stock. In addition, we may issue additional shares of common stock to participants in our direct stock purchase and dividend reinvestment plan and to our directors, officers, and employees under our employee stock purchase plan, our incentive plan, or other similar plans, including upon the exercise of, or in respect of, distributions on equity awards previously granted thereunder. We are not required to offer any such shares to existing shareholders on a preemptive basis. Therefore, it may not be possible for existing shareholders to participate in future share issuances, which may dilute existing shareholders' interests in us. In addition, if market participants buy shares of common stock, or securities convertible into, or exchangeable for, shares of common stock, in issuances by us in the future, it may reduce or eliminate any purchases of our common stock they might otherwise make in the open market, which in turn could have the effect of reducing the volume of shares of our common stock traded in the marketplace, which could have the effect of reducing the market price and liquidity of our common stock.

At February 25, 2019, our directors and executive officers beneficially owned, in the aggregate, approximately 2% of our common stock. Sales of shares of our common stock by these individuals are generally required to be publicly reported and are tracked by many market participants as a factor in making their own investment decisions. As a result, future sales by these individuals could negatively affect the market price of our common stock.

There is a risk that you may not receive dividend distributions or that dividend distributions may decrease over time. Changes in the amount of dividend distributions we pay, in the tax characterization of dividend distributions we pay, or in the rate at which holders of our common stock are taxed on dividend distributions we pay, may adversely affect the market price of our common stock or may result in holders of our common stock being taxed on dividend distributions at a higher rate than initially expected.

Our dividend distributions are driven by a variety of factors, including our minimum dividend distribution requirements under the REIT tax laws and our REIT taxable income as calculated for tax purposes pursuant to the Internal Revenue Code. We generally intend to distribute to our shareholders at least 90% of our REIT taxable income, although our reported financial results for GAAP purposes may differ materially from our REIT taxable income.

For 2018, we paid one regular quarterly dividend at a rate of \$0.28 per share and three regular quarterly dividends at a rate of \$0.30 per share. Our ability to continue to pay future dividends in 2019 may be adversely affected by a number of factors, including the risk factors described herein. In addition, to the extent we determine that future dividends would represent a return of capital to investors, rather than the distribution of income, we may determine to discontinue dividend payments until such time that dividends would again represent a distribution of income. Any reduction or elimination of our payment of dividend distributions would not only reduce the amount of dividends you would receive as a holder of our common stock, but could also have the effect of reducing the market price of our common stock.

The rate at which holders of our common stock are taxed on dividends we pay and the characterization of our dividends - as ordinary income, capital gains, or a return of capital - could have an impact on the market price of our common stock. In addition, after we announce the expected characterization of dividend distributions we have paid, the actual characterization (and, therefore, the rate at which holders of our common stock are taxed on the dividend distributions they have received) could vary from our expectation, including due to errors, changes made in the course of preparing our corporate tax returns, or changes made in response to an IRS audit), with the result that holders of our common stock could incur greater income tax liabilities than expected.

The market price of our common stock could be negatively affected by various factors, including broad market fluctuations.

The market price of our common stock may be negatively affected by various factors, which change from time to time. Some of these factors are:

Our actual or anticipated financial condition, performance, and prospects and those of our competitors.

The market for similar securities issued by other REITs and other competitors of ours.

Changes in the manner that investors and securities analysts who provide research to the marketplace on us analyze the value of our common stock.

Changes in recommendations or in estimated financial results published by securities analysts who provide research to the marketplace on us, our competitors, or our industry.

General economic and financial market conditions, including, among other things, actual and projected interest rates, prepayments, and credit performance and the markets for the types of assets we hold or invest in.

Proposals to significantly change the manner in which financial markets, financial institutions, and related industries, or financial products are regulated under applicable law, or the enactment of such proposals into law or regulation.

Other events or circumstances which undermine confidence in the financial markets or otherwise have a broad impact on financial markets, such as the sudden instability or collapse of large financial institutions or other significant corporations (whether due to fraud or other factors), terrorist attacks, natural or man-made disasters, or threatened or actual armed conflicts.

Furthermore, these fluctuations do not always relate directly to the financial performance of the companies whose stock prices may be affected. As a result of these and other factors, investors who own our common stock could experience a decrease in the value of their investment, including decreases unrelated to our financial results or prospects.

ITEM 1B. UNRESOLVED STAFF COMMENTS None.

ITEM 2. PROPERTIES

Our principal executive and administrative office is located in Mill Valley, California and we have additional offices, including at the locations listed below. We do not own any properties and lease the space we utilize for our offices. Additional information on our leases is included in Note 16 to the Financial Statements within this Annual Report on Form 10-K. The following table presents the locations and remaining lease terms of our primary offices. Executive and Administrative Office Locations and Lease Expirations

Location One Belvedere Place, Suite 300 Mill Valley, CA 94941	Lease Expiration 2028
8310 South Valley Highway, Suite 425 Englewood, CO 80112	2021
225 W. Washington St., Suite 1440 Chicago, IL 60606	2020

ITEM 3. LEGAL PROCEEDINGS

On or about December 23, 2009, the Federal Home Loan Bank of Seattle (the "FHLB-Seattle") filed a complaint in the Superior Court for the State of Washington (case number 09-2-46348-4 SEA) against Redwood Trust, Inc., our subsidiary, Sequoia Residential Funding, Inc. ("SRF"), Morgan Stanley & Co., and Morgan Stanley Capital I, Inc. (collectively, the "FHLB-Seattle Defendants"), which alleged that the FHLB-Seattle Defendants made false or misleading statements in offering materials for a mortgage pass-through certificate (the "Seattle Certificate") issued in the Sequoia Mortgage Trust 2005-4 securitization transaction (the "2005-4 RMBS") and purchased by the FHLB-Seattle. Specifically, the complaint alleged that the alleged misstatements concerned the (1) loan-to-value ratio of mortgage loans and the appraisals of the properties that secured loans supporting the 2005-4 RMBS, (2) occupancy status of the properties, (3) standards used to underwrite the loans, and (4) ratings assigned to the Seattle Certificate. The FHLB-Seattle alleged claims under the Securities Act of Washington (Section 21.20.005, et seq.) and sought to rescind the purchase of the Seattle Certificate and to collect interest on the original purchase price at the statutory interest rate of 8% per annum from the date of original purchase (net of interest received) as well as attorneys' fees and costs. The Seattle Certificate was issued with an original principal amount of approximately \$133 million, and, at December 31, 2018, approximately \$126 million of principal and \$12 million of interest payments had been made in respect of the Seattle Certificate. As of December 31, 2018, the Seattle Certificate had a remaining outstanding principal amount of approximately \$8 million. The matter was subsequently resolved and the claims were dismissed by the FHLB Seattle as to all the FHLB Seattle Defendants. At the time the Seattle Certificate was issued, Redwood agreed to indemnify the underwriters of the 2005-4 RMBS, which underwriters were named as defendants in the action, for certain losses and expenses they might incur as a result of claims made against them relating to this RMBS, including, without limitation, certain legal expenses. Regardless of the resolution of this litigation, we could incur a loss as a result of these indemnities.

On or about July 15, 2010, The Charles Schwab Corporation ("Schwab") filed a complaint in the Superior Court for the State of California in San Francisco (case number CGC-10-501610) against SRF and 26 other defendants (collectively, the "Schwab Defendants"), which alleged that the Schwab Defendants made false or misleading statements in offering materials for various residential mortgage-backed securities sold or issued by the Schwab Defendants. Schwab alleged only a claim for negligent misrepresentation under California state law against SRF and sought unspecified damages and attorneys' fees and costs from SRF. Schwab claimed that SRF made false or misleading statements in offering materials for a mortgage pass-through certificate (the "Schwab Certificate") issued in the 2005-4 RMBS and purchased by Schwab. Specifically, the complaint alleged that the misstatements for the 2005-4 RMBS concerned the (1) loan-to-value ratio of mortgage loans and the appraisals of the properties that secured loans supporting the 2005-4 RMBS, (2) occupancy status of the properties, (3) standards used to underwrite the loans, and (4) ratings assigned to the Schwab Certificate. The Schwab Certificate was issued with an original principal amount of approximately \$15 million, and, at December 31, 2018, approximately \$14 million of principal and \$1 million of interest payments had been made in respect of the Schwab Certificate. As of December 31, 2018, the Schwab Certificate had a remaining outstanding principal amount of approximately \$1 million. At the time the Schwab Certificate was issued, Redwood agreed to indemnify the underwriters of the 2005-4 RMBS, which underwriters were also named as defendants in the action, for certain losses and expenses they might incur as a result of claims made against them relating to this RMBS, including, without limitation, certain legal expenses. Regardless of the resolution of this litigation, Redwood could incur a loss as a result of these indemnities.

Through certain of our wholly-owned subsidiaries, we have in the past engaged in, and expect to continue to engage in, activities relating to the acquisition and securitization of residential mortgage loans. In addition, certain of our wholly-owned subsidiaries have in the past engaged in activities relating to the acquisition and securitization of debt obligations and other assets through the issuance of collateralized debt obligations (commonly referred to as CDO transactions). Because of this involvement in the securitization and CDO businesses, we could become the subject of litigation relating to these businesses, including additional litigation of the type described above, and we could also become the subject of governmental investigations, enforcement actions, or lawsuits, and governmental authorities could allege that we violated applicable law or regulation in the conduct of our business. As an example, in July 2016 we became aware of a complaint filed by the State of California on April 1, 2016 against Morgan Stanley & Co. and certain of its affiliates alleging, among other things, that there were misleading statements contained in offering

materials for 28 different mortgage pass-through certificates purchased by various California investors, including various California public pension systems, from Morgan Stanley and alleging that Morgan Stanley made false or fraudulent claims in connection with the sale of those certificates. Of the 28 mortgage pass-through certificates that were the subject of the complaint, two were Sequoia mortgage pass-through certificates issued in 2004 and two were Sequoia mortgage pass-through certificates issued in 2007. With respect to each of those certificates, our wholly-owned subsidiary, RWT Holdings, Inc., was the sponsor and our wholly-owned subsidiary, Sequoia Residential Funding, Inc., was the depositor. The plaintiffs subsequently withdrew from the litigation their claims based on eight of the 28 mortgage pass-through certificates, including one of the Sequoia mortgage pass-through certificates issued in 2004. At the time these Sequoia mortgage pass-through certificates were issued, Sequoia Residential Funding, Inc. and Redwood Trust agreed to indemnify the underwriters of these certificates for certain losses and expenses they might incur as a result of claims made against them relating to these certificates, including, without limitation, certain legal expenses. Regardless of the outcome of this litigation, we could incur a loss as a result of these indemnities.

In accordance with GAAP, we review the need for any loss contingency reserves and establish reserves when, in the opinion of management, it is probable that a matter would result in a liability and the amount of loss, if any, can be reasonably estimated. Additionally, we record receivables for insurance recoveries relating to litigation-related losses and expenses if and when such amounts are covered by insurance and recovery of such losses or expenses are due. At December 31, 2018, the aggregate amount of loss contingency reserves established in respect of the FHLB-Seattle and Schwab litigation matters described above was \$2 million. We review our litigation matters each quarter to assess these loss contingency reserves and make adjustments in these reserves, upwards or downwards, as appropriate, in accordance with GAAP based on our review.

In the ordinary course of any litigation matter, including certain of the above-referenced matters, we have engaged and may continue to engage in formal or informal settlement communications with the plaintiffs or co-defendants. Settlement communications we have engaged in relating to certain of the above-referenced litigation matters are one of the factors that have resulted in our determination to establish the loss contingency reserves described above. We cannot be certain that any of these matters will be resolved through a settlement prior to trial and we cannot be certain that the resolution of these matters, whether through trial or settlement, will not have a material adverse effect on our financial condition or results of operations in any future period.

Future developments (including resolution of substantive pre-trial motions relating to these matters, receipt of additional information and documents relating to these matters (such as through pre-trial discovery), new or additional settlement communications with plaintiffs relating to these matters, or resolutions of similar claims against other defendants in these matters) could result in our concluding in the future to establish additional loss contingency reserves or to disclose an estimate of reasonably possible losses in excess of our established reserves with respect to these matters. Our actual losses with respect to the above-referenced litigation matters may be materially higher than the aggregate amount of loss contingency reserves we have established in respect of these litigation matters, including in the event that any of these matters proceeds to trial and the plaintiff prevails. Other factors that could result in our concluding to establish additional loss contingency reserves or estimate additional reasonably possible losses, or could result in our actual losses with respect to the above-referenced litigation matters being materially higher than the aggregate amount of loss contingency reserves we have established in respect of these litigation matters include that: there are significant factual and legal issues to be resolved; information obtained or rulings made during the lawsuits could affect the methodology for calculation of the available remedies; and we may have additional obligations pursuant to indemnity agreements, representations and warranties, and other contractual provisions with other parties relating to these litigation matters that could increase our potential losses.

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

Our common stock is listed and traded on the NYSE under the symbol RWT. At February 15, 2019, our common stock was held by approximately 636 holders of record and the total number of beneficial stockholders holding stock through depository companies was approximately 16,462. At February 25, 2019, there were 96,609,827 shares of common stock outstanding.

The cash dividends declared on our common stock for each full quarterly period during 2018 and 2017 were as follows:

	Common Dividends Declared								
	Record Payable		Per	Dividend					
	Date	Date	Share	Type					
Year Ended December 31, 2018									
Fourth Quarter	12/14/2018	12/28/2018	\$0.30	Regular					
Third Quarter	9/14/2018	9/28/2018	\$0.30	Regular					
Second Quarter	6/15/2018	6/29/2018	\$0.30	Regular					
First Quarter	3/15/2018	3/29/2018	\$0.28	Regular					
Year Ended December 31, 2017									
Fourth Quarter	12/15/2017	12/28/2017	\$0.28	Regular					
Third Quarter	9/15/2017	9/29/2017	\$0.28	Regular					
Second Quarter	6/16/2017	6/30/2017	\$0.28	Regular					
First Quarter	3/16/2017	3/31/2017	\$0.28	Regular					

All dividend distributions are made with the authorization of the board of directors at its discretion and will depend on such items as our GAAP net income, REIT taxable income, financial condition, maintenance of REIT status, and other factors that the board of directors may deem relevant from time to time. The holders of our common stock share proportionally on a per share basis in all declared dividends on common stock. As reported on our Current Report on Form 8-K on January 28, 2019, for dividend distributions made in 2018, we expect our dividends paid in 2018 to be characterized as 69% ordinary dividend income and 31% long-term capital gain dividend income. None of the dividend distributions made in 2018 are expected to be characterized for federal income tax purposes as return of capital or qualified dividends.

During the year ended December 31, 2018, we did not sell any equity securities that were not registered under the Securities Act of 1933, as amended. In February 2016, our Board of Directors approved an authorization for the repurchase of up to \$100 million of our common stock and also authorized the repurchase of outstanding debt securities, including convertible and exchangeable debt. This authorization replaced all previous share repurchase plans and has no expiration date. At December 31, 2017, approximately \$77 million of this current authorization remained available for the repurchase of shares of our common stock. During January 2018, we repurchased 1,040,829 shares of our common stock pursuant to this authorization for \$16 million.

In February 2018, our Board of Directors approved an authorization for the repurchase of an additional \$39 million of our common stock, increasing the total amount authorized for repurchases of common stock to \$100 million, and also authorized the repurchase of outstanding debt securities, including convertible and exchangeable debt. As noted above, this authorization increased the previous share repurchase authorization approved in February 2016 and has no expiration date. This repurchase authorization does not obligate us to acquire any specific number of shares or securities. Under this authorization, shares or securities may be repurchased in privately negotiated and/or open market transactions, including under plans complying with Rule 10b5-1 under the Securities Exchange Act of 1934, as amended. At December 31, 2018, \$100 million of this current total authorization remained available for repurchases of shares of our common stock. Like other investments we may make, any repurchases of our common stock or debt securities under this authorization would reduce our available capital described above.

The following table contains information on the shares of our common stock that we purchased or otherwise acquired during the three months ended December 31, 2018.

(In Thousands, except Per Share Data)	Total Number of Shares Purchased or Acquired	Average Price per Share Paid	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number (or approximate dollar value) of Shares that May Yet be Purchased under the Plans or Programs
October 1, 2018 - October 31, 2018	(1)	\$ 16.24	_	\$ —
November 1, 2018 - November 30, 2018	_	\$ <i>—</i>	_	\$ —
December 1, 2018 - December 31, 2018	_	\$ <i>—</i>	_	\$ 100,000
Total		\$ <i>-</i>		

⁽¹⁾ Represents fewer than 1000 shares reacquired to satisfy tax withholding requirements related to the vesting of restricted shares.

Information with respect to compensation plans under which equity securities of the registrant are authorized for issuance is set forth in Part II, Item 12 of this Annual Report on Form 10-K.

Performance Graph

The following graph presents a cumulative total return comparison of our common stock, over the last five years, to the S&P Composite-500 Stock Index and the National Association of Real Estate Investment Trusts, Inc. ("NAREIT") Mortgage REIT index. The total returns reflect stock price appreciation and the reinvestment of dividends for our common stock and for each of the comparative indices, assuming that \$100 was invested in each on December 31, 2013. The information has been obtained from sources believed to be reliable; but neither its accuracy nor its completeness is guaranteed. The total return performance shown on the graph is not necessarily indicative of future performance of our common stock.

	2013	2014	2015	2016	2017	2018
Redwood Trust, Inc.	100	108	78	97	101	111
FTSE NAREIT Mortgage REIT Index	100	118	107	132	158	154
S&P Composite-500 Index	100	114	115	129	157	150

ITEM 6. SELECTED FINANCIAL DATA

The following selected financial data are qualified in their entirety by, and should be read in conjunction with, the more detailed information contained in the Consolidated Financial Statements and Notes thereto and Management's Discussion and Analysis of Financial Condition and Results of Operations included elsewhere in this Annual Report on Form 10-K and in our Annual Reports on Form 10-K as of and for each of the years ended December 31, 2017, 2016, 2015, and 2014. Certain amounts for prior periods have been reclassified to conform to the 2018 presentation.

2010, 2013, and 2014. Certain amounts for	prior periods in	ave been rectas	sifica to comoi	III to the 2010 j	presentation.
(In Thousands, except Share Data)	2018	2017	2016	2015	2014
Selected Statement of Operations Data:					
Interest income	\$378,717	\$248,057	\$246,355	\$259,432	\$242,070
Interest expense	(239,039)	(108,816)	(88,528)	(95,883)	(87,463)
Net Interest Income	139,678	139,241	157,827	163,549	154,607
Reversal of (provision for) loan losses	_	_	7,102	355	(961)
Net Interest Income after Provision	139,678	139,241	164,929	163,904	153,646
Non-interest Income					
Mortgage banking activities, net	59,566	53,908	38,691	10,972	34,994
Investment fair value changes, net	(25,689)	10,374	(28,574)	(21,357)	(10,202)
Other income, net	12,874	12,436	20,691	(730)	(2,480)
Realized gains, net	27,041	13,355	28,009	36,369	15,478
Total non-interest income, net	73,792	90,073	58,817	25,254	37,790
Operating expenses	(82,782)	(77,156)	(88,786)	(97,416)	(90,123)
Net Income before Provision for Income	120 600	150 150	124.060	01.742	101 212
Taxes	130,688	152,158	134,960	91,742	101,313
(Provision for) benefit from income taxes	(11,088)	(11,752)	(3,708)	10,346	(744)
Net Income	\$119,600	\$140,406	\$131,252	\$102,088	\$100,569
Average common shares – basic	78,724,912	76,792,957	76,747,047	82,945,103	82,837,369
Earnings per share – basic	\$1.47	\$1.78	\$1.66	\$1.20	\$1.18
Average common shares – diluted ¹⁾	110,027,770	101,975,008	97,909,090	84,518,395	85,098,579
Earnings per share – diluted	\$1.34	\$1.60	\$1.54	\$1.18	\$1.15
Regular dividends declared per common	¢1 10	¢ 1 12	¢1.12	¢1 12	¢1 10
share	\$1.18	\$1.12	\$1.12	\$1.12	\$1.12
Selected Balance Sheet Data:					
Total assets	\$11,937,406	\$7,039,822	\$5,483,477	\$6,220,047	\$5,902,916
Short-term debt	\$2,400,279	\$1,938,682	\$791,539	\$1,855,003	\$1,793,825
Asset-backed securities issued –	\$ —	\$ —	\$ —	\$ —	¢ 44 000
Resecuritization, net (2)	5 —	5 —	5 —	\$ —	\$44,909
Asset-backed securities issued, net –	\$ —	\$ —	\$ —	¢52.505	¢01.760
Commercial	5 —	5 —	5 —	\$52,595	\$81,760
Asset-backed securities issued, net –	\$2,397,250	\$1,164,585	\$773,462	\$996,820	\$1,416,090
Sequoia	\$2,391,230	\$1,104,363	\$ 773,402	\$ 990,620	\$1,410,090
Asset-backed securities issued, net –	\$993,748	\$ —	\$ —	\$ —	\$ —
Freddie Mac SLST	φ993,740	φ—	φ—	φ—	φ—
Asset-backed securities issued, net –	\$2,019,075	\$ —	\$ —	\$ —	\$ —
Freddie Mac K-Series	\$2,019,073	φ—	\$ —	φ—	φ—
Long-term debt, net (2)	\$2,572,158	\$2,575,023	\$2,620,683	\$2,027,737	\$1,180,877
Total liabilities	\$10,588,612	\$5,827,535	\$4,334,049	\$5,073,782	\$4,646,775
Total stockholders' equity	\$1,348,794	\$1,212,287	\$1,149,428	\$1,146,265	\$1,256,141
Number of common shares outstanding	84,884,344	76,599,972	76,834,663	78,162,765	83,443,141
Book value per common share	\$15.89	\$15.83	\$14.96	\$14.67	\$15.05
Other Selected Data:					
Average assets	\$8,190,681	\$5,918,233	\$5,893,998	\$6,015,420	\$5,356,839

Average debt and ABS issued outstanding	\$6,751,746		\$4,544,694	4	\$4,617,956	6	\$4,505,079	9	\$3,871,404	4
Average stockholders' equity	\$1,280,287		\$1,181,050	6	\$1,112,313	3	\$1,240,34	5	\$1,250,627	7
Net income/average stockholders' equity	9.3	%	11.9	%	11.8	%	8.2	%	8.0	%

Diluted average common shares for 2018, 2017, and 2016 include certain convertible notes that were determined to be dilutive for those years.

At December 31, 2018, 2017, 2016, 2015, and 2014, Asset-backed securities issued, net included \$0, \$0, \$0, \$542, (2) and \$2,360, respectively, of deferred debt issuance costs, and long-term debt, net included \$11,411, \$10,240, \$7,081, \$10,438, and \$13,690, respectively, of deferred debt issuance costs.

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

Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") is intended to provide a reader of our financial statements with a narrative from the perspective of our management on our financial condition, results of operations, liquidity and certain other factors that may affect our future results. Our MD&A is presented in six main sections:

Overview

Results of Operations

Liquidity and Capital Resources

Off Balance Sheet Arrangements and Contractual Obligations

Critical Accounting Policies and Estimates

New Accounting Standards

Our MD&A should be read in conjunction with the Consolidated Financial Statements and related Notes included in Part II, Item 8, Financial Statements and Supplementary Data of this Annual Report on Form 10-K. References herein to "Redwood," the "company," "we," "us," and "our" include Redwood Trust, Inc. and its consolidated subsidiaries, unless the context otherwise requires. The discussion in this MD&A contains forward-looking statements that involve substantial risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, such as those discussed in the Cautionary Statement in Part 1, Item 1, Business and in Part 1, Item 1A, Risk Factors of this Annual Report on Form 10-K.

OVERVIEW

Our Business

Redwood Trust, Inc., together with its subsidiaries, is a specialty finance company focused on making credit-sensitive investments in single-family residential and multifamily mortgages and related assets and engaging in mortgage banking activities. Our goal is to provide attractive returns to shareholders through a stable and growing stream of earnings and dividends, as well as through capital appreciation. During 2018, we operated our business in two segments: Investment Portfolio and Mortgage Banking. Our segments are based on our organizational and management structure, which aligns with how our results are monitored and performance is assessed.

Our primary sources of income are net interest income from our investment portfolio and non-interest income from our mortgage banking activities. Net interest income consists of the interest income we earn on investments less the interest expense we incur on borrowed funds and other liabilities. Income from mortgage banking activities is generated through the acquisition of loans and their subsequent sale or securitization. Redwood Trust, Inc. has elected to be taxed as a real estate investment trust ("REIT"). We generally refer, collectively, to Redwood Trust, Inc. and those of its subsidiaries that are not subject to subsidiary-level corporate income tax as "the REIT" or "our REIT." We generally refer to subsidiaries of Redwood Trust, Inc. that are subject to subsidiary-level corporate income tax as "our operating subsidiaries" or "our taxable REIT subsidiaries" or "TRS."

For additional information on our business, refer to Part I, Item 1, Business of this Annual Report on Form 10-K.

Business Update

The fourth quarter of 2018 capped a transformational year for Redwood Trust. We recast our strategic vision with an emphasis on becoming the premier specialty finance lender to a changing housing market. That entailed a fresh look at the evolving needs of today's homebuyers - both consumers and investors alike. Our approach focused on better leveraging our reputation, residential credit acumen, deep industry relationships, and financial structuring expertise, in order to expand our investing activity. Having just capped off a record year of capital deployment in 2018, we've taken the early steps towards realizing this vision and are excited about the opportunities we see ahead.

The fourth quarter was a challenging one for industry participants, with market volatility reaching peak levels towards the end of 2018. This pressured valuations across both fixed income and equity markets. Our year-end GAAP book valuation was impacted, but the decline was relatively modest, reflecting the conservatism of our leverage and the overall buoyancy of our credit-focused investment portfolio. Credit spreads have generally improved since early January, helping to retrace a good portion of last quarter's book value reduction. Most importantly, the key driver of our long-term earnings and ability to pay attractive levels of dividends - namely, the quality of our cash-flows - remained very strong. Dividends per share for 2018 exceeded the prior year by 5.4%.

At the center of our progress is continued strong momentum from our investment portfolio. We deployed \$235 million of capital during the fourth quarter, bringing the total for 2018 to just over \$800 million. Fundamental performance in our portfolio continues to reflect the strength of our underwriting and production quality. The breadth of our initiatives should enable us to continue sourcing investments that can drive net interest margins higher. The majority of our portfolio's activity during the fourth quarter remained in line with our strategy - larger investments in cash flows not easily sourced by our competitors.

Additionally, our relationship with 5 Arches, LLC, an originator of business purpose real estate loans, is a key contributor to our strategic vision. In January of 2019, we announced our intention to complete the full acquisition of 5 Arches, with a closing date toward the end of the first quarter of 2019, subject to customary closing conditions. As 5 Arches becomes a wholly owned subsidiary, its platform will provide us with a direct origination capability in the business-purpose lending market - namely, loans to investors in residential real estate.

Turning to our traditional residential mortgage banking operations, we continue to manage cyclical headwinds that we expect to pressure industry volumes throughout 2019, as they have over the past few quarters. Notwithstanding the recent decline in benchmark rates - 30-year mortgage rates fell below 4.5% for the first time in almost a year - overall home purchase activity has begun to level off. While current mortgage rates are lower by historical standards, they still remain above the rate enjoyed by most existing borrowers, effectively shutting off meaningful refinance activity. Amidst this challenging origination environment, we continue to leverage our platform's strengths to drive efficiencies and returns. One of our goals in 2019 is to continue improving workflow efficiencies and capital turnover. By increasing the speed with which we buy and sell loans, we reduce market risk and can operate the business more efficiently without compromising on the quality or service we provide to our loan sellers. Additionally, we expect to continue expanding how we distribute loans in our business. To complement our well-established securitization and bulk whole-loan distribution channels, we have begun to identify new sources of demand for residential credit that can further bolster our conduit liquidity.

In 2019, our emphasis remains on growing durable investment cash-flows that support our attractive levels of sustainable dividends. Our integrated businesses are squarely focused in residential housing credit, an area where we believe we have more experience than any of our modern-day competitors.

2018 Financial Overview

This section includes an overview of our 2018 financial results. A detailed discussion of our results of operations is presented in the next section of this MD&A. The following table presents selected financial highlights from 2018 and 2017.

Table 1 – Key Earnings and Return Metrics

	Years Ended December				
	31,				
(In Thousands, except per Share Data)	2018		2017		
Net income	\$119,600		\$140,406		
Net income per diluted common share (EPS)	\$1.34		\$1.60		
GAAP return on equity (ROE)	9.3	%	11.9	%	
Book value per share	\$15.89		\$15.83		
Economic return on book value (1)	7.8	%	13.3	%	
REIT taxable income per share	\$1.38		\$1.17		
Dividends per share	\$1.18		\$1.12		

⁽¹⁾ Economic return on book value is based on the periodic change in GAAP book value per common share plus dividends declared per common share during the period.

In 2018, increased returns from higher capital deployment and portfolio optimization, as well as strong mortgage banking results, were dampened by negative market valuation changes during the fourth quarter of the year. These market valuation changes were primarily driven by credit spread widening on our portfolio investments, which we estimate impacted net income by more than \$30 million in the fourth quarter. Inclusive of these valuation changes, we generated a return on equity of 9.3% for 2018. REIT taxable income, which excludes most market valuation changes, increased to \$1.38 per share, providing strong coverage of the \$1.18 per share of dividends we paid in 2018. Despite recent volatility in credit spreads, cash flows and credit fundamentals in our investment portfolio remain strong and we have observed credit spread tightening in the first two months of 2019, which positively impacted the value of our investment portfolio and book value per share.

Table 1.1 – Key Operational Metrics

Years Ended December

31,

 (In Thousands)
 2018
 2017

 Capital Deployed
 \$810,203
 \$511,125

 Residential Loans Purchased
 \$7,133,558
 \$5,741,651

 Residential Loans Sold
 \$5,426,304
 \$3,982,683

During 2018, we raised \$342 million of capital, including \$142 million of equity capital and \$200 million of convertible debt. We used the proceeds from these issuances along with proceeds from portfolio optimization to deploy \$810 million of capital in 2018, a significant increase from 2017. While much of this capital was deployed into our traditional asset classes, we also deployed a meaningful amount into new asset classes, including multifamily assets, business purpose residential loans and re-performing loans, further diversifying our exposure to housing credit. In our mortgage banking business, loan purchases in 2018 increased by over 24%, driven by higher volumes of Redwood Choice loans, which accounted for 32% of our purchase volume in 2018, compared to 22% in 2017. In 2018, through our Sequoia platform, we completed eight Select securitizations and four Choice securitizations, which were supplemented by whole loans sales, as we continued to foster diversified distribution channels.

Book Value per Share

The following table sets forth the changes in our book value per share for the year ended December 31, 2018.

Table 2 – Changes in Book Value per Share

Year End	ed	
December	31,	
2018		
\$ 15.83		
1.34		
(0.23))	
(0.13))	
0.09		
(0.27))	
(1.18)	
0.01		
0.01		
0.01		
0.11		
0.03		
\$ 15.89		
	December 2018 \$ 15.83 1.34 (0.23 (0.13 0.09 (0.27 (1.18 0.01 0.01 0.01 0.01 0.01	

Our GAAP book value per share increased \$0.06 per share to \$15.89 per share during 2018. This increase was driven primarily by earnings exceeding our dividend payments and an increase in the value of derivatives hedging our long-term debt.

Unrealized gains on our available-for-sale securities decreased \$0.27 per share during 2018. This decrease primarily resulted from \$0.23 per share of previously unrealized net gains that were realized as income from the sale of securities, as well as \$0.13 per share of discount accretion income recognized in earnings from the appreciation in the amortized cost basis of our available-for-sale securities. These decreases were offset by positive mark-to-market adjustments on available-for-sale securities primarily resulting from overall credit spread tightening on these investments during 2018.

Higher benchmark interest rates during 2018 resulted in a \$0.11 per share increase to book value due to a decrease in unrealized losses on the derivatives hedging a portion of our long-term debt. At December 31, 2018, the cumulative unrealized loss on these derivatives, which is included in our GAAP book value per share, was \$0.40 per share.

Capital Allocation Summary

This section provides an overview of our capital position and how it was allocated at the end of 2018. A detailed discussion of our liquidity and capital resources is provided in the Liquidity and Capital Resources section of this MD&A that follows.

We use a combination of equity and corporate debt (which we collectively refer to as "capital") to fund our business. Our total capital was \$2.12 billion at December 31, 2018, and included \$1.35 billion of equity capital and \$0.77 billion of convertible notes and other long-term debt, including \$201 million of exchangeable debt due in 2019, \$245 million of convertible debt due in 2023, \$200 million of convertible debt due in 2024, and \$140 million of trust-preferred securities due in 2037.

We also utilize various forms of collateralized short-term and long-term debt to finance certain investments and to warehouse some of our inventory of residential loans held-for-sale. We do not consider this collateralized debt as "capital" and, therefore, it is presented separately from allocated capital in the table below. The following table presents how our capital was allocated between business segments and investment types at December 31, 2018. Table 3 – Capital Allocation Summary

At December 31, 2018

(Dollars in Thousands)	Fair Value	Collateralized Debt		Allocated Capital	% of Tota Capi	1
Investment portfolio						
Residential loans (1)	\$2,426,891	\$(1,999,999)	\$426,892	20	%
Securities portfolio						
Third-party residential securities	610,002	(265,529)	344,473	16	%
Residential re-performing loan securities (2)	350,909	(183,795)	167,114	8	%
Sequoia residential securities (3)	485,797	(179,909)	305,888	14	%
Multifamily securities (4)	554,602	(359,657)	194,945	9	%
Total securities portfolio	2,001,309	(988,890)	1,012,419	48	%
Business purpose residential loans	112,798	(66,327)	46,471	2	%
Other investments	438,518	(262,740)	175,778	8	%
Other assets/(other liabilities)	199,933)	113,452	5	%
Cash and liquidity capital	•			175,560	N/A	
Total investment portfolio	\$5,179,449	\$(3,404,437)	1,950,572	92	%
Mortgage banking				170,000	8	%
Total				\$2,120,572	100	%

- (1) Includes \$43 million of FHLB stock.
 - Re-performing residential loan securities presented above represent third-party securities collateralized by
- (2) seasoned re-performing, and to a lesser extent, non-performing residential loans and includes \$229 million of subordinate investments in the Freddie Mac SLST securitization. For GAAP purposes we consolidated \$1.22 billion of residential loans and \$994 million of non-recourse ABS debt associated with these securities. Sequoia residential securities presented above includes \$194 million of securities retained from our consolidated
- (3) Seguoia Choice securitizations. For GAAP purposes we consolidated \$2.08 billion of residential loans and \$1.89 billion of non-recourse ABS debt associated with these retained securities.
 - Multifamily securities presented above includes \$126 million of subordinate investments in the Freddie Mac
- (4) K-Series securitizations. For GAAP purposes we consolidated \$2.14 billion of multifamily loans and \$2.02 billion of non-recourse ABS debt associated with these securities.

Of our \$2.12 billion of total capital at December 31, 2018, \$1.95 billion (or 92%) was allocated to our investments with the remaining\$170 million (or 8%) allocated to our mortgage banking activities. During the fourth quarter, we decreased the capital allocated to our mortgage banking operations to \$170 million from \$210 million and may reduce it further in 2019 as we leverage operational changes that will allow us to manage our mortgage banking business with less capital and respond to market conditions.

As of December 31, 2018, our cash and liquidity capital included \$85 million of capital available for investment. Additionally, in January 2019, we raised \$177 million of capital in an underwritten public offering of our common stock.

RESULTS OF OPERATIONS

Within this Results of Operations section, we provide commentary that compares results year-over-year for 2018, 2017, and 2016. Most tables include "changes" columns that show the amounts by which the year's results are greater or less than the results from the prior year. Unless otherwise specified, references in this section to increases or decreases in 2018 refer to the change in results from 2017 to 2018, and increases or decreases in 2017 refer to the change in results from 2016 to 2017.

The following table presents the components of our net income for the years ended December 31, 2018, 2017, and 2016.

Table 4 – Net Income

	Years End	ed Decembe	Changes			
(In Thousands, except per Share Data)	2018	2017	2016	'18/'17	'17/'16	
Net Interest Income	\$139,678	\$139,241	\$157,827	\$437	\$(18,586)	
Reversal of provision for loan losses	_	_	7,102	_	(7,102)	
Net Interest Income After Provision	139,678	139,241	164,929	437	(25,688)	
Non-interest Income						
Mortgage banking activities, net	59,566	53,908	38,691	5,658	15,217	
Investment fair value changes, net	(25,689)	10,374	(28,574)	(36,063)	38,948	
Other income, net	12,874	12,436	20,691	438	(8,255)	
Realized gains, net	27,041	13,355	28,009	13,686	(14,654)	
Total non-interest income, net	73,792	90,073	58,817	(16,281)	31,256	
Operating expenses	(82,782)	(77,156)	(88,786)	(5,626)	11,630	
Net income before income taxes	130,688	152,158	134,960	(21,470)	17,198	
Provision for income taxes	(11,088)	(11,752)	(3,708)	664	(8,044)	
Net Income	\$119,600	\$140,406	\$131,252	\$(20,806)	\$9,154	

Net Interest Income

Net interest income in 2018 was consistent with 2017, as higher interest income from net capital deployment and higher average yields in 2018 was offset by higher interest expense on short-term floating rate debt facilities and FHLB borrowings from rising benchmark interest rates.

We utilize hedges to manage interest rate risk in our investment portfolio and the net interest expense from these instruments is a component of our Investment fair value changes line item, which is discussed below. Net hedge interest expense associated with portfolio hedges decreased in 2018 and on a combined basis, net interest income plus net interest expense on hedges increased by \$15 million in 2018, compared to 2017.

The \$19 million decrease in net interest income in 2017 was primarily due to the sale of our commercial mezzanine loans during 2016, which resulted in a \$26 million reduction in net interest income. This decline was partially offset by higher net interest income from our residential investments as a result of capital redeployment during late 2016 and 2017.

Additional detail on changes in net interest income is provided in the "Net Interest Income" section that follows. Provision for Loan Losses

The reversal of provision for loan losses in 2016 was related to our commercial mezzanine loans. Prior to their sale in 2016, the commercial loans were reclassified to held-for-sale status, at which point the allowance for loan losses was reversed and no longer maintained for these loans.

Mortgage Banking Activities, Net

Income from mortgage banking activities, net includes results from our residential jumbo mortgage banking operations and, prior to the second quarter of 2016, results from our residential conforming and commercial mortgage banking operations. The \$6 million increase in 2018 was predominantly due to an increase in loan purchase volume in 2018, relative to 2017, on similar gross margins.

The \$15 million increase in 2017 was predominantly due to higher jumbo loan purchase volume in 2017, relative to 2016, on similar gross margins.

A more detailed analysis of the changes in this line item is included in the "Results of Operations by Segment" section that follows.

Investment Fair Value Changes, Net

Investment fair value changes, net, is primarily comprised of the change in fair values of our residential loans held-for-investment and financed with FHLB borrowings, our business purpose residential loans held-for-investment, our investment securities classified as trading, and interest rate hedges associated with each of these investments. During 2018, the negative investment fair value changes primarily resulted from widening credit spreads during the fourth quarter, which impacted both our residential securities and our residential loans held-for-investment. During 2017, the positive investment fair value changes primarily resulted from tightening credit spreads on our trading securities during the year. This increase was partially offset by net decreases in the fair value of our residential loans held-for-investment and their associated hedges, primarily resulting from principal paydowns and hedging costs. Additional detail on our investment fair value changes is included in the Investment Portfolio portion of the "Results of Operations by Segment" section that follows.

Other Income, Net

Other income, net was primarily comprised of MSR income and income from our residential loan risk-sharing arrangements with Fannie Mae and Freddie Mac. Other income in 2018 was consistent with 2017, while the \$8 million decrease in other income in 2017 primarily resulted from a decline in the average balance of MSRs during 2017, as we sold the remaining portion of our conforming MSRs.

Realized Gains, Net

For 2018, we realized gains of \$27 million, primarily from the sale of \$144 million of AFS securities. For 2017, we realized gains of \$13 million, primarily from the sale of \$90 million of AFS securities. For 2016, we realized gains of \$28 million, which included \$23 million from the sale of \$253 million of AFS securities and \$5 million from the sale of \$218 million of commercial mezzanine loans.

Additional detail on realized gains is included in the Investment Portfolio portion of the "Results of Operations by Segment" section that follows.

Operating Expenses

The increase in operating expenses in 2018 primarily resulted from higher loan acquisition costs due to higher loan purchase volume in 2018, as well as higher expenses associated with implementing new investment initiatives, including higher personnel costs and legal fees. These increases were partially offset by lower variable compensation expense commensurate with a decline in net income in 2018.

The decrease in operating expenses in 2017 was primarily due to the restructuring of our residential conforming and commercial mortgage banking operations during the first quarter of 2016, which resulted in restructuring costs of \$10 million and a lower run-rate of expenses subsequent to the restructuring.

Provision for Income Taxes

Our provision for income taxes is almost entirely related to activity at our taxable REIT subsidiaries, which primarily includes our mortgage banking activities, MSR investments, as well as certain other investment and hedging activities associated with these investments.

The decrease in the provision for income taxes for 2018 resulted primarily from a lower corporate tax rate, and lower investment portfolio income at our TRS during the year.

The increase in the provision for income taxes in 2017 resulted primarily from higher mortgage banking income in 2017, compared to 2016. This increase was offset by a tax benefit of \$8 million from the reduction of our net federal deferred tax liabilities as a result of the Tax Cuts and Jobs Act of 2017 (the "Tax Act") that was enacted in December 2017. Additionally, 2016 benefited from the release of a valuation allowance recorded against our deferred tax assets during that year.

Net Interest Income

The following tables present the components of net interest income for the years ended December 31, 2018, 2017, and 2016.

(Dollars in Thousands)	2018 Interest	Average Balance	31, Yield	d	2017 Interest Income/ (Expense)	Average Balance	Yiel	d	2016 Interest Income/ (Expense)	Average Balance	Yiel	d
Interest Income	(Expense)				(Expense)				(LAPCHSC)	,		
Residential loans, held-for-sale	\$51,330	\$1,129,810	4.5	%	\$38,854	\$939,273	4.1	%	\$33,120	\$908,353	3.6	%
Residential loans - HFI at Redwood (2)	94,361	2,345,219	4.0	%	90,970	2,316,375	3.9	%	85,147	2,193,619	3.9	%
Residential loans - HFI at Legacy Sequoia	20,029	577,175	3.5	%	19,405	700,746	2.8	%	19,537	882,079	2.2	%
Residential loans - HFI at Sequoia Choice	69,645	1,452,784	4.8	%	5,133	109,463	4.7	%	_	_	_	%
Residential loans - HFI at Freddie Mac SLST ⁽²⁾	4,453	109,231	4.1	%	_	_	_	%	_	_	_	%
Commercial loans	_	_		%	345	1,065	N/A		30,496	258,041	11.8	%
Business purpose residential loans	4,333	50,962	8.5	%	_	_	_	%	_	_	_	%
Multifamily loans - HFI at Freddie Mac K-Series	21,322	532,020	4.0	%	_	_	_	%	_	_	_	%
Trading securities	71,350	1,016,613	7.0	%	47,419	713,945	6.6	%	22,484	299,912	7.5	%
Available-for-sale securities	33,728	302,134			43,384	430,395			54,389	530,357	10.3	%
Other interest income Total interest income	8,166 378,717	211,651 7,727,599			2,547 248,057	224,545 5,435,807	1.1 4.6		1,182 246,355	294,830 5,367,191		% %
Interest Expense Short-term debt facilities	(52,832	1,513,497	(3.5))%	(28,015) 1,075,430	(2.6)%	(22,287)	1,089,352	(2.0)%
Short-term debt - servicer advance financing	(971	17,271	(5.6))%	_	_	_	%	_	_	_	%
Short-term debt - convertible notes, net	(5,114	97,035	(5.3))%	(8,836) 182,551	(4.8)%	_	_	_	%
ABS issued - Redwood	_	_		%	_	_	_	%	(1,560)	21,159	(7.4)%
ABS issued - Legacy Sequoia (2)	(16,519	567,908	(2.9))%	(14,833	684,733	(2.2)%	(13,175)	861,020	(1.5)%
ABS issued - Sequoia Choice (2)	(59,769	1,317,645	(4.5))%	(4,275	97,158	(4.4)%	_	_	_	%
ABS issued - Freddie Mac SLST ⁽²⁾	(3,156	89,172	(3.5))%	_	_	_	%	_	_	_	%

ABS issued - Freddie (19,985) 497,524 (4.0)% — % — % Mac K-Series Long-term debt -(41,360) 1,999,999 (2.1)% (21,769) 1,999,999 (1.1)% (11,579) 1,980,971 (0.6)%**FHLBC** Long-term debt - other (39,333) 651,696 (6.0)% (31,088) 504,822 (6.2)% (39,927) 665,453Total interest expense (239,039) 6,751,747 (3.5)% (108,816) 4,544,693 (2.4)% (88,528) 4,617,955 (1.9)% Net Interest Income \$139,678 \$139,241 \$157,827

Average balances for residential loans held-for-sale, residential loans held-for-investment, business purpose

- (1) residential loans, and trading securities are calculated based upon carrying values, which represent estimated fair values. Average balances for available-for-sale securities and debt are calculated based upon amortized historical cost, except for ABS issued, which is based upon fair value.
 - Interest income from residential loans held-for-investment ("HFI") at Redwood exclude loans HFI at consolidated Sequoia or Freddie Mac SLST entities. Interest income from residential loans HFI at Legacy Sequoia and the interest expense from ABS issued Legacy Sequoia represent activity from our consolidated Legacy Sequoia
- (2) entities. Interest income from residential loans HFI at Sequoia Choice and the interest expense from ABS issued Sequoia Choice represent activity from our consolidated Sequoia Choice entities. Interest income from residential loans HFI at Freddie Mac SLST and the interest expense from ABS issued Freddie Mac SLST represent activity from our consolidated Freddie Mac SLST entity.

The following table details how net interest income changed on a consolidated basis as a result of changes in average investment balances ("volume") and changes in interest yields ("rate").

Table 6 – Net Interest Income - Volume and Rate Changes

	Change in Net Interest Income						
	For the Years Ended December 31,						
	2018		2017				
(In Thousands)	Volume Rate	Total	Volume	Rate	Total		
Net Interest Income for the Beginning of the		\$139,241			\$157,827	7	
Year		φ137,2-11			Ψ157,027	,	
Impact of Changes in Interest Income							
Residential loans - HFS	\$7,882 \$4,594	12,476	\$1,127	\$4,607	5,734		
Residential loans - HFI at Redwood	1,133 2,258	3,391	4,765	1,058	5,823		
Residential loans - HFI at Legacy Sequoia	(3,422) 4,046	624	(4,016)	3,884	(132)	
Residential loans - HFI at Sequoia Choice	62,992 1,520	64,512	5,133	_	5,133		
Residential loans - HFI at Freddie Mac SLST	4,453 —	4,453	_	_	_		
Commercial loans	(345) —	(345)	(30,370)	219	(30,151)	
Business purpose residential loans	4,333 —	4,333	_	_	_		
Multifamily loans - HFI at Freddie Mac K-Series	21,322 —	21,322		_			
Trading securities	20,103 3,828	23,931	31,039	(6,104)	24,935		
Available-for-sale securities	(12,929) 3,273	(9,656)	(10,251)	(754)	(11,005)	
Other Interest Income	(146) 5,765	5,619	(282)	1,647	1,365		
Net changes in interest income	105,376 25,284	130,660	(2,855)	4,557	1,702		
Impact of Changes in Interest Expense							
Short-term debt facilities	(11,412) (13,405)	(24,817)	285	(6,013)	(5,728)	
Short-term debt - servicer advance financing	(971) —	(971)		_			
Short-term debt - convertible notes, net	4,139 (417)	3,722	_	(8,836)	(8,836)	
ABS issued - Redwood		_	1,560	_	1,560		
ABS issued - Legacy Sequoia	2,531 (4,217)	(1,686)	2,697	(4,355)	(1,658)	
ABS issued - Sequoia Choice	(53,702) (1,792)	(55,494)	(4,275)	_	(4,275)	
ABS issued - Freddie Mac SLST	(3,156) —	(3,156)	_	_	_		
ABS issued - Freddie Mac K-Series	(19,985) —	(19,985)	_	_	_		
Long-term debt - FHLBC	— (19,591)	(19,591)	(111)	(10,079)	(10,190))	
Long-term debt - Other	(9,045) 800	(8,245)	9,638	(799)	8,839		
Net changes in interest expense	(91,601) (38,622)	(130,223)	9,794	(30,082)	(20,288)	
Net changes in interest income and expense	13,775 (13,338)	437	6,939	(25,525)	(18,586)	
Net Interest Income for the Year Ended		\$139,678			\$139,241	1	

The following table presents the components of net interest income by segment for the years ended December 31, 2018, 2017, and 2016.

Table 7 – Net Interest Income by Segment

	Years Ende	ed Decembe	Changes		
(In Thousands)	2018	2017	2016	'18/'17	'17/'16
Net Interest Income by Segment					
Investment Portfolio	\$155,497	\$152,070	\$169,203	\$3,427	\$(17,133)
Mortgage Banking	24,120	21,940	19,470	2,180	2,470
Corporate/Other	(39,939)	(34,769)	(30,846)	(5,170)	(3,923)
Net Interest Income	\$139,678	\$139,241	\$157,827	\$437	\$(18,586)

Additional details regarding the activities impacting net interest income at each segment are included in the "Results of Operations by Segment" section that follows.

The Corporate/Other line item in the table above primarily includes interest expense related to long-term debt not directly allocated to our segments and net interest income from consolidated Legacy Sequoia entities. The \$5 million decrease in net interest income from Corporate/Other during 2018 was primarily due to a higher average balance of long-term debt, as we issued \$200 million of convertible notes in June 2018, and lower net interest income from consolidated Legacy Sequoia entities, as loans in these securitizations continued to pay down. The \$4 million decrease in net interest income from Corporate/Other during 2017 was primarily due to a higher average balance of long-term debt, as we issued additional convertible debt in August 2017, and lower net interest income from consolidated Legacy Sequoia entities, as loans in these securitizations continued to pay down. Details regarding consolidated Legacy Sequoia entities are included in the "Results of Consolidated Legacy Sequoia Entities" section that follows. The following table presents the net interest rate spread between the yield on unsecuritized loans and securities and the debt yield of the short-term debt used in part to finance each investment type at December 31, 2018.

Table 8 – Interest Expense — Specific Borrowing Costs

December 31, 2018	Residential Loans Held-for-Sale Single-Family Rental Loans		Residential Bridge Loans		Residential Securities			
Asset yield	4.88	%	5.90	%	9.15	%	4.83	%
Short-term debt yield	4.10	%	4.77	%	5.20	%	3.47	%
Net Spread	0.78	%	1.13	%	3.95	%	1.36	%

For additional discussion on short-term debt, including information regarding margin requirements and financial covenants, see "Risks Relating to Debt Incurred under Short-Term and Long-Term Borrowing Facilities" in the Liquidity and Capital Resources section of this MD&A.

Results of Operations by Segment

We report on our business using two distinct segments: Investment Portfolio and Mortgage Banking. Our segments are based on our organizational and management structure, which aligns with how our results are monitored and performance is assessed. For additional information on our segments, refer to Note 23 in Part II, Item 8 and Part I, Item 1 of this Annual Report on Form 10-K. The following table presents the segment contribution from our two segments reconciled to our consolidated net income for the years ended December 31, 2018, 2017, and 2016.

	Years Ended December 31,			Changes		
(In Thousands)	2018	2017	2016	'18/'17	'17/'16	
Segment Contribution from:						
Investment Portfolio	\$156,180	\$185,671	\$188,077	\$(29,491)	\$(2,406)	
Mortgage Banking	48,167	44,311	35,111	3,856	9,200	
Corporate/Other	(84,747)	(89,576)	(91,936)	4,829	2,360	
Net Income	\$119,600	\$140,406	\$131,252	\$(20,806)	\$9,154	

The following sections provide a detailed discussion of the results of operations at each of our two business segments for the years ended December 31, 2018, 2017, and 2016.

The \$5 million improvement from Corporate/Other in 2018 primarily resulted from lower variable compensation expense commensurate with lower GAAP earnings, as well as higher earnings from our consolidated Legacy Sequoia entities in 2018. This improvement was partially offset by an increase in interest expense related to a higher average balance of convertible debt outstanding during 2018. Details regarding consolidated Legacy Sequoia entities are included in the "Results of Consolidated Legacy Sequoia Entities" section that follows.

The \$2 million improvement from Corporate/Other in 2017 was primarily due to \$10 million of costs incurred in 2016 associated with the restructuring of our residential conforming and commercial mortgage banking operations in 2016. This improvement was partially offset by an increase in interest expense from convertible debt we issued in August 2017 as well as a decline in income from our consolidated Legacy Sequoia securitizations. Investment Portfolio Segment

Our Investment Portfolio segment is where we hold our housing-focused credit-sensitive investments in residential mortgage loans, mortgage-backed securities, and related assets. Our portfolio is primarily comprised of prime jumbo residential mortgage loans financed through the FHLBC, mortgage-backed securities collateralized by both residential and multifamily mortgages, and business purpose residential loans, which are mortgage loans to investors in residential properties.

GAAP accounting rules require us to consolidate certain securitization entities in which we hold subordinate interests and have either sponsored or hold certain control rights. While our economic interest is only in the subordinate securities we own in these entities, we present the loans and associated debt (Asset-backed securities issued) of these entities on our balance sheet. During 2018, we consolidated several such entities that we invested in.

For segment reporting purposes, certain of our Sequoia senior trading securities were included in our Mortgage Banking segment in 2016. As such, they are excluded from any amounts and tables in this section and may not agree with similarly titled amounts and tables in our consolidated financial statements and footnotes.

The following table presents the components of segment contribution for the Investment Portfolio segment for the years ended December 31, 2018, 2017, and 2016.

Table 10 – Investment Portfolio Segment Contribution

	Years Ended De	Changes		
(In Thousands)	2018 2017	2016	'18/'17	'17/'16
Interest income	\$304,636 \$188	3,760 \$192,200	\$115,876	\$(3,440)
Interest expense	(149,139) (36,6	590) (22,997)	(112,449)	(13,693)
Net interest income	155,497 152,0	070 169,203	3,427	(17,133)
Reversal of provision for loan losses		7,102	_	(7,102)
Net Interest Income after Provision	155,497 152,0	070 176,305	3,427	(24,235)
Non-interest income				
Investment fair value changes, net	(24,693) 18,4	14 (24,367)	(43,107)	42,781
Other income, net	12,433 12,43	36 20,691	(3)	(8,255)
Realized gains, net	27,041 14,10	07 27,717	12,934	(13,610)
Total non-interest income, net	14,781 44,95	57 24,041	(30,176)	20,916
Direct operating expenses	(10,357) (6,02	28) (10,421)	(4,329)	4,393
Segment contribution before income taxes	159,921 190,9	999 189,925	(31,078)	1,074
Provision for income taxes	(3,741) (5,32	28) (1,848)	1,587	(3,480)
Total Segment Contribution	\$156,180 \$185	5,671 \$188,077	\$(29,491)	\$(2,406)

The following table presents our primary portfolios of investment assets in our Investment Portfolio segment at December 31, 2018 and December 31, 2017.

Table 11 – Investment Portfolio

(In Thousands)	December 31,	December 31, December 31,			
(III Thousands)	2018	2017	Change		
Residential loans held-for-investment at Redwood	\$2,383,932	\$ 2,434,386	\$(50,454)	
Residential loans held-for-investment at Sequoia Choice (1)	2,079,382	620,062	1,459,320		
Residential loans held-for-investment at Freddie Mac SLST (1)	1,222,669	_	1,222,669		
Residential bridge loans held-for-investment	112,798	_	112,798		
Multifamily loans held-for-investment at Freddie Mac K-Series (1)	2,144,598	_	2,144,598		
Residential securities	1,023,415	1,152,485	(129,070)	
Multifamily securities	429,079	324,025	105,054		
Other investments	427,764	63,598	364,166		
Other assets	270,356	149,317	121,039		
Total Assets at Investment Portfolio	\$10,093,993	\$ 4,743,873	\$5,229,081		

Our economic investment in the consolidated Sequoia Choice entities at December 31, 2018 and December 31, 2017 was \$196 million and \$78 million, respectively. Our economic investment in the consolidated Freddie Mac SLST entity and Freddie Mac K-Series entities at December 31, 2018 was \$230 million and \$126 million,

⁽¹⁾ respectively. For additional details on our Choice, Freddie Mac SLST and multifamily loans, see the subsections titled "Residential Loans Held-for-Investment at Sequoia Choice Portfolio," "Residential Loans Held-for-Investment at Freddie Mac SLST Portfolio," and "Multifamily Loans Held-for-Investment at Freddie Mac K-Series Portfolio" that follow.

Overview

During 2018, the increase in our total investment portfolio was primarily attributable to the deployment of \$810 million of capital into new residential and multifamily investments, further diversifying our exposure to housing credit, including investments in excess servicing off of seasoned non-Agency securitizations and re-performing loan securities. We also continued our focus on optimizing our investment portfolio by selling assets that had appreciated in value with lower current yields, and redeployed capital into higher-yielding opportunities. During 2018, we consolidated \$1.78 billion of residential Sequoia Choice loans from securitizations we completed, as well as \$1.21 billion of re-performing residential loans and \$2.10 billion of multifamily loans in connection with our investment in Freddie Mac SLST and Freddie Mac K-Series securitizations, respectively. Increases in interest income and gains from capital deployment and optimization in 2018 were more than offset by negative investment fair value changes, which were primarily driven by credit spread widening in the fourth quarter of 2018. Despite this recent credit spread widening, cash flows and credit fundamentals in our portfolio remain strong, benefiting from continued stability in the general economy and in housing.

Net Interest Income

Net interest income from our Investment Portfolio primarily includes interest income from our securities and residential loans held-for-investment, as well as the associated interest expense from short-term debt, FHLBC borrowings, and ABS issued. The following table presents the components of net interest income for our Investment Portfolio segment by investment type for the years ended December 31, 2018, 2017, and 2016.

Table 12 - Net Interest Income ("NII") from Investment Portfolio

	Years End	ed Decembe	Changes		
(In Thousands)	2018	2017	2016	'18/'17	'17/'16
Net interest income from:					
Residential securities	\$75,358	\$74,020	\$67,210	\$1,338	\$6,810
Multifamily securities	7,089	6,137	2,255	952	3,882
HFI residential loans at Redwood	53,001	69,201	73,560	(16,200	(4,359)
HFI residential loans at Sequoia Choice	9,876	858		9,018	858
HFI residential bridge loans	2,605	_		2,605	
HFI residential loans at Freddie Mac SLST	1,297	_		1,297	
HFI multifamily loans at Freddie Mac K-Series	1,337	_		1,337	
Commercial mezzanine loans	_	345	25,168	(345	(24,823)
Other interest income	4,934	1,509	1,010	3,425	499
NII from Investment Portfolio	\$155,497	\$152,070	\$169,203	\$3,427	\$(17,133)

Supplemental information:

Hedge interest expense, net \$(1,437) \$(13,297) \$(9,117) \$11,860 \$(4,180)

The increase in net interest income from our Investment Portfolio segment during 2018 was primarily due to higher net interest income from net capital deployment in 2018, as well as higher overall yields from portfolio optimization. These increases were partially offset by lower net interest income from residential loans held-for-investment at Redwood, which decreased primarily as a result of higher interest costs from rising benchmark rates during 2018. The decrease in net interest income from our Investment Portfolio segment during 2017 was primarily due to the sale of our commercial mezzanine loans during 2016, as well as from higher interest costs on our FHLB borrowings during 2017. These decreases were partially offset by higher net interest income from real estate securities, primarily resulting from higher average balances of these investments from the redeployment of capital from our commercial mezzanine loan sales in 2016.

The table above also presents supplemental information about interest income (expense) from hedges that we use to manage interest rate risk in our investment portfolio, which are a component of Investment fair value changes, net on our consolidated statements of income. On a combined basis, net interest income in our investment portfolio segment plus income (expense) from hedges used to manage interest rate risk in our investment portfolio increased in 2018. Investment fair value changes, net

Market valuation changes included in Investment fair value changes, net, result from changes in the fair value of investments and their associated hedges, generally due to changes in market interest rates, changes in credit spreads, and reductions in the basis of investments due to changes in principal balances. See Note 20 of our Notes to Consolidated Financial Statements in Part I, Item I of this Annual Report on Form 10-K for additional detail regarding the components of Investment fair value changes, net presented on our consolidated statements of income. The following table presents the components of investment fair value changes for our Investment Portfolio segment by investment type for the years ended December 31, 2018, 2017, and 2016. Each line item is comprised of market valuation gains and losses for the underlying investments as well as their associated interest rate hedges, exclusive of net hedge interest expense, which is presented separately.

Table 13 – Investment Portfolio Fair Value Changes, Net by Investment Type

	Years Ended December 31,			Changes		
(In Thousands)	2018	2017	2016	'18/'17	'17/'16	
Market valuation changes:						
Residential loans held-for-investment at Redwood	\$(17,017)	\$(4,261)	\$(23,901)	\$(12,756)	\$19,640	
Residential bridge loans held-for-investment	(29)			(29)) —	
Net investments in Sequoia Choice entities (1)	443	(323)	_	766	(323)	
Net investments in Freddie Mac SLST entity (1)	1,271			1,271		
Net investments in Freddie Mac K-Series entities (1)	931	_	_	931		
Residential trading securities	(13,407)	21,581	7,396	(34,988)	14,185	
Commercial/Multifamily trading securities	3,954	17,208	2,774	(13,254)	14,434	
Servicer advance investments	(701)	_	_	(701)		
Excess MSRs	1,823	_	_	1,823		
Hedge interest expense, net	(1,437)	(13,297)	(9,117)	11,860	(4,180)	
Other valuation changes	(524)	(2,494)	(1,519)	1,970	(975)	
Investment Fair Value Changes, Net	\$(24,693)	\$18,414	\$(24,367)	\$(43,107)	\$42,781	

Includes changes in fair value of the loans held-for-investment and the ABS issued at the entities, which netted (1)together represent the change in value of our retained investments (senior and subordinate securities) at the consolidated VIEs.

For 2018, the negative investment fair value changes primarily resulted from credit spread widening that occurred in the fourth quarter, impacting both our residential loans and residential trading securities. These decreases were partially offset by overall spread tightening on our multifamily securities during 2018 as well as a lower negative impact from the change in basis of our investments from principal payments in 2018, as premiums on loans and securities generally decreased in 2018 due to rising benchmark interest rates.

For 2017, the net positive investment fair value changes primarily resulted from net increases in the fair value of our trading securities and their associated hedges, which were primarily due to tightening credit spreads on these securities during this period. These increases were partially offset by decreases in the fair value of our residential loans held-for-investment and their associated hedges, primarily resulting from principal paydowns and hedging costs.

Other Income, net

The following table presents the components of Other income, net for our investment portfolio and for Redwood in total for the years ended December 31, 2018, 2017, and 2016.

Table 14 – Other Income, net

	Years End	ded Decer	Changes		
(In Thousands)	2018	2017	2016	'18/'17	'17/'16
MSR income, net	\$7,076	\$7,860	\$14,353	\$(768)	\$(6,493)
Risk share income	3,613	3,194	4,952	419	(1,758)
FHLBC capital stock dividend	1,763	1,382	1,118	381	264
Other	(19)	_	268	(19)	(268)
Other Income, Net from Investment Portfolio	12,433	12,436	20,691	13	(8,255)
Equity investment earnings (1)	441	_		441	
Other Income, Net	\$12,874	\$12,436	\$20,691	\$454	\$(8,255)

⁽¹⁾ Equity investment earnings represents our share of earnings related to our investment in 5 Arches and is included in our Corporate/Other segment.

Realized Gains, net

During the years ended December 31, 2018, 2017, and 2016, we realized gains of \$27 million, \$14 million, and \$28 million, primarily from the sale of \$144 million, \$90 million, and \$253 million of AFS securities, respectively. Direct Operating Expenses and Provision for Income Taxes

The increase in operating expenses at our Investment Portfolio segment for 2018 was primarily related to additional personnel added to support our new business initiatives as well as initial set-up costs associated with certain new investments we made in 2018. We began disposing of our conforming MSRs in 2016 and had disposed of substantially all of them by the end of 2017, which primarily drove the decrease in operating expenses from 2016 to 2017.

The provision for income taxes at our Investment Portfolio segment in 2018 and 2017 resulted from GAAP income earned at our TRS during those periods, primarily from MSRs and certain securities we hold at our TRS. For 2018, the decrease in the tax provision primarily resulted from decreased GAAP mark-to-market gains on securities held at our TRS in this segment. For additional detail on income taxes, see the "Tax Provision and Taxable Income" section that follows.

Residential Loans Held-for-Investment at Redwood Portfolio

The following table provides the activity of residential loans held-for-investment at Redwood during the years ended December 31, 2018 and 2017.

Table 15 – Residential Loans Held-for-Investment at Redwood - Activity

Years Ended December 31, 2018 2017 (In Thousands) Fair value at beginning of period \$2,434,386 \$2,261,016 Transfers between portfolios (1) 269,883 500,887 Principal repayments (290,327) (322,187 Changes in fair value, net (30,010) (5,330 Fair Value at End of Period \$2,383,932 \$2,434,386

(1) Represents the net transfers of loans into our Investment Portfolio segment from our Mortgage Banking segment and their reclassification from held-for-sale to held-for-investment.

The decrease in the balance of loans held-for-investment during 2018 was primarily due to principal repayments and a decrease in fair value of the loans during this period, resulting from rising benchmark interest rates and credit spread widening. As our loans held-for-investment are generally fixed-rate and sensitive to changes in interest rates, we utilize various interest rate derivatives to hedge our interest rate risk for these investments. As a result of rising interest rates during the year ended December 31, 2018, interest rate derivatives associated with these investments increased in value by \$13 million.

At December 31, 2018, \$2.38 billion of loans were held by our FHLB-member subsidiary and financed with \$2.00 billion of borrowings from the FHLBC. In connection with these borrowings, our FHLB-member subsidiary is required to hold \$43 million of FHLB stock.

At December 31, 2018, the weighted average maturity of these FHLB borrowings was approximately seven years and they had a weighted average cost of 2.52% per annum. While the interest costs on these borrowings is variable and resets every 13 weeks, we utilize various interest rate derivative instruments to hedge our interest rate risk in this portfolio.

Under a final rule published by the Federal Housing Finance Agency in January 2016, our FHLB-member subsidiary will remain an FHLB-member through the five-year transition period for captive insurance companies. Our FHLB-member subsidiary's existing \$2.00 billion of FHLB debt, which matures beyond this transition period, is permitted to remain outstanding until its stated maturity. As residential loans pledged as collateral for this debt pay down, we are permitted to pledge additional loans or other eligible assets to collateralize this debt; however, we do not expect to be able to increase our subsidiary's FHLB debt above the existing \$2.00 billion.

The following table presents the unpaid principal balances for residential real estate loans held-for-investment at fair value by product type at December 31, 2018.

Table 16 – Characteristics of Residential Real Estate Loans Held-for-Investment at Redwood December 31, 2018

	Principal	Weighted		
(Dollars in Thousands)	Balance	Avera	ige	
	Darance	Coup	on	
Fixed - 30 year	\$2,020,786	4.14	%	
Fixed - 15, 20, & 25 year	60,979	3.67	%	
Hybrid	303,565	4.23	%	
Total Outstanding Principal	\$2,385,330			

The outstanding loans held-for-investment at Redwood at December 31, 2018 were prime-quality, first-lien loans, of which 96% were originated between 2013 and 2018 and 4% were originated in 2012 and prior years. The weighted average FICO score of borrowers backing these loans was 768 (at origination) and the weighted average loan-to-value ("LTV") ratio was 66% (at origination). At December 31, 2018, two of these loans with an aggregate unpaid principal balance of \$1 million were greater than 90 days delinquent and none of these loans were in foreclosure.

Residential Bridge Loans Held-for-Investment at Redwood Portfolio

The outstanding residential bridge loans held-for-investment at December 31, 2018 were acquired in 2018 and comprised of first-lien, fixed-rate, interest-only loans with a weighted average coupon of 9.16% and original maturities of 6 to 24 months. At origination, the weighted average FICO score of borrowers backing these loans was 698, the weighted average LTV ratio of these loans was 76%, and the estimated rehabilitated LTV ratio was 59%. At December 31, 2018, of the 157 loans in this portfolio, seven of these loans with an aggregate unpaid principal balance of \$12 million were greater than 90 days delinquent and none of these loans were in foreclosure.

Real Estate Securities Portfolio

The following table sets forth our real estate securities activity by collateral type in our Investment Portfolio segment for the years ended December 31, 2018 and 2017.

3 6 1.10

Table 17 – Real Estate Securities Activity by Collateral Type

Year Ended December 31, 2018	Residential			Multifamily	Total
(In Thousands)	Senior	Mezzanine	Subordinate	Mezzanine	Total
Beginning fair value	\$249,838	\$331,452	\$ 571,195	\$ 324,025	\$1,476,510
Transfers			_	(17,181)	(17,181)
Acquisitions					
Sequoia securities	29,968	14,204	7,739		51,911
Third-party securities	78,868	54,675	250,503	225,521	609,567
Sales					
Sequoia securities		(54,743)	(16,953)	_	(71,696)
Third-party securities	(67,333)	(114,222)	(248,957)	(79,741)	(510,253)
Gains on sales and calls, net	16,973	4,354	5,714		27,041
Effect of principal payments (1)	(35,410)	(8,896)	(9,545)	(28,051)	(81,902)
Change in fair value, net	(26,619)	(8,677)	(713)	4,506	(31,503)
Ending Fair Value (2)	\$246,285	\$218,147	\$ 558,983	\$429,079	\$1,452,494
V E. 1. 1 D 21 2017	Danidantial	1		3 f 1.10 11	
Year Ended December 31, 2017	Residential	L		Multifamily	Total
Year Ended December 31, 2017 (In Thousands)	Senior		Subordinate	-	Total
			Subordinate \$ 352,180	-	Total \$1,018,439
(In Thousands)	Senior	Mezzanine		Mezzanine	Total
(In Thousands) Beginning fair value	Senior	Mezzanine		Mezzanine	Total
(In Thousands) Beginning fair value Transfers	Senior	Mezzanine		Mezzanine	Total
(In Thousands) Beginning fair value Transfers Acquisitions	Senior \$259,092 —	Mezzanine \$315,397 —	\$352,180 —	Mezzanine	\$1,018,439 —
(In Thousands) Beginning fair value Transfers Acquisitions Sequoia securities	Senior \$259,092 — 14,524	Mezzanine \$315,397 — 51,797	\$ 352,180 — 13,341	Mezzanine \$91,770 —	\$1,018,439 — 79,662
(In Thousands) Beginning fair value Transfers Acquisitions Sequoia securities Third-party securities	Senior \$259,092 — 14,524	Mezzanine \$315,397 — 51,797	\$ 352,180 — 13,341	Mezzanine \$91,770 —	\$1,018,439 — 79,662
(In Thousands) Beginning fair value Transfers Acquisitions Sequoia securities Third-party securities Sales	Senior \$259,092 — 14,524 32,681 —	Mezzanine \$315,397 — 51,797 83,791	\$ 352,180 — 13,341 247,183 —	Mezzanine \$91,770 — — 237,143	\$1,018,439 — 79,662 600,798
(In Thousands) Beginning fair value Transfers Acquisitions Sequoia securities Third-party securities Sales Sequoia securities	Senior \$259,092 — 14,524 32,681 —	Mezzanine \$315,397 — 51,797 83,791 (42,304)	\$ 352,180 — 13,341 247,183 —	Mezzanine \$91,770 — — 237,143	\$1,018,439
(In Thousands) Beginning fair value Transfers Acquisitions Sequoia securities Third-party securities Sales Sequoia securities Third-party securities Third-party securities	Senior \$259,092 — 14,524 32,681 — (13,635) 5,327	Mezzanine \$315,397 — 51,797 83,791 (42,304) (102,062)	\$352,180 — 13,341 247,183 — (54,467 3,604	Mezzanine \$ 91,770 — 237,143 — (15,858) —	\$1,018,439
(In Thousands) Beginning fair value Transfers Acquisitions Sequoia securities Third-party securities Sales Sequoia securities Third-party securities Third-party securities Gains on sales and calls, net	Senior \$259,092 — 14,524 32,681 — (13,635) 5,327 (36,605)	Mezzanine \$315,397 — 51,797 83,791 (42,304) (102,062) 5,176	\$352,180 — 13,341 247,183 — (54,467) 3,604 (11,815)	Mezzanine \$ 91,770 — 237,143 — (15,858) —	10tal \$1,018,439 — 79,662 600,798 (42,304) (186,022) 14,107
(In Thousands) Beginning fair value Transfers Acquisitions Sequoia securities Third-party securities Sales Sequoia securities Third-party securities Third-party securities Gains on sales and calls, net Effect of principal payments (1)	Senior \$259,092 — 14,524 32,681 — (13,635) 5,327 (36,605) (11,546)	Mezzanine \$315,397 — 51,797 83,791 (42,304) (102,062) 5,176 (18,279) 37,936	\$352,180 — 13,341 247,183 — (54,467) 3,604 (11,815)	Mezzanine \$91,770 — 237,143 — (15,858) — (5,066)	10tal \$1,018,439

The effect of principal payments reflects the change in fair value due to principal payments, which is calculated as (1)the cash principal received on a given security during the period multiplied by the prior quarter ending price or acquisition price for that security.

acquisition price for that security.

At December 31, 2018, excludes \$194 million of securities retained from our consolidated Sequoia Choice securitizations as well as \$229 million and \$126 million of securities we owned that were issued by consolidated

Freddie Mac SLST and Freddie Mac K-Series securitizations, respectively. For additional details on our Choice and multifamily loans, see the subsections titled "Residential Loans at Sequoia Choice Investment Portfolio," "Residential Loans at Freddie Mac SLST Investment Portfolio," and "Multifamily Loans at Freddie Mac K-Series Investment Portfolio" that follow.

At December 31, 2018, our securities consisted of fixed-rate assets (74%), adjustable-rate assets (20%), hybrid assets that reset within the next year (5%), and hybrid assets that reset between 12 and 36 months (1%). For the portions of our securities portfolio that are sensitive to changes in interest rates, we seek to minimize this interest rate risk by using various derivative instruments.

We directly finance our holdings of real estate securities with a combination of capital and collateralized debt in the form of repurchase (or "repo") financing. The following table presents the fair value of our residential securities that were financed with repurchase debt at December 31, 2018.

Table 18 – Real Estate Securities Financed with Repurchase Debt

December 31, 2018 (Dollars in Thousands, except Weighted Average Price)	Real Estate Securities	Repurchase Debt	Allocated Capital	Weighted Average Price (2)		_
Residential Securities						
Senior	\$147,861	\$(132,937)	\$14,924	\$ 99	10	%
Mezzanine (4)	368,659	(311,253)	57,406	97	16	%
Subordinate (5)	257,925	(185,043)	72,882	74	28	%
Total Residential Securities	774,445	(629,233)	145,212	88	19	%
Multifamily Securities (6)	446,600	(359,657)	86,943	94	19	%
Total	\$1,221,045	\$(988,890)	\$232,155			

- (1) Amounts represent carrying value of securities, which are held at GAAP fair value.
- (2) GAAP fair value per \$100 of principal.
- (3) Allocated capital divided by GAAP fair value.
- (4) Includes \$130 million and \$53 million of securities we owned that were issued by consolidated Sequoia Choice and Freddie Mac SLST securitizations, respectively.
- (5) Includes \$176 million of securities we owned that were issued by the consolidated Freddie Mac SLST securitization.
- (6) Includes \$18 million of securities we owned that were issued by consolidated Freddie Mac K-Series securitizations.

At December 31, 2018, we had short-term debt incurred through repurchase facilities of \$989 million, which was secured by \$1.22 billion of real estate securities. The remaining \$780 million of our securities, including certain securities we own that were issued by consolidated Sequoia Choice and Freddie Mac K-Series securitization entities, were financed with capital. Our repo borrowings were made under facilities with nine different counterparties, and the weighted average cost of funds for these facilities during 2018 was approximately 3.21%.

At December 31, 2018, the credit performance on the securities we financed through repurchase facilities continued to perform in line with, or better than our expectations. In addition to the allocated capital listed in the table above that directly supports our repurchase facilities (the "financing haircut"), we continue to hold a designated amount of supplemental risk capital available for potential margin calls or future obligations relating to these facilities. The majority of the \$148 million of senior securities noted in the table above are supported by seasoned residential loans originated prior to 2008. The \$369 million of mezzanine securities financed through repurchase facilities at December 31, 2018, primarily carry investment grade credit ratings and are supported by residential loans originated between 2012 and 2018. The majority of the loans underlying these securities have experienced minimal delinquencies to date. The \$447 million of multifamily securities financed through repurchase facilities at December 31, 2018 primarily carry investment grade credit ratings with 7%-8% of structural credit enhancement.

The following table presents our real estate securities at December 31, 2018 and December 31, 2017, categorized by portfolio vintage (the years the securities were issued), and by priority of cash flows (senior, mezzanine, and subordinate). We have additionally separated securities issued through our Sequoia platform or by third parties, including the Agencies.

Table 19 – Real Estate Securities by Vintage and Type

December 31, 2018	Cognois	Third Party	Agency	Third	Total	Multifamily	Total Real
(In Thomas da)	Sequoia 2012-2018	•	CRT	Party	Residential	•	Estate
(In Thousands)	2012-2018	2013-2018	2013-2018	<=2008	Securities	2015-2018	Securities
Senior (1)	\$61,179	\$ 96,069	\$ —	\$89,037	\$246,285	\$ —	\$246,285
Mezzanine (2)	99,977	118,170		_	218,147	429,079	647,226
Subordinate (1)	130,271	174,879	237,841	15,992	558,983	_	558,983
Total Securities (3)	\$ 291,427	\$ 389,118	\$ 237,841	\$105,029	\$1,023,415	\$ 429,079	\$1,452,494
December 31, 2017	Caquaia	Third Dorty	Agency	Third	Total	Multifomily	Total Real
·	Sequoia	Third Party	Agency CRT	Third Party	Total Residential	Multifamily	Total Real Estate
December 31, 2017 (In Thousands)	Sequoia 2012-2017	Third Party 2012-2017	· ·			Multifamily 2015-2017	
·	•	•	CRT	Party <=2008	Residential Securities	•	Estate
(In Thousands)	2012-2017	2012-2017	CRT 2013-2017	Party <=2008	Residential Securities	2015-2017	Estate Securities
(In Thousands) Senior (1)	2012-2017 \$ 33,773	2012-2017 \$ 33,517	CRT 2013-2017	Party <=2008	Residential Securities \$249,838	2015-2017 \$—	Estate Securities \$249,838

At December 31, 2018 and December 31, 2017, senior Sequoia and third-party securities included \$82 million and \$70 million of IO securities, respectively. At December 31, 2018 and December 31, 2017, subordinate third-party securities included \$26 million and \$12 million of IO securities, respectively. Our interest-only securities included

- (1)\$43 million and \$15 million of A-IO-S securities at December 31, 2018 and December 31, 2017, respectively, which are securities we retained from certain of our Sequoia securitizations that represent certificated servicing strips and therefore may be negatively impacted by the operating and funding costs related to servicing the associated securitized mortgage loans.
- (2) Mezzanine primarily includes securities initially rated AA through BBB- and issued in 2012 or later. Excludes \$194 million and \$78 million of securities retained from our consolidated Sequoia Choice securitizations at December 31, 2018 and December 31, 2017, respectively. At December 31, 2018, excludes \$229 million and
- (3)\$126 million of securities we owned that were issued by consolidated Freddie Mac SLST and Freddie Mac K-Series securitizations, respectively. For GAAP purposes we consolidated \$5.45 billion of loans and \$4.90 billion of non-recourse ABS debt associated with these securities.

The following tables present the components of the interest income we earned on AFS securities for the years ended December 31, 2018, 2017, and 2016.

Table 20 – Interest Income — AFS Securities

Year Ended December 31, 2018					Yield a	s a Result of	Ĺ	
(Dollars in Thousands)	Interest Income	Discount (Premium) Amortization		Average Amortized Cost		Discount (Premium) Amortization	Total Interes	
Residential								
Senior	\$6,290	\$ 8,174	\$14,464	\$ 106,304	5.92%	7.69 %	13.61	%
Mezzanine	1,999	838	2,837	47,414	4.22%	1.77 %	5.99	%
Subordinate	11,341	5,086	16,427	148,416	7.64%	3.43 %	11.07	%
Total AFS Securities	\$19,630	\$ 14,098	\$33,728	\$ 302,134	6.50%	4.67 %	11.16	%

Year Ended December 31, 2017					Yield as	a Result	of	
(Dollars in Thousands)	Interest Income	Discount (Premium)	Total Interest	Average Amortized	Interest	Discount (Premium)	Total Interest
,	meome	Amortization	Income	Cost	meome	Amortizat	ion	Income
Residential								
Senior	\$8,361	\$ 11,176	\$19,537	\$ 153,619	5.44%	7.28	%	12.71 %
Mezzanine	4,860	2,215	7,075	123,571	3.93%	1.79	%	5.72 %
Subordinate	11,368	5,404	16,772	153,205	7.42%	3.53	%	10.95%
Total AFS Securities	\$24,589	\$ 18,795	\$43,384	\$ 430,395	5.71%	4.37	%	10.08%
Year Ended December 31, 2016					Yield a	as a Result	of	
	Intomast	Discount	Total	Average	Intono	Discount		Total
(Dallans in Thomas da)	Interest	(Premium)	Interest	Amortized	Interes	(Premiur	n)	Interest
(Dollars in Thousands)	Income	Amortization	Income	Cost	Income	Amortiza	ation	Income
Residential								
Senior	\$11,255	\$ 17,820	\$29,073	5 \$ 222,379	5.06%	8.01	%	13.07 %
Mezzanine	7,260	2,686	9,946	184,602	3.93%	1.46	%	5.39 %
Subordinate	9,621	5,747	15,368	123,376	7.80%	4.66	%	12.46%
Total AFS Securities	\$28,136	\$ 26,253	\$54,389	9 \$ 530,357	5.31%	4.95	%	10.26 %
Residential Loans Held-for-Inves	stment at	Sequoia Choice	Portfolio					

During 2017 and 2018, we issued six securitizations primarily comprised of expanded-prime Choice loans that we consolidate for financial reporting purposes in accordance with GAAP. These entities are independent of Redwood and the assets and liabilities of these entities are not, respectively, owned by us or legal obligations of ours. We record the assets and liabilities of the consolidated Sequoia Choice entities at fair value, based on the estimated fair value of the debt securities (ABS) issued from the securitizations, in accordance with GAAP provisions for collateralized financing entities. At December 31, 2018, our economic investment in the consolidated Sequoia Choice entities had an estimated fair value of \$196 million, and was comprised of retained senior and subordinate securities.

The following tables present the statements of income for the years ended December 31, 2018, 2017, and 2016 and the balance sheets of the consolidated Sequoia Choice entities at December 31, 2018 and December 31, 2017. All amounts in the statements of income and balance sheets presented below are included in our consolidated financial

Table 21 – Consolidated Sequoia Choice Entities Statements of Income

statements and are included in our Investment Portfolio segment.

	Years En	ded Dece	Changes		
	31,			Changes	
(In Thousands)	2018	2017	2016	'18/'17	'17/'16
Interest income	\$69,645	\$5,133	\$ -	-\$64,512	\$5,133
Interest expense	(59,769)	(4,275)		(55,494)	(4,275)
Net interest income	9,876	858	_	9,018	858
Investment fair value changes, net	444	(323)		767	(323)
Net Income from Consolidated Sequoia Choice Entities	\$10,320	\$535	\$ -	-\$9,785	\$535

Table 22 – Consolidated Sequoia Choice Entities Balance Sheets

(In Thousands)	noer	December
31, 20)18	31, 2017
Residential loans, held-for-investment, at fair value \$2,07	9,382	\$620,062
Other assets 10,01	0	2,528
Total Assets \$2,08	9,392	\$622,590
Other liabilities \$8,20	2	\$2,035
Asset-backed securities issued, at fair value 1,885	,010	542,140
Total liabilities 1,893	,212	544,175
Equity (fair value of Redwood's retained investments in entities) 196,1	80	78,415
Total Liabilities and Equity \$2,08	9,392	\$622,590

The following table presents residential loan activity at the consolidated Sequoia Choice entities for the years ended December 31, 2018 and 2017.

Table 23 – Residential Loans Held-for-Investment at Sequoia Choice - Activity

	Years Ended December		
	31,		
(In Thousands)	2018	2017	
Balance at beginning of period	\$620,062	\$	
New securitization issuance	1,777,229	645,689	
Principal repayments	(305,252)	(20,600)	
Changes in fair value, net	(12,657)	(5,027)	
Balance at End of Period	\$2,079,382	\$620,062	

During the years ended December 31, 2018 and 2017, we had transfers of \$1.78 billion and \$646 million of consolidated Sequoia Choice loans, respectively, from our Mortgage Banking segment to our Investment Portfolio segment. The outstanding loans held-for-investment at our Sequoia Choice entities at December 31, 2018 were primarily comprised of prime-quality, first-lien, 30-year, fixed-rate loans originated in 2017 and 2018. The gross weighted average coupon of these loans was 4.73%, the weighted average FICO score of borrowers backing these loans was 744 (at origination) and the weighted average original LTV ratio was 75% (at origination). At December 31, 2018, three of these loans with an aggregate unpaid principal balance of \$2 million were greater than 90 days delinquent and none of these loans were in foreclosure. At December 31, 2017, none of these loans were greater than 90 days delinquent or in foreclosure.

Residential Loans Held-for-Investment at Freddie Mac SLST Portfolio

During the fourth quarter of 2018, we invested in certain subordinate securities backed by a pool of seasoned re-performing residential mortgage loans that were issued by a Freddie Mac SLST securitization entity and we were required to consolidate this entity for financial reporting purposes in accordance with GAAP. This entity is independent of Redwood and the assets and liabilities of this entity are not, respectively, owned by us or legal obligations of ours. We record the assets and liabilities of the consolidated Freddie Mac SLST entity at fair value, based on the estimated fair value of the debt securities (ABS) issued from the securitization, in accordance with GAAP provisions for collateralized financing entities. At December 31, 2018, our economic investment in the consolidated Freddie Mac SLST entity had an estimated fair value of \$230 million, and was comprised of subordinate securities.

The following tables present the statements of income for the years ended December 31, 2018, 2017, and 2016 and the balance sheets of the consolidated Freddie Mac SLST entity at December 31, 2018 and December 31, 2017. All amounts in the statements of income and balance sheets presented below are included in our consolidated financial statements and are included in our Investment Portfolio segment.

Table 24 – Consolidated Freddie Mac SLST Entity Statements of Income

	Years En	nded	Changes		
	Decembe	er 31,	Changes		
(In Thousands)	2018	2017 2016	'18/'17	'17/'16	
Interest income	\$4,453	\$ -\$ -	_\$4,453	\$ —	_
Interest expense	(3,156)		(3,156)		
Net interest income	1,297		1,297		
Investment fair value changes, net	1,271		1,271	_	
Net Income from Consolidated Freddie Mac SLST Entit	ty \$2,568	\$ _\$ -	_\$2,568	\$ —	_
Table 25 – Consolidated Freddie Mac SLST Entity Bala	ince Sheets				
(In Thousands)	December	Decembe	er		
	31, 2018	31, 2017			
Residential loans, held-for-investment, at fair value	\$1,222,669	\$			
Other assets	3,926				
Total Assets	\$1,226,595	\$			
Other liabilities	\$2,907	\$			
Asset-backed securities issued, at fair value	993,748				
Total liabilities	996,655				
Equity (fair value of Redwood's investments in entity)	229,940	_			
Total Liabilities and Equity	\$1,226,595	\$			

The following table presents residential loan activity at the consolidated Freddie Mac SLST entity for the years ended December 31, 2018 and 2017.

Table 26 – Residential Loans Held-for-Investment at Freddie Mac SLST - Activity

	Years Ended		
	December 31,		
(In Thousands)	2018	2017	
Balance at beginning of period	\$	\$ —	
Consolidation of residential loans held in securitization trust	1,206,645	_	
Principal repayments	(5,272)	· —	
Changes in fair value, net	21,296	_	
Balance at End of Period	\$1,222,669	\$ —	

The outstanding re-performing and non-performing residential loans held-for-investment at the Freddie Mac SLST entity at December 31, 2018 were first-lien, fixed- or step-rate loans that have been modified. At securitization, in December 2018, the weighted average FICO score of borrowers backing these loans was 598 and the weighted average LTV ratio of these loans was 68%. At December 31, 2018, 306 of these loans with an aggregate unpaid principal balance of \$51 million were greater than 90 days delinquent and none of these loans were in foreclosure. Due to the credit profile of re-performing and non-performing loans, our investment in the subordinate securities issued by the Freddie Mac SLST entity was made based on an expectation of defaults and credit losses that will occur on the underlying pool of residential mortgage loans, which was reflected in our purchase price yield. At December 31, 2018, delinquencies and credit losses in the portfolio were in line with our expectations.

Multifamily Loans Held-for-Investment at Freddie Mac K-Series Portfolio

During the third and fourth quarters of 2018, we invested in certain subordinate securities issued by Freddie Mac K-Series securitization entities and were required to consolidate these entities for financial reporting purposes in accordance with GAAP. Each of these entities is independent of Redwood and of each other and the assets and liabilities of these entities are not, respectively, owned by us or legal obligations of ours. We record the assets and liabilities of the consolidated Freddie Mac K-Series entities at fair value, based on the estimated fair value of the debt securities (ABS) issued from the securitizations, in accordance with GAAP provisions for collateralized financing entities. At December 31, 2018, our economic investment in the consolidated Freddie Mac K-Series entities had an estimated fair value of \$126 million, and was comprised of subordinate securities.

The following tables present the statements of income for the years ended December 31, 2018, 2017, and 2016 and the balance sheets of the consolidated Freddie Mac K-Series entities at December 31, 2018 and December 31, 2017. All amounts in the statements of income and balance sheets presented below are included in our consolidated financial statements and are included in our Investment Portfolio segment.

Table 27 – Consolidated Freddie Mac K-Series Entities Statements of Income

		Years Ended		Changes			
		December 31,					
(In Thousands)		2018	201	7 2016	'18/'17	'17/'	16
Interest income		\$21,322	\$	-\$ -	_\$21,322	\$	_
Interest expense		(19,985)) —		(19,985)		
Net interest income		1,337	_		1,337		
Investment fair value changes, net		931	_		931		
Net Income from Consolidated Freddie Mac K-Series Ent	ities	\$2,268	\$	-\$ -	_\$2,268	\$	_
Table 28 – Consolidated Freddie Mac K-Series Entities B	alance	Sheets					
(In Thousands)	Dece	mber	Dece	mber			
(In Thousands)	31, 20	018	31, 20	017			

(In Thousands)	December	Decem	Der
(III Thousanus)	31, 2018	31, 201	17
Multifamily loans, held-for-investment, at fair value	\$2,144,598	\$	
Other assets	6,595		
Total Assets	\$2,151,193	\$	
Other liabilities	\$6,239	\$	
Asset-backed securities issued, at fair value	2,019,075		
Total liabilities	2,025,314		
Equity (fair value of Redwood's investments in entities)	125,879		
Total Liabilities and Equity	\$2,151,193	\$	

The following table presents multifamily loan activity at the consolidated Freddie Mac K-Series entities for the years ended December 31, 2018 and 2017.

Table 29 – Multifamily Loans Held-for-Investment at Freddie Mac K-Series - Activity

	Years Ended
	December 31,
(In Thousands)	2018 2017
Balance at beginning of period	\$—
Consolidation of multifamily loans held in securitization trusts	2,099,916 —
Principal repayments	(1,873) —
Changes in fair value, net	46,555 —
Balance at End of Period	\$2,144,598 \$ —

The outstanding multifamily loans held-for-investment at the Freddie Mac K-Series entities at December 31, 2018 were first lien, fixed-rate loans that were originated in 2015 and 2016 and had original loan terms of seven to ten years and an original weighted average LTV ratio of 69%. At December 31, 2018, the weighted average coupon of these loans was 4.16% and the weighted average loan term was seven years. At December 31, 2018, none of these loans were greater than 90 days delinquent or in foreclosure.

Mortgage Servicing Rights Portfolio

Our MSRs are held and managed at our taxable REIT subsidiary and typically are acquired together with loans from originators and then separately recognized under GAAP when the MSR is retained and the associated loan is sold to a third party or transferred to a Sequoia residential securitization sponsored by us that meets the GAAP criteria for sale. In addition, in the past we have also purchased MSRs on a flow basis from third-parties that sold the associated loans directly to the Agencies. Although we own the rights to service loans, we contract with sub-servicers to perform these activities. Our receipt of MSR income is not subject to any covenants other than customary performance obligations associated with servicing residential loans. If a sub-servicer we contract with was to fail to perform these obligations, our servicing rights could be terminated and we would evaluate our MSR asset for impairment at that time. The following table provides the activity for MSRs by portfolio for the years ended December 31, 2018 and 2017.

Table 30 – MSR Activity by Portfolio

	Years Ended		
	December	r 31,	
(In Thousands)	2018	2017	
Balance at beginning of period	\$63,598	\$118,526	
Additions			
MSRs retained from Sequoia securitizations	_	7,123	
MSRs retained from third-party loan sales	328	263	
Purchased MSRs	_	640	
Sold MSRs	(1,077)	(52,788)	
Market valuation adjustments	(2,568)	(10,166)	
Balance at End of Period	\$60,281	\$63,598	

The following table presents characteristics of our MSR investments and their associated loans at December 31, 2018. Table 31 – Characteristics of MSR Investments Portfolio

December		
31, 2018		
\$4,933,86	4	
\$60,281		
1.22	%	
0.28	%	
7,545		
\$654		
3.96	%	
54		
67	%	
771		
0.10	%	
	31, 2018 \$4,933,86 \$60,281 1.22 0.28 7,545 \$654 3.96 54 67	

Gross cash yield is calculated by dividing the gross servicing fees we received for the year ended December 31, (1) 2018, by the weighted average notional balance of loans associated with MSRs we owned during the year.

At December 31, 2018, nearly all of our MSRs were comprised of base MSRs and within this portfolio we did not own any portion of a servicing right related to any loan where we did not own the entire servicing right. At both December 31, 2018 and December 31, 2017, we had \$1 million of servicer advances outstanding related to our MSRs, which are presented in Other assets on our consolidated balance sheets.

Servicing Investments

In December 2018, we invested in servicer advances and excess MSRs associated with legacy RMBS (See Note 10 to our Consolidated Financial Statements for additional information). At December 31, 2018, our servicer advance investments and excess MSRs associated with this investment had a carrying value of \$300 million and \$12 million, respectively. The following table presents characteristics of the residential mortgage loans underlying these investments at December 31, 2018.

Table 32 – Characteristics of Servicing Investments

(Dollars in Thousands)	December			
(Donars in Thousands)	31, 2018			
Unpaid principal balance	\$8,047,120			
Number of loans	38,422			
Average loan size	\$209			
Average coupon	5.02	%		
Average loan age (months)	160			
Average original loan-to-value	94	%		
Average original FICO score	701			
60+ day delinquencies (1)	10.75	%		

(1) Includes unpaid principal balance of \$513 million, or 6% of total portfolio, of loans in foreclosure or transferred to REO.

Mortgage Banking Segment

Our Mortgage Banking segment primarily consists of operating a mortgage loan conduit that acquires residential loans from third-party originators for subsequent sale, securitization, or transfer to our investment portfolio. We typically acquire prime, jumbo mortgage loans from our network of loan sellers and in 2018 we also began to acquire business purpose residential loans from our affiliate, 5 Arches.

During 2018, we only acquired a small number of business purpose residential loans and they did not have a significant impact on our mortgage banking results. We expect to continue to aggregate business purpose residential loans in the future and will seek to securitize the loans, once sufficient scale is achieved, and market conditions are permissible.

The following table presents the components of segment contribution for the Mortgage Banking segment for the years ended December 31, 2018, 2017, and 2016. Beginning in the third quarter of 2018, this segment includes our single-family rental business purpose residential loans.

Table 33 – Mortgage Banking Segment Contribution

	Years En	ded Decen	iber 31,	Changes		
(In Thousands)	2018	2017	2016	'18/'17	'17/'16	
Interest income						
Loans	\$53,054	\$39,309	\$33,089	\$13,745	\$6,220	
Sequoia securities			572	_	(572)	
Total interest income	53,054	39,309	33,661	13,745	5,648	
Interest expense	(28,934)	(17,369)	(14,191)	(11,565)	(3,178)	
Net interest income	24,120	21,940	19,470	2,180	2,470	
Mortgage banking activities, net	59,566	53,908	40,753	5,658	13,155	
Direct operating expenses	(28,172)	(25,113)	(23,252)	(3,059)	(1,861)	
Segment contribution before income taxes	55,514	50,735	36,971	4,779	13,764	
Provision for income taxes	(7,347)	(6,424)	(1,860)	(923)	(4,564)	
Segment Contribution	\$48,167	\$44,311	\$35,111	\$3,856	\$9,200	

The following tables provide the activity of unsecuritized residential loans during the years ended December 31, 2018 and 2017.

Table 34 – Residential Loans Held-for-Sale — Activity

	Years Ended	December	31,			
	2018			2017		
(In Thousands)	Select	Choice	Total	Select	Choice	Total
Balance at beginning of period	\$1,101,356	\$326,589	\$1,427,945	\$765,058	\$70,341	\$835,399
Acquisitions	4,833,326	2,300,232	7,133,558	4,503,674	1,237,977	5,741,651
Sales	(5,149,243)	(277,061)	(5,426,304)	(3,866,053)	(116,631)	(3,982,684)
Transfers between portfolios (1)	(29,965)	(2,017,129	(2,047,094)	(286,676)	(859,900)	(1,146,576)
Principal repayments	(46,744)	(20,945)	(67,689)	(42,252)	(11,222)	(53,474)
Changes in fair value, net	7,463	20,922	28,385	27,605	6,024	33,629
Balance at End of Period	\$716,193	\$332,608	\$1,048,801	\$1,101,356	\$326,589	\$1,427,945

Represents the net transfers of loans out of our Mortgage Banking segment into our Investment Portfolio segment and their reclassification from held-for-sale to held-for-investment. Includes \$1.78 billion and \$646 million of

Overview

Segment contribution from our mortgage banking business increased during 2018, driven by higher loan purchase volume and consistent gross margins as compared to the prior year, despite declines in origination volume across the industry and an increasingly competitive landscape. During the year ended December 31, 2018, we purchased \$7.13 billion of predominately prime residential jumbo loans, securitized \$3.22 billion of jumbo Select loans that were accounted for as sales, and sold \$2.21 billion of jumbo loans to third parties. Additionally, we transferred \$1.78 billion of jumbo Choice loans that did not qualify for sales accounting treatment under GAAP to Sequoia securitization entities and we had net transfers of \$270 million of loans to our Investment Portfolio segment that were financed with borrowings from the FHLBC. Our pipeline of loans identified for purchase at December 31, 2018 included \$466 million of jumbo loans. During the fourth quarter of 2018, we reallocated capital from our mortgage banking business to our investment portfolio, leveraging operational changes that we expect will allow us to manage our mortgage banking business with less capital.

⁽¹⁾ Choice loans securitized during the years ended December 31, 2018 and 2017, respectively, which were not treated as sales for GAAP purposes and continue to be reported on our consolidated balance sheets within our Investment Portfolio segment.

We utilize a combination of capital and our residential loan warehouse facilities to manage our inventory of residential loans held-for-sale. At December 31, 2018, we had \$861 million of warehouse debt outstanding to fund our residential loans held-for-sale. The weighted average cost of the borrowings outstanding under these facilities during 2018 was 3.66%. Jumbo loan warehouse capacity at December 31, 2018 totaled \$1.43 billion across four separate counterparties and our business purpose residential loan warehouse capacity totaled \$400 million across two separate counterparties, which should continue to provide sufficient liquidity to fund our residential mortgage banking operations in the near-term.

At December 31, 2018, we had 501 loan sellers, up from 451 at the end of 2017. This included 191 jumbo sellers and 310 sellers from various FHLB districts participating in the FHLB's MPF Direct program.

Net Interest Income

Net interest income from mortgage banking is primarily comprised of interest income earned on residential loans from the time we purchase the loans to when we sell or securitize them, offset by interest expense incurred on short-term warehouse debt used in part to finance the loans while we hold them on our consolidated balance sheets.

For 2018 and 2017, the \$2 million increase in net interest income for each of these years was primarily due to increased interest income from a higher average balance of loans held-for-sale each consecutive year. These increases were partially offset by higher interest expense on our residential loan warehouse facilities, resulting from rising benchmark interest rates during both 2017 and 2018.

The amount of net interest income we earn on loans held-for-sale is dependent on many variables, including the amount of loans and the time they are outstanding on our consolidated balance sheet and their interest rates, as well as the amount of leverage we employ through the use of short-term debt to finance the loans and the interest rates on that debt. These factors will impact net interest income in future periods.

Mortgage Banking Activities, Net

Mortgage banking activities, net, includes the changes in market value of both the loans we hold for sale and commitments for loans we intend to purchase (collectively, our loan pipeline), as well as the effect of derivative instruments we utilize to manage risks associated with our loan pipeline. Our loan sale profit margins are measured over the period from when we commit to purchase a loan and subsequently sell or securitize the loan. Accordingly, these profit margins may encompass positive or negative market valuation adjustments on loans, hedging gains or losses associated with our loan pipeline, and any other related transaction expenses, and may be realized over the course of one or more quarters for financial reporting purposes.

The following table presents the components of mortgage banking activities, net. Amounts presented include both the changes in market values for loans that were sold and associated derivative positions that were settled during the periods presented, as well as changes in market values of loans, derivatives and hedges outstanding at the end of each period.

Table 35 – Components of Mortgage Banking Activities, Net

	Years Er	nded Decei	Changes				
(In Thousands)	2018	2017	2016	'18/'17	'17/'16		
Changes in fair value of:							
Residential loans, at fair value (1)	\$21,808	\$69,373	\$31,399	\$(47,565)	\$37,974		
Single-family rental loans, at fair value	453	_		453	_		
Sequoia securities	_	_	1,455	_	(1,455)		
Risk management derivatives (2)	34,739	(17,529)	5,696	52,268	(23,225)		
Other income, net (3)	2,566	2,064	2,203	502	(139)		
Total Mortgage Banking Activities, Net	\$59,566	\$53,908	\$40,753	\$5,658	\$13,155		

⁽¹⁾ Includes changes in fair value for loan purchase and forward sale commitments.

Represents market valuation changes of derivatives that are used to manage risks associated with our accumulation of residential loans.

⁽³⁾ Amounts in this line include other fee income from loan acquisitions and the provision for repurchase expense, presented net.

The increase in mortgage banking activities, net in 2018 was primarily due to an increase in loan purchase volume on similar gross margins. We define gross margins as net interest income plus income from mortgage banking activities, divided by loan purchase commitments ("LPCs"). LPCs, adjusted for fallout expectations, were \$6.44 billion and \$5.89 billion for the years ended December 31, 2018 and 2017, respectively.

While our overall jumbo loan purchase volumes increased in 2018 relative to 2017, our purchase volumes peaked in the second quarter of 2018 and decreased each consecutive quarter of 2018. Lower projected industry-wide origination volumes and increased competition for loans could result in further volume decreases for us in 2019 and could also result in our gross margins decreasing. Returns on our mortgage banking business in 2019 will also be impacted by our ability to continue diversifying our loan distribution channels and improving distribution timelines. During 2019, we expect to continue reallocating capital from our mortgage banking business into our investment portfolio to optimize our overall returns.

At December 31, 2018, we had a repurchase reserve of \$4 million outstanding related to residential loans sold through this segment. For the years ended December 31, 2018 and 2017, we recorded \$0.3 million and \$0.1 million of reversals of provision for repurchases, respectively, that were included in income from mortgage banking activities, net, in this segment. We review our loan repurchase reserves each quarter and adjust them as necessary based on current information available at each reporting date.

The following table details outstanding principal balances for residential loans held-for-sale by product type at December 31, 2018.

Table 36 – Characteristics of Residential Loans Held-for-Sale

December 31, 2018	Principal	Weighted Average Coupon		
(Dollars in Thousands)	Value			
First Lien Prime		•		
Fixed - 30 year	\$934,054	4.91 %		
Fixed - 15 & 20 year	13,086	4.45 %		
Hybrid	87,144	4.46 %		
ARM	149	4.45 %		

Total Outstanding Principal \$1,034,433

Operating Expenses and Taxes

Operating expenses for this segment primarily include costs associated with the underwriting, purchase and sale of residential loans. Operating expenses increased \$3 million during 2018, primarily related to an increase in loan acquisition costs associated with the increase in loan purchase volume in 2018, relative to 2017. Operating expenses increased \$2 million during 2017, primarily related to the increase in loan purchase volume in 2017, as compared with 2016.

All mortgage banking activities are performed at our taxable REIT subsidiary and the provision for income taxes is generally correlated to the amount of this segment's contribution before income taxes in relation to the TRS's overall GAAP income and associated tax provision. For 2018, the increase in the tax provision primarily resulted from increased GAAP earnings at this segment. For additional detail on income taxes, see the "Tax Provision and Taxable Income" section that follows.

Single-Family Rental Loans Held-for-Sale

The \$28 million of outstanding single-family rental loans held-for-sale December 31, 2018 were first-lien, fixed-rate loans with maturities of five, seven, or ten years. At December 31, 2018, the weighted average coupon of our single-family rental loans was 5.90% and the weighted average loan term was seven years. At origination, the weighted average LTV ratio of these loans was 64% and the weighted average debt service coverage ratio ("DSCR") was 1.29.

Results of Consolidated Legacy Sequoia Entities

We sponsored Sequoia securitization entities prior to 2012 that are reported on our consolidated balance sheets for financial reporting purposes in accordance with GAAP. Each of these entities is independent of Redwood and of each other and the assets and liabilities of these entities are not, respectively, owned by us or legal obligations of ours. We record the assets and liabilities of the consolidated Legacy Sequoia entities at fair value, based on the estimated fair value of the debt securities (ABS) issued from the securitizations in accordance with GAAP provisions for collateralized financing entities. At December 31, 2018, the estimated fair value of our investments in the consolidated Legacy Sequoia entities was \$12 million.

The following tables present the statements of income (loss) for the years ended December 31, 2018, 2017, and 2016 and the balance sheets of the consolidated Legacy Sequoia entities at December 31, 2018 and December 31, 2017. All amounts in the statements of income and balance sheets presented below are included in our consolidated financial statements.

Table 37 – Consolidated Legacy Sequoia Entities Statements of Income (Loss)

	Years En	ded Decen	Changes			
(In Thousands)	2018	2017	2016	'18/'17	'17/'16	
Interest income	\$20,036	\$19,407	\$19,537	\$629	\$(130)	
Interest expense	(16,519)	(14,789)	(13,103)	(1,730)	(1,686)	
Net interest income	3,517	4,618	6,434	(1,101)	(1,816)	
Investment fair value changes, net	(1,016)	(8,027)	(4,200)	7,011	(3,827)	
Net Income (Loss) from Consolidated Legacy Sequoia Entities	\$2,501	\$(3,409)	\$2,234	\$5,910	\$(5,643)	
Table 38 – Consolidated Legacy Sequoia Entities Balance Sheets						
December December						

(In Thousands)	December	December
(III Thousands)		31, 2017
Residential loans held-for-investment, at fair value	\$519,958	\$632,817
Other assets	4,911	4,367
Total Assets	\$524,869	\$637,184
Other liabilities	\$571	\$537
Asset-backed securities issued, at fair value	512,240	622,445
Total liabilities	512,811	622,982
Equity (fair value of Redwood's retained investments in entities)	12,058	14,202
Total Liabilities and Equity	\$524,869	\$637,184

Net Interest Income at Consolidated Legacy Sequoia Entities

The decreases in net interest income in 2018 and 2017 were primarily attributable to the continued pay down of loans at the consolidated entities.

Investment Fair Value Changes, net at Consolidated Legacy Sequoia Entities

Investment fair value changes, net at consolidated Legacy Sequoia entities includes the change in fair value of the residential loans held-for-investment, REO, and the ABS issued at the entities, which netted together represent the change in value of our retained investments in the consolidated Legacy Sequoia entities. The negative investment fair value changes in each of the years presented was primarily related to a decline in fair value on retained IO securities, as the basis of these assets continue to diminish.

Residential Loans at Consolidated Legacy Sequoia Entities

The following table provides details of residential loan activity at consolidated Legacy Sequoia entities for the years ended December 31, 2018 and 2017.

Table 39 – Residential Loans at Consolidated Legacy Sequoia Entities — Activity

Years Ended December 31, (In Thousands) 2018 2017 Balance at beginning of period \$632,817 \$791,636 Principal repayments (146,210) (177,353) Transfers to REO (4,104)) (4,219) Changes in fair value, net 37,455 22,753 Balance at End of Period \$519,958 \$632,817

First lien adjustable rate mortgage ("ARM") and hybrid loans comprise all of the loans in the consolidated Legacy Sequoia entities and were primarily originated in 2006 or prior. For outstanding loans at consolidated Legacy Sequoia entities at December 31, 2018, the weighted average FICO score of borrowers backing these loans was 728 (at origination) and the weighted average original LTV ratio was 66% (at origination). At December 31, 2018 and December 31, 2017, the unpaid principal balance of loans at consolidated Legacy Sequoia entities delinquent greater than 90 days was \$14 million and \$25 million, respectively, of which the unpaid principal balance of loans in foreclosure was \$5 million and \$10 million, respectively.

Tax Provision and Taxable Income

Tax Provision under GAAP

For the years ended December 31, 2018, 2017, and 2016, we recorded tax provisions of \$11 million, \$12 million, and \$4 million, respectively. Our tax provision is primarily derived from GAAP net income or loss at our TRS, as we do not book a material tax provision associated with income generated at our REIT. Our TRS income is generally earned from our mortgage banking activities, MSRs, and other non-REIT eligible security investments.

Taxable Income

The following table summarizes our taxable income and distributions to shareholders for the years ended December 31, 2018, 2017, and 2016. For each of these periods, we had no undistributed REIT taxable income, after the application of net operating loss carryforwards.

(1) Our tax results for the year ended December 31, 2018 are estimates until we file tax returns for 2018.

Table 40 – Taxable Income

	Years Ended December 31,					
(In Thousands except per Share Data)	2018 est. (1)	2017	2016			
REIT taxable income	\$110,092	\$90,122	\$97,576			
Taxable REIT subsidiary income	57,556	31,675	68,792			
Total Taxable Income	\$167,648	\$121,797	\$166,368			
REIT taxable income per share	\$1.38	\$1.17	\$1.27			
Total taxable income per share	\$2.12	\$1.59	\$2.17			
Distributions to shareholders	\$94,134	\$86,271	\$86,240			
Distributions to shareholders per share	\$1.18	\$1.12	\$1.12			

Taxable Income Distribution Requirement

As a REIT, we are required to distribute at least 90% of our taxable income, after the application of available federal net operating loss carryforwards (NOLs), to our shareholders. For 2018, our estimated REIT taxable income of \$110 million exceeded our available NOLs by \$55 million, and therefore our minimum dividend distribution requirement was \$50 million. The following table details our federal NOLs and capital loss carryforwards available as of December 31, 2018.

Table 41 - Federal Net Operating and Capital Loss Carryforwards

	Loss Carryforward Expiration by Period							
	to 3	3 to	5	5 to)	After 15		
(In Thousands)	YearsYears		Years		Years	Total		
REIT Loss Carryforwards								
Net operating loss	\$	\$	_	\$	_	\$(38,674)	\$(38,674)	
Capital loss	_	_		_				
Total REIT Loss Carryforwards	\$—	\$		\$		\$(38,674)	\$(38,674)	
TRS Loss Carryforwards								
Net operating loss	\$	\$	_	\$	_	\$	\$ —	
Capital loss	_	_		_				
Total TRS Loss Carryforwards	\$—	\$	_	\$	_	\$	\$ —	

At December 31, 2017, we maintained \$55 million of NOLs at the REIT level. In order to utilize these carryforwards, taxable income must exceed our dividend distributions. During 2018, we distributed \$94 million to shareholders, which was less than our estimated taxable income of \$110 million. We therefore expect to report REIT taxable income on our 2018 federal income tax return after the application of a dividends paid deduction. As a result, we expect \$16 million of our federal NOLs at the REIT level to be utilized in 2018. Federal NOLs at the REIT level do not expire until 2029.

The Tax Act created a limitation on the annual usage of REIT NOLs to 80% of REIT taxable income, effective with respect to NOLs arising in taxable years beginning after December 31, 2017. We do not expect this to materially impact our REIT.

Tax Characteristics of Distributions to Shareholders

For the year ended December 31, 2018, we declared and distributed four regular quarterly dividends totaling \$94 million (\$1.18 per share). Under the federal income tax rules applicable to REITs, the taxable portion of any distribution to shareholders is determined by (i) taxable income of the REIT, exclusive of the dividends paid deduction and NOLs; and (ii) net capital gains recognized by the REIT, exclusive of capital loss carryforwards. The income or loss generated at our TRS does not directly affect the tax characterization of our dividends. Our 2018 dividend distributions are expected to be characterized for federal income tax purposes as 69% ordinary dividend income and 31% long-term capital gain dividend income. Under the federal income tax rules applicable to REITs, none of the 2018 dividend distributions are expected to be characterized as a return of capital or qualified dividends.

Beginning in 2018, the Tax Act provides that individual taxpayers may generally deduct 20% of their ordinary REIT dividends from taxable income. This results in a maximum federal effective tax rate of 29.6% on an individual taxpayer's ordinary REIT dividends, compared to the highest marginal rate of 37%. This deduction does not apply to REIT dividends classified as qualified dividends or long-term capital gains dividends, as those dividends are taxed at a maximum rate of 20% for individuals.

Differences between Estimated Total Taxable Income and GAAP Income

Differences between estimated taxable income and GAAP income are largely due to the following: (i) we cannot establish loss reserves for future anticipated events for tax but we can for GAAP, as realized credit losses are expensed when incurred for tax and these losses can be anticipated through lower yields on assets or through loss provisions for GAAP; (ii) the timing, and possibly the amount, of some expenses (e.g., certain compensation expenses) are different for tax than for GAAP; (iii) since amortization and impairments differ for tax and GAAP, the tax and GAAP gains and losses on sales may differ, resulting in differences in realized gains on sale; (iv) at the REIT and certain TRS entities, unrealized gains and losses on market valuation adjustments of loans, securities and derivatives are not recognized for tax until the instrument is sold or extinguished; (v) for tax, basis may not be assigned to mortgage servicing rights retained when whole loans are sold resulting in lower tax gain on sale; (vi) for tax, we do not consolidate securitization entities as we do under GAAP; and, (vii) dividend distributions to our REIT from our TRS are included in REIT taxable income, but not GAAP income. As a result of these differences in accounting, our estimated taxable income can vary significantly from our GAAP income during certain reporting periods.

For tax years beginning after December 31, 2018, the Tax Act may require acceleration of discount accretion for federal income tax purposes for debt instruments with original issue discount. We are evaluating the effects of this change, and currently do not believe these provisions will have a material income tax effect for us.

The tax basis in assets and liabilities at the REIT was \$4.84 billion and \$3.59 billion, respectively, at December 31, 2018. The GAAP basis in assets and liabilities at the REIT was \$9.80 billion and \$8.55 billion, respectively, at December 31, 2018. The primary difference in both the tax and GAAP assets and liabilities is attributable to securitization entities that are consolidated for GAAP reporting purposes but not for tax purposes.

The tables below reconcile our estimated total taxable income to our GAAP income for the years ended December 31, 2018, 2017, and 2016.

Year Ended December 31, 2018

Table 42 – Differences between Estimated Total Taxable Income and GAAP Net Income

	Teal Elided December 51, 2018							
(In Thousands, avant non Chana Data)	REIT	TRS	Total Tax	GAAP	Differences			
(In Thousands, except per Share Data)	(Est.)	(Est.)	(Est.)	UAAF	Differences			
Interest income	\$212,528	\$53,225	\$265,753	\$378,717	\$(112,964)			
Interest expense	(96,126)	(43,462)	(139,588)	(239,039)	99,451			
Net interest income	116,402	9,763	126,165	139,678	(13,513)			
Realized credit losses	(1,738)	_	(1,738)	_	(1,738)			
Mortgage banking activities, net	_	57,297	57,297	59,566	(2,269)			
Investment fair value changes, net	5,513	(518)	4,995	(25,689)	30,684			
Operating expenses	(41,140)	(37,750)	(78,890)	(82,782)	3,892			
Other income, net	1,353	15,901	17,254	12,874	4,380			
Realized gains, net	30,001	13,098	43,099	27,041	16,058			
Provision for income taxes	(299)	(235)	(534)	(11,088)	10,554			
Net Income	\$110,092	\$57,556	\$167,648	\$119,600	\$48,048			
Income per basic common share	\$1.38	\$0.74	\$2.12	\$1.47	\$0.65			

	Year Ended December 31, 2017							
(In Thousands, except per Share Data)	REIT	TRS	Total Tax	GAAP	Differences	,		
Interest income	\$186,214	\$38,865	\$225,079	\$248,057	\$(22,978)			
Interest expense	(59,875)	(29,787)	(89,662)	(108,816)	19,154			
Net interest income	126,339	9,078	135,417	139,241	(3,824)			
Realized credit losses	(3,442)		(3,442)	_	(3,442)			
Mortgage banking activities, net		44,143	44,143	53,908	(9,765)			
Investment fair value changes, net	(16,483)	5,292	(11,191)	10,374	(21,565)			
Operating expenses	(41,589)	(31,614)	(73,203)	(77,156)	3,953			
Other income, net (1)	26,382	4,943	31,325	12,436				