

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

FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the Fiscal Year Ended: December 31, 2016
Commission File Number 001-34506

TWO HARBORS INVESTMENT CORP.

(Exact Name of Registrant as Specified in Its Charter)

Maryland
(State or Other Jurisdiction of
Incorporation or Organization)

27-0312904
(I.R.S. Employer
Identification No.)

590 Madison Avenue, 36th Floor
New York, New York
(Address of Principal Executive Offices)

10022
(Zip Code)

(612) 629-2500
(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 No

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 No

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) 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.

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

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company

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

As of June 30, 2016, the aggregate market value of the registrant's common stock held by non-affiliates of the registrant was approximately \$2.9 billion based on the closing sale price as reported on the NYSE on that date.

As of February 24, 2017 there were 348,910,980 shares of common stock, par value \$.01 per share, issued and outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement for the 2017 Annual Meeting of Stockholders, which will 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.

**TWO HARBORS INVESTMENT CORP.
2016 ANNUAL REPORT ON FORM 10-K**

TABLE OF CONTENTS

	<u>Page</u>
PART I	
Item 1. Business	1
Item 1A. Risk Factors	13
Item 1B. Unresolved Staff Comments	41
Item 2. Properties	41
Item 3. Legal Proceedings	41
Item 4. Mine Safety Disclosures	41
PART II	
Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	42
Item 6. Selected Financial Data	46
Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations	48
Item 7A. Quantitative and Qualitative Disclosures About Market Risk	97
Item 8. Financial Statements and Supplementary Data	102
Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	167
Item 9A. Controls and Procedures	167
Item 9B. Other Information	170
PART III	
Item 10. Directors, Executive Officers and Corporate Governance	171
Item 11. Executive Compensation	171
Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	171
Item 13. Certain Relationships and Related Transactions, and Director Independence	171
Item 14. Principal Accounting Fees and Services	171
PART IV	
Item 15. Exhibits, Financial Statement Schedules	172
Signatures	175

PART I

Item 1. Business

Overview

Our Company

Two Harbors Investment Corp. is a Maryland corporation focused on investing in, financing and managing residential mortgage-backed securities, or RMBS, mortgage servicing rights, or MSR, commercial real estate and other financial assets, which we collectively refer to as our target assets. We operate as a real estate investment trust, or REIT, as defined under the Internal Revenue Code of 1986, as amended, or the Code. The terms “Two Harbors,” “we,” “our,” “us” and the “company” refer to Two Harbors Investment Corp. and its subsidiaries as a consolidated entity.

We were incorporated on May 21, 2009 and commenced operations as a publicly traded company on October 28, 2009, upon completion of a merger with Capitol Acquisition Corp., or Capitol, which became our wholly owned indirect subsidiary as a result of the merger. Our common stock is listed on the New York Stock Exchange, or NYSE, under the symbol “TWO”.

Our objective is to provide attractive risk-adjusted total return to our stockholders over the long term, primarily through dividends and secondarily through capital appreciation. We selectively acquire and manage an investment portfolio of our target assets, which is constructed to generate attractive returns through market cycles. We focus on asset selection and implement a relative value investment approach across various sectors within the mortgage market. Our target assets include the following:

- Agency RMBS, meaning RMBS whose principal and interest payments are guaranteed by the Government National Mortgage Association (or Ginnie Mae), the Federal National Mortgage Association (or Fannie Mae), or the Federal Home Loan Mortgage Corporation (or Freddie Mac);
- Non-Agency RMBS, meaning RMBS that are not issued or guaranteed by Ginnie Mae, Fannie Mae or Freddie Mac;
- MSR;
- Commercial real estate assets; and
- Other financial assets comprising approximately 5% to 10% of the portfolio.

We seek to deploy moderate leverage as part of our investment strategy. We generally finance our RMBS and commercial real estate assets through short- and long-term borrowings structured as repurchase agreements and advances from the Federal Home Loan Bank of Des Moines, or the FHLB. We also finance our MSR through revolving credit facilities.

We have elected to be treated as a REIT for U.S. federal income tax purposes. To qualify as a REIT, we are required to meet certain investment and operating tests and annual distribution requirements. We generally will not be subject to U.S. federal income taxes on our taxable income to the extent that we annually distribute all of our net taxable income to stockholders, do not participate in prohibited transactions and maintain our intended qualification as a REIT. However, certain activities that we may perform may cause us to earn income which will not be qualifying income for REIT purposes. We have designated certain of our subsidiaries as taxable REIT subsidiaries, or TRSs, as defined in the Code, to engage in such activities, and we may form additional TRSs in the future. We also operate our business in a manner that will permit us to maintain our exemption from registration under the Investment Company Act of 1940, as amended, or the 1940 Act.

Our Manager

We are externally managed and advised by PRCM Advisers LLC, or PRCM Advisers, a wholly-owned subsidiary of Pine River Capital Management L.P, or Pine River. Pine River formed PRCM Advisers for the purpose of providing management services to us. PRCM Advisers is responsible for administering our business activities and day-to-day operations. Pursuant to the terms of the management agreement between us and PRCM Advisers, PRCM Advisers provides us with our management team, including our executive officers and support personnel. In addition, PRCM Advisers provides us with the expertise of a dedicated team of investment professionals and other infrastructure support. PRCM Advisers is at all times subject to the supervision and oversight of our board of directors. Each of our executive officers is an employee or partner of Pine River; we do not have any employees. We do not pay any of our executive officers cash compensation; rather, we pay PRCM Advisers a base management fee equal to 1.5% per annum of our stockholders’ equity, adjusted to exclude any unrealized gains, losses or other items that do not affect realized net income, among other adjustments, as defined by the management agreement. We also reimburse PRCM Advisers for the allocable share of the compensation paid by Pine River to its personnel serving as our principal financial officer and general counsel and other reimbursable costs under the management agreement. We do not pay PRCM Advisers any incentive-based fees or other incentive-based compensation.

Through our relationship with PRCM Advisers, we benefit from Pine River's disciplined and highly analytical investment approach, extensive long-term relationships in the financial community, and established infrastructure. Pine River's disciplined investment process utilizes a cross-product approach, conducting top-down market assessments with respect to various subsets of the RMBS and mortgage market in order to identify the most attractive segments and investment opportunities. Our investment process leverages proprietary and third-party analytic tools to conduct a detailed analysis of factors that influence our target assets. We select our target assets after extensive analysis of the asset, including the underlying collateral, prepayment trends, average remaining life, amortization schedules, fixed versus floating interest rates, geographic concentration, property type, loan-to-value ratios and credit scores, among others.

The dedicated team of investment professionals provided to us by PRCM Advisers has broad experience in managing our target assets and has demonstrated the ability to generate attractive risk-adjusted returns under different market conditions and cycles. Pine River maintains extensive long-term relationships with financial intermediaries, including prime brokers, investment banks, broker-dealers and asset custodians. We believe these relationships enhance our ability to source, finance, protect and hedge our investments and, thus, enable us to succeed in various credit and interest rate environments. We also benefit from Pine River's comprehensive finance, operational and administrative infrastructure, including its risk management, accounting, operations, legal, compliance and information technology teams. Through the use of existing resources within Pine River, the addition of new personnel having significant experience in managing our target assets, and the use of experienced outside advisors, we believe that we have sufficient experience to execute on our business strategies.

Note Regarding Forward-Looking Statements

This Annual Report on Form 10-K contains, or incorporates by reference, not only historical information, but also forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, or the Exchange Act, and that are subject to the safe harbors created by such sections. 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," "target," "believe," "intend," "seek," "plan," "goals," "future," "likely," "may," and similar expressions or their negative 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 Securities and Exchange Commission, or the SEC, including our Quarterly Reports on Form 10-Q and Current Reports on Form 8-K. Forward-looking statements speak only as of the date they are made, and we undertake no obligation to update or revise any such forward-looking statements, whether as a result of new information, future events, or otherwise.

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

- changes in interest rates and the market value of our target assets;
- changes in prepayment rates of mortgages underlying our target assets;
- the occurrence, extent and timing of credit losses within our portfolio;
- our exposure to adjustable-rate and negative amortization mortgage loans underlying our target assets;
- the state of the credit markets and other general economic conditions, particularly as they affect the price of earning assets and the credit status of borrowers;
- the concentration of the credit risks to which we are exposed;
- legislative and regulatory actions affecting our business;
- the availability and cost of our target assets;
- the availability and cost of financing for our target assets, including repurchase agreement financing, lines of credit, revolving credit facilities and financing through the FHLB;
- declines in home prices;
- increases in payment delinquencies and defaults on the mortgages comprising and underlying our target assets;
- changes in liquidity in the market for real estate securities, the re-pricing of credit risk in the capital markets, inaccurate ratings of securities by rating agencies, rating agency downgrades of securities, and increases in the supply of real estate securities available-for-sale;
- changes in the values of securities we own and the impact of adjustments reflecting those changes on our consolidated statements of comprehensive income (loss) and balance sheets, including our stockholders' equity;
- our ability to generate cash flow from our target assets;

- our ability to effectively execute and realize the benefits of strategic transactions and initiatives we have pursued or may in the future pursue;
- changes in the competitive landscape within our industry, including changes that may affect our ability to attract and retain personnel;
- our exposure to legal and regulatory claims, penalties or enforcement activities, including those arising from our involvement in securitization transactions and ownership and management of MSR;
- our exposure to counterparties involved in our mortgage loan conduit and MSR businesses and our ability to enforce representations and warranties made by them;
- our ability to acquire MSR and successfully operate our seller-servicer subsidiary and oversee the activities of our subservicers;
- the state of commercial real estate markets, including the demand for commercial loans;
- our ability to acquire commercial real estate assets, and to originate commercial loans;
- our ability to successfully diversify our business into new asset classes, and manage the new risks to which they may expose us;
- our ability to manage various operational and regulatory risks associated with our business;
- interruptions in or impairments to our communications and information technology systems;
- our ability to maintain appropriate internal controls over financial reporting;
- our ability to establish, adjust and maintain appropriate hedges for the risks in our portfolio;
- our ability to maintain our REIT qualification for U.S. federal income tax purposes; and
- limitations imposed on our business due to our REIT status and our status as exempt from registration under the 1940 Act.

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

Our Business

Our Investment Strategy

Our investment objective is to provide attractive risk-adjusted total return to our stockholders over the long-term, primarily through dividends and secondarily through capital appreciation. We intend to achieve this objective by constructing a well-balanced portfolio consisting of RMBS, MSR, commercial real estate and other financial assets, with a focus on managing various associated risks, including interest rate, prepayment, credit, mortgage spread and financing risk. The preservation of book value is of paramount importance to our ability to generate total return on an ongoing basis. Consistent with the objective of achieving attractive risk-adjusted total return over various market cycles, we intend to maintain a balanced approach to these various risks.

We rely on PRCM Advisers' expertise in identifying assets within our target asset classes. PRCM Advisers makes investment decisions based on a rigorous asset selection process that takes into consideration a variety of factors, including expected cash yield, risk-adjusted returns, current and projected credit fundamentals, current and projected macroeconomic considerations, current and projected supply and demand, credit and market risk concentration limits, liquidity, cost of financing and financing availability. It is our intention to select our assets in such a way as to maintain our REIT qualification and our exemption from registration under the 1940 Act.

Other assets include financial and mortgage-related assets other than the target assets in our rates, credit and commercial strategies, including residential mortgage loans (see discussion below) and certain non-hedging transactions that may produce non-qualifying income for purposes of the REIT gross income tests.

Our Investment Activities

The following is a summary of our investment activities related to the target assets in our rates, credit and commercial strategies for the year ended December 31, 2016. We believe our investment model allows management to allocate capital across various sectors within the mortgage market, with a focus on asset selection and the implementation of a relative value investment approach. Our capital allocation decisions factor in the opportunities in the marketplace, the cost of financing and the cost of hedging interest rate, prepayment, credit and other portfolio risks. As a result, allocation among our target assets reflects management's flexible approach to investing in the marketplace.

Rates Strategy

Our Agency RMBS portfolio is comprised of adjustable rate and fixed rate mortgage-backed securities backed by single-family and multi-family mortgage loans. All of our principal and interest Agency RMBS are Fannie Mae or Freddie Mac mortgage pass-through certificates or collateralized mortgage obligations that carry an implied rating of "AAA," or Ginnie Mae mortgage pass-through certificates, which are backed by the guarantee of the U.S. Government. The majority of these securities consist of whole pools in which we own all of the investment interests in the securities. During the year ended December 31, 2016, we increased our allocation towards Agency RMBS due to attractive market prices.

One of our wholly owned subsidiaries holds the requisite approvals from Fannie Mae, Freddie Mac and Ginnie Mae to own and manage MSR, which represent a contractual right to service a mortgage loan and collect a fee for performing servicing activities, such as collecting principal and interest from a borrower and distributing those payments to the owner of the loan. We do not directly service the mortgage loans underlying the MSR we acquire; rather, we contract with appropriately licensed third-party subservicers to handle substantially all servicing functions for the loans underlying our MSR.

We believe MSR are a natural fit for our portfolio over the long term. Our MSR business leverages our core competencies in prepayment and credit risk analytics and the MSR assets are a natural hedge to our Agency RMBS, hedging both interest rate and mortgage spread risk. Our goal is to create long-lasting relationships with high quality originators in both flow and bulk acquisitions of MSR. We have completed multiple substantial bulk acquisitions of MSR and have in place flow arrangements with multiple sellers through which we purchase MSR on new-origination production. During the year ended December 31, 2016, we increased the size of our MSR portfolio through both flow and bulk acquisitions, which was slightly offset by the sale of substantially all of our Ginnie Mae MSR portfolio.

Credit Strategy

Within our non-Agency RMBS portfolio, we have a substantial emphasis on "legacy" securities, which include securities issued prior to 2009, many of which are subprime. We believe these deeply discounted securities can add relative value as the economy and housing markets continue to improve, as there remains upside optionality to lower delinquencies, higher recoveries and faster prepaids. We also hold "new issue" non-Agency RMBS, which we believe have enabled us to find attractive returns and further diversify our non-Agency RMBS portfolio.

In July 2016, we announced our plan to discontinue our mortgage loan conduit and securitization business, through which we acquired prime nonconforming residential mortgage loans from select mortgage loan originators and secondary market institutions with the intent to securitize the loans through the issuance of non-Agency mortgage-backed securities and/or exit through a whole loan sale. This decision was made due to the challenging market environment facing the business, combined with the intent to reduce operating complexity and costs, and allowed for the reallocation of capital to assets we believed would generate higher returns. During the remainder of 2016, all remaining commitments to purchase mortgage loans were funded, an additional securitization transaction was completed and substantially all of the remaining prime nonconforming residential loans were sold through whole loan sale transactions. The wind down process was completed at the end of 2016, though we currently intend to retain certain subordinated securities from our prior securitization transactions, or net economic interests in consolidated securitization trusts.

As of December 31, 2016, we held a small legacy portfolio of credit sensitive residential mortgage loans, or CSL, which are loans where the borrower has previously experienced payment delinquencies and is more likely to be underwater (i.e., the amount owed on a mortgage loan exceeds the current market value of the home). As a result, there is a higher probability of default on CSL than on newly originated residential mortgage loans.

Commercial Strategy

We originate and purchase commercial real estate debt and related instruments generally to be held as long-term investments. Pine River employs a seasoned commercial real estate team with broad experience across multiple segments of the commercial real estate market to manage this strategy. It is estimated that the commercial real estate loan market is over \$3.0 trillion in size and over \$1.5 trillion in loans are expected to mature in the next several years. During the year ended December 31, 2016, we increased the size of our commercial real estate portfolio, investing in both first mortgage and mezzanine commercial real estate loans. It is our intention to continue to allocate capital towards this business.

Our Investment Guidelines

Our board of directors has approved the following investment guidelines:

- no investment shall be made that would cause us to fail to qualify as a REIT for U.S. federal income tax purposes;
- no investment shall be made that would cause us to be regulated as an investment company under the 1940 Act;
- we will primarily invest within our target assets, consisting primarily of Agency RMBS, non-Agency RMBS, residential mortgage loans, MSR and commercial real estate assets, inclusive of commercial real estate loans, commercial real property, CMBS, commercial corporate debt and loans and other commercial real estate-related investments in the U.S.; approximately 5% to 10% of our portfolio may include other financial assets; and
- until appropriate investments can be identified, we will invest available cash in interest-bearing and short-term investments that are consistent with (i) our intention to qualify as a REIT and (ii) our exemption from investment company status under the 1940 Act.

These investment guidelines may be changed from time to time by our board of directors in its discretion without the approval of our stockholders.

Within the constraints of the foregoing investment guidelines, PRCM Advisers has broad authority to select, finance and manage our investment portfolio. As a general matter, our investment strategy is designed to enable us to:

- build an investment portfolio consisting of Agency RMBS, non-Agency RMBS, MSR, commercial real estate and other financial assets that will generate attractive returns while having a moderate risk profile;
- manage financing, interest, prepayment rate, credit and similar risks;
- capitalize on discrepancies in the relative valuations in the mortgage and housing markets; and
- provide regular quarterly dividend distributions to stockholders.

Within the requirements of the investment guidelines, PRCM Advisers makes determinations as to the percentage of our assets that will be invested in each of our target assets. Our investment decisions depend on prevailing market conditions and may change over time in response to opportunities available in different interest rate, economic and credit environments. As a result, we cannot predict the percentage of our assets that will be invested in any of our target asset classes at any given time. We believe that the diversification of our portfolio of assets and the flexibility of our strategy, combined with the expertise of PRCM Advisers and its affiliates, will enable us to achieve attractive risk-adjusted total return under a variety of market conditions and economic cycles.

Financing Strategy

We deploy moderate leverage to increase potential returns to our stockholders and to fund the acquisition of our target assets. We are not required to maintain any particular leverage ratio. The amount of leverage we deploy for particular investments in our target assets depends upon a variety of factors, including without limitation: general economic, political and financial market conditions; the anticipated liquidity and price volatility of our assets; the gap between the duration of assets and liabilities, including hedges; the availability and cost of financing the assets; our opinion of the credit worthiness of financing counterparties; the health of the U.S. residential mortgage and housing markets; our outlook for the level, slope and volatility of interest rates; the credit quality of the loans underlying our Agency RMBS, non-Agency RMBS and retained interests from our on-balance sheet securitizations; the rating assigned to RMBS assets; and our outlook for asset spreads relative to the London Interbank Offered Rate, or LIBOR, curve.

Our primary financing sources are repurchase agreements, FHLB advances and revolving credit facilities. Repurchase agreements are financings pursuant to which one party, the seller/borrower, sells assets to the repurchase agreement counterparty, the buyer/lender, for an agreed price with the obligation to repurchase the assets from the buyer at a future date and at a price higher than the original purchase price. The amount of financing available under a repurchase agreement is limited to a specified percentage of the estimated market value of the assets. The difference between the sale price and repurchase price is the interest expense of financing under a repurchase agreement. Under repurchase agreement financing arrangements, if the value of the collateral decreases, the buyer could require the seller to provide additional cash collateral to re-establish the ratio of value of the collateral to the amount of borrowing (*i.e.*, a margin call). In the current economic climate, lenders under repurchase agreements generally advance approximately 90% to 97% of the market value of the Agency RMBS financed (a discount from market value, generally referred to as a haircut, of 3% to 10%), 50% to 75% of the market value of the non-Agency RMBS and retained interests financed (*i.e.*, a haircut of 25% to 50%), 25% to 50% of the market value of the mezzanine commercial real estate loans financed (*i.e.*, a haircut of 50% to 75%), and 65% to 80% of the market value of the commercial real estate first mortgages financed (*i.e.*, a haircut of 20% to 35%).

A significant decrease in the advance rate or an increase in the haircut could result in our having to sell assets in order to meet additional margin requirements by the lender. We expect to mitigate our risk of margin calls under repurchase agreements by deploying leverage at an amount that is below what could be used under current advance rates.

In order to reduce our exposure to risks associated with lender counterparty concentration, we generally seek to diversify our exposure by entering into repurchase agreements with multiple counterparties. At December 31, 2016, we had \$9.3 billion of outstanding balances under repurchase agreements with 23 counterparties, with a maximum net exposure (the difference between the amount loaned to us, including interest payable, and the value of the assets pledged by us as collateral, including accrued interest receivable on such assets) to any single lender of \$247.5 million, or 7.3% of equity.

Our wholly owned subsidiary, TH Insurance Holdings Company LLC, or TH Insurance, is a member of the FHLB. As a member of the FHLB, TH Insurance currently has access to a variety of products and services offered by the FHLB, including secured advances. Eligible collateral may include conventional 1-4 family residential loans, commercial real estate loans, Agency RMBS and non-Agency RMBS with a rating of A and above.

We use FHLB advances to finance our Agency and non-Agency RMBS and commercial real estate assets. Similar to repurchase agreements, if the value of our assets pledged to the FHLB as collateral for advances decreases, the FHLB could require us to provide additional collateral to re-establish the ratio of value of the collateral to the amount of advances outstanding. The FHLB generally advances approximately 90% to 95% of the market value of the Agency RMBS financed (*i.e.*, a haircut of 5% to 10%), 85% to 90% of the market value of the non-Agency RMBS financed (*i.e.*, a haircut of 10% to 15%), and 60% to 80% of the market value of the commercial real estate assets financed (*i.e.*, a haircut of 20% to 40%).

In January 2016, the FHFA released a final rule regarding membership in the Federal Home Loan Bank system. Among other effects, the ruling excludes captive insurers from membership eligibility, including our subsidiary member, TH Insurance. Since TH Insurance was admitted as a member in 2013, it is eligible for a membership grace period that shall run through February 19, 2021, during which new advances or renewals that mature beyond the grace period will be prohibited. However, any existing advances that mature beyond this grace period will be permitted to remain in place subject to their terms insofar as we maintain good standing with the FHLB. If any new advances or renewals occur, TH Insurance's outstanding advances will be limited to forty percent of its total assets. Notwithstanding the FHFA's ruling, we continue to believe our mission aligns well with that of the Federal Home Loan Bank system.

To finance MSR, we enter into revolving credit facilities collateralized by the value of the MSR pledged. Similar to repurchase agreements, if the value of our MSR pledged as collateral for the facilities decreases, the respective lender could require us to provide additional collateral to re-establish the ratio of value of the collateral to the amount of the debt outstanding. Due to certain GSE requirements, we may be restricted as to the frequency we are able to pledge additional MSR collateral to counterparties. As a result, we may choose to over-collateralize certain revolving credit facilities in order to avoid having to provide cash as additional collateral. Lenders generally advance approximately 60% to 65% of the market value of the MSR financed (*i.e.*, a haircut of 35% to 40%).

Interest Rate Hedging and Risk Management Strategy

We enter into a variety of derivative and non-derivative instruments in connection with our risk management activities. Our primary objective for executing these derivative and non-derivative instruments is to mitigate our exposure to future events that are outside our control. Our derivative financial instruments are utilized principally to manage market risk and cash flow volatility associated with interest rate risk (including associated prepayment risk) and credit risk related to certain assets and liabilities. As part of our risk management activities, we may, at times, enter into various forward contracts including short securities, Agency TBAs, options, futures, swaps and caps. In executing on our current risk management strategy, we have entered into interest rate swap and swaption agreements, TBAs, short U.S. Treasuries, put and call options for TBAs and U.S. Treasuries, constant maturity swaps, credit default swaps, total return swaps (based on the Markit IOS Index) and forward purchase commitments. We have also entered into a number of non-derivative instruments to manage interest rate risk, principally U.S. Treasuries and Agency interest-only securities.

Our Competitive Advantages

Our investment strategy is focused on utilizing our underlying core strengths, described below in further detail, which we believe offer competitive advantages in the marketplace:

Significant Experience of Our Management Team

We believe that the extensive experience of our management team and, through our relationship with PRCM Advisers, the employees of Pine River, provides us with significant expertise across our target assets. Our team of dedicated investment professionals has managed our target assets through a variety of credit and interest rate environments and has demonstrated strong ability to generate attractive risk-adjusted returns under different market conditions, on both a levered and unlevered basis. Pine River also employs a seasoned commercial real estate team with broad experience across multiple segments of the commercial real estate market.

Our Chief Investment Officer and the other senior members of our investment team have extensive experience in investing in our target assets, including experience in performing advisory services for investment banks, funds, other investment vehicles and other managed and discretionary accounts. Our team of dedicated investment professionals includes seasoned traders, analysts and risk managers, and is backed by Pine River's extensive infrastructure in the areas of credit analysis, trade execution, risk management, valuation, accounting, operations and law.

Disciplined Relative Value Investment Approach

Disciplined security and asset selection is a key element of our overall investment strategy. We are a relative value investor in residential mortgage-backed securities. We use a cross-product approach, conducting top-down market assessments with respect to various subsets of the RMBS market in order to identify the most attractive segments and investment opportunities. In employing this detailed analysis, we seek to best capture market inefficiencies and identify the most attractive securities. We select our RMBS based on factors that include extensive analysis of the underlying loans, including prepayment trends, average remaining life, amortization schedules, fixed versus floating interest rates, geographic concentration, property type, LTV ratios and credit scores. Considering the multi-trillion dollar size of the U.S. RMBS market, we can be selective with our investments and buy only the securities we deem to be the most attractive. We believe this holistic, relative-value approach to Agency and non-Agency RMBS investments may achieve higher risk-adjusted returns than an approach that focuses on a single sector of the residential mortgage market.

Within the commercial market, we employ a bottom-up methodology to assess properties based on the type of sponsor or property owner, the building type and local market demand, cash flow and stress analysis and structural protections within the loan agreements to protect our investments. In applying this detailed analysis, we seek to capture market inefficiencies and identify the most attractive investment opportunities on a risk-adjusted basis. We are diversified with respect to property type and geographic location. Commercial assets are generally floating-rate assets, providing a complement to our RMBS portfolio from an interest rate exposure perspective. Within the multi-trillion dollar size of the U.S. commercial mortgage market, it is estimated that \$1.5 trillion of maturities are due in the next several years, providing ample opportunity with respect to asset selection.

Portfolio Construction

Our objective is to provide attractive risk-adjusted total return to our stockholders over the long term, primarily through dividends and secondarily through capital appreciation. We intend to achieve this objective by constructing a well-balanced portfolio consisting primarily of RMBS, net economic interests in consolidated securitization trusts, MSR and commercial real estate assets, with a focus on managing the various associated risks, including interest rate, prepayment, mortgage spread and financing risk. We use the expertise of our dedicated team of investment professionals in the RMBS, MSR and commercial real estate markets to construct our diverse portfolio, balancing the relative attractiveness of assets with the aforementioned risks. Across our portfolio we are mindful with respect to leverage and other risks. Through the careful and disciplined selection of assets, and continual portfolio monitoring, we seek to build and maintain an investment portfolio that provides value to stockholders over time both in absolute terms and relative to other residential and commercial mortgage-related portfolios.

Analytical Tools, Infrastructure and Expertise

Our experienced investment team constructs and manages our investment portfolio through the use of focused qualitative and quantitative analysis, which helps us manage risk on an asset-level and portfolio basis. We rely on a variety of proprietary and third-party analytical tools and models, which we customize to our needs. We focus on in-depth analysis of the numerous factors that influence our target assets, including:

- fundamental market and sector review;
- cash flow analysis;
- disciplined asset selection;
- controlled risk exposure; and
- prudent balance sheet management.

We also use these tools to guide our hedging strategies to the extent consistent with the requirements for qualification as a REIT.

Our focus on loan-level and local market analysis allows us to track and understand borrower performance, which we consider important to our overall investment strategy. Our ability to track real-time variables such as market-specific home prices and unemployment rates provides us with valuable insights and helps with specific asset selection decisions. We believe that sophisticated analysis of both macro- and micro-economic factors will enable us to manage cash flow and distributions while preserving our stockholders' capital.

We benefit, through PRCM Advisers, from Pine River's comprehensive finance, operational and administrative infrastructure, including its risk management, accounting, operations, legal, compliance and information technology teams.

Extensive Strategic Relationships and Experience of PRCM Advisers and its Affiliates

PRCM Advisers and its affiliates maintain extensive long-term relationships with financial intermediaries including prime brokers, investment banks, broker-dealers and asset custodians. We believe these relationships enhance our ability to source, finance, protect and hedge our investments and, thus, enable us to succeed in various credit and interest rate environments. Members of the investment team have many years of experience and well-established contacts within the residential and commercial mortgage industries. This experience and the associated relationships are beneficial to our stockholders.

Management Agreement

Pursuant to the management agreement between us and PRCM Advisers, PRCM Advisers provides a dedicated team of investment and management professionals to carry out our business strategy as well as operational and administrative infrastructure to support our operations, subject to oversight by our board of directors. PRCM Advisers is responsible for, among other duties, (i) performing all of our day-to-day functions; (ii) determining investment criteria in conjunction with our board of directors; (iii) sourcing, analyzing and executing investments, asset sales and financings; and (iv) performing asset management duties.

The current term of the management agreement expires on October 28, 2017, and will continue to automatically renew thereafter for successive one-year terms unless terminated in accordance with the agreement. Our independent directors review PRCM Advisers' performance annually and the management agreement may be terminated by us without cause upon the vote of at least two-thirds of our independent directors or by a vote of the holders of a majority of the outstanding shares of our common stock, based upon: (i) PRCM Advisers' unsatisfactory performance that is materially detrimental to us or (ii) our determination that the management fees payable to PRCM Advisers are not fair, subject to PRCM Advisers' right to prevent termination based on unfair fees by accepting a reduction of management fees agreed to by at least two-thirds of our independent directors. We are required to provide PRCM Advisers with 180 days' prior notice of such termination. Upon termination of the management agreement by us without cause or by PRCM Advisers due to our material breach of the management agreement, we are required to pay a termination fee equal to three times the sum of the average annual base management fee earned by PRCM Advisers during the 24-month period immediately preceding the date of termination, calculated as of the end of the most recently completed fiscal quarter prior to the date of termination. We may terminate the management agreement with 30 days' prior notice from our board of directors, without payment of a termination fee, for cause, as defined in the management agreement. PRCM Advisers may terminate the management agreement if we become required to register as an investment company under the 1940 Act, with such termination deemed to occur immediately before such event, and may also decline to renew the management agreement by providing us with 180 days' prior notice; in either case, we would not be required to pay a termination fee.

Base Management Fee

The base management fee paid to PRCM Advisers is 1.5% of our stockholders' equity per annum, calculated and payable quarterly in arrears.

For purposes of calculating the management fee, our stockholders' equity means the sum of the net proceeds from all issuances of our equity securities since inception (allocated on a pro rata daily basis for such issuances during the fiscal quarter of any such issuance), plus our retained earnings at the end of the most recently completed calendar quarter (without taking into account any non-cash equity compensation expense incurred in current or prior periods), less any amount that we have paid for repurchases of our common stock since inception, and excluding any unrealized gains, losses or other items that do not affect realized net income (regardless of whether such items are included in other comprehensive income or loss, or in net income). This amount will be adjusted to exclude one-time events pursuant to changes in accounting principles generally accepted in the United States of America, or U.S. GAAP, and certain non-cash items after discussions between PRCM Advisers and our independent directors and approval by a majority of our independent directors. To the extent asset impairments reduce our retained earnings at the end of any completed calendar quarter it will reduce the base management fee for such quarter. Our stockholders' equity for the purposes of calculating the base management fee could be greater than the amount of stockholders' equity shown on the consolidated financial statements.

Expense Reimbursement

We reimburse PRCM Advisers for (i) our allocable share of the compensation paid by Pine River to its personnel serving as our principal financial officer and general counsel and personnel employed by Pine River as in-house legal, tax, accounting, consulting, auditing, administrative, information technology, valuation, computer programming and development and back-office resources to us and (ii) any amounts for personnel of Pine River's affiliates arising under a shared facilities and services agreement. We also have certain costs allocated to us by PRCM Advisers for data services and technology, but most direct expenses with third-party vendors are paid directly by us.

Operating and Regulatory Structure

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

REIT Qualification

We elected to be taxed as a REIT under the Code, commencing with our taxable period ended December 31, 2009. Our qualification as a REIT depends upon our ability to meet on a continuing basis, through actual investment and operating results, various complex requirements under the Code relating to, among other things, the sources of our gross income, the composition and value of our assets, our distribution levels and the diversity of ownership of our shares. We believe that we are organized in conformity with the requirements for qualification and taxation as a REIT under the Code, and we conduct our operations in a manner which will enable us to continue to meet the requirements for qualification and taxation as a REIT. Certain activities that we may perform may cause us to earn income that will not be qualifying income for REIT purposes. We have designated certain of our subsidiaries as TRSs to engage in such activities, and we may in the future form additional TRSs.

As long as we continue to qualify as a REIT, we generally will not be subject to U.S. federal income tax on the REIT taxable income we distribute currently to our stockholders. If we fail to qualify as a REIT in any taxable year and do not qualify for certain statutory relief provisions, we will be subject to U.S. federal income tax at regular corporate rates and may be precluded from qualifying as a REIT for the subsequent four taxable years following the year during which we lost our REIT qualification. Even if we qualify for taxation as a REIT, we may be subject to certain U.S. federal, state and local taxes on our income or property.

Investment Company Act of 1940

We conduct our operations so that we are not required to register as an investment company under the 1940 Act. If we were to fall within the definition of an investment company, we would be unable to conduct our business as described in this Annual Report on Form 10-K.

Section 3(a)(1)(A) of the 1940 Act defines an investment company as any issuer that “is or holds itself out as being engaged primarily in the business of investing, reinvesting or trading in securities.” Section 3(a)(1)(C) of the 1940 Act also defines an investment company as any issuer that “is engaged or proposes to engage in the business of investing, reinvesting, owning, holding or trading in securities and owns or proposes to acquire investment securities having a value exceeding 40% of the value of the issuer’s total assets (exclusive of U.S. Government securities and cash items) on an unconsolidated basis.” Excluded from the term “investment securities,” among other things, are U.S. Government securities and securities issued by majority-owned subsidiaries that are not themselves investment companies and are not relying on the exclusion from the definition of investment company set forth in Section 3(c)(1) or Section 3(c)(7) of the 1940 Act.

We are organized as a holding company that conducts business primarily through our subsidiaries. Any business conducted through our subsidiaries will be conducted in such a manner as to ensure that we do not meet the definition of “investment company” because less than 40% of the value of our total assets on an unconsolidated basis would consist of “investment securities.”

To avoid registration as an investment company, certain of our subsidiaries rely on certain exemptions from the 1940 Act, including Section 3(c)(5)(C), which exempts entities that are “primarily engaged in the business of purchasing or otherwise acquiring mortgages and other liens on and interests in real estate.” Under the SEC staff’s current guidance, to qualify for this exemption, we must maintain (i) at least 55% of our assets in qualifying interests (referred to as the 55% Test) and (ii) at least 80% of our assets in qualifying interest plus other real estate related assets (referred to as the 80% Test). Qualifying interests for this purpose include mortgage loans and other assets, such as whole pool Agency and non-Agency RMBS, which are considered the functional equivalent of mortgage loans for the purposes of the 1940 Act. We expect each of our subsidiaries relying on Section 3(c)(5)(C) to invest at least 55% of its assets in qualifying interests in accordance with SEC staff guidance, and an additional 25% of its assets in either qualifying interests or other types of real estate related assets that do not constitute qualifying interests. We believe that we conduct our business so that we are exempt from the 1940 Act under Section 3(c)(5)(C), but rapid changes in the values of our assets could disrupt prior efforts to conduct our business to meet the 55% Test and the 80% Test. Our efforts to comply with the 55% Test and the 80% Test could require us to acquire or dispose of certain assets at unfavorable prices and limit our ability to pursue certain investment opportunities.

The SEC has previously solicited public comment on issues relating to the exemptions set forth in Section 3(c)(5)(C) of the 1940 Act, including what types of assets should be deemed qualifying interests and whether REITs that invest in RMBS should be regulated in a manner similar to investment companies. Although we believe that we are properly relying on Section 3(c)(5)(C) of the 1940 Act to exempt us from regulation under the 1940 Act, any modifications to the 1940 Act exemption rules or interpretations may require us to change our business and operations in order for us to continue to rely on such exemption. We will continue to monitor our compliance with the Section 3(c)(5)(C) exemptions.

Mortgage Industry Regulation

Although we do not originate or service residential mortgage loans, we must comply with various federal and state laws, rules and regulations as a result of owning residential mortgage loans and MSR. These rules generally focus on consumer protection and include, among others, rules promulgated under the Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, and the Gramm-Leach-Bliley Financial Modernization Act of 1999, or the Gramm-Leach-Bliley Act. We are also required to maintain qualifications and licenses in certain states in order to own certain of our assets. These requirements can and do change as statutes and regulations are enacted, promulgated or amended, and the trend in recent years among federal and state lawmakers and regulators has been toward increasing laws, regulations and investigative proceedings in relation to the mortgage industry generally.

The Gramm-Leach-Bliley Act imposes additional obligations on us to safeguard the information we maintain on mortgage loan borrowers, requires that we provide mortgage borrowers with notices describing how we collect, use and share their personal information, and allows mortgage borrowers to “opt-out” of sharing certain information with third parties and affiliates. In addition, certain states have passed a variety of laws to further protect borrower information, including laws that regulate the use and storage of personally identifiable information, require notifications to borrowers if the security of their personal information is breached, or require us to encrypt personal information when it is transmitted electronically. These federal and state laws require ongoing review and changes to our operations, increased compliance costs, and affect our ability to use and share information with third parties.

The Dodd-Frank Act significantly changed the regulation of financial institutions and the financial services industry, including the mortgage industry. The Dodd-Frank Act tasked many agencies with issuing a variety of new regulations, including rules related to mortgage origination, mortgage servicing, securitization transactions and derivatives.

The Dodd-Frank Act created a new regulator, the Consumer Financial Protection Bureau, or the CFPB, which is responsible for regulating the offering and provision of financial products and services for personal, family and household purposes. The CFPB has broad rulemaking authority with respect to many of the federal consumer protection laws applicable to the mortgage industry. In addition to its rulemaking authority, the CFPB has supervision, examination and enforcement authority over consumer financial products and services by certain non-depository institutions, including our company.

The CFPB has issued a series of final rules as part of ongoing efforts to affect reforms and create uniform standards for the mortgage lending and servicing industries. These rules include requirements addressing how lenders must evaluate a consumer’s ability to repay a mortgage loan, what specific communications must be made to consumers at various stages in the mortgage lending and servicing processes, how consumer account records must be maintained and how servicers must respond to written borrower requests, complaints and notices of errors. The rules also provide specific guidance relating to servicing delinquent loans, undertaking loss mitigation efforts and commencing foreclosure proceedings. These rules have led to and will likely continue to lead to increased costs to originate and service loans across the mortgage industry, and given their complexity, it is anticipated the originators, servicers and other mortgage industry participants will be exposed to greater regulatory scrutiny from federal and state regulators and increased litigation and complaints from both consumers and government officials. We expect the CFPB will continue to interpret and modify the rules, regulations and guidance related to mortgage lending and servicing industries and we will continue to evaluate these actions in order to understand the impact on our business and the industry, generally.

Because a significant number of rules and regulations under the Dodd-Frank Act relating to the origination and servicing of residential mortgage loans are recently effective or have not yet taken effect, the long term effect on the mortgage industry, including the availability of credit and the investing environment for our target assets, remains uncertain. We have implemented and will continue to implement new policies and procedures in order to ensure ongoing compliance with the laws, rules and regulations applicable to our business. We have incurred and expect to incur ongoing operational costs to comply with existing and future rules and regulations. We continue to monitor and evaluate rulemaking and other developments regarding the Dodd-Frank Act, including the comprehensive review of the act recently announced by the Trump administration.

Corporate Governance

We strive to maintain an ethical workplace in which the highest standards of professional conduct are practiced.

- Our board of directors is composed of a majority of independent directors. Our Audit, Compensation, Nominating and Corporate Governance and Risk Oversight Committees are composed exclusively of independent directors.
- In order to foster the highest standards of ethics and conduct in all of our business relationships, we have adopted a Code of Business Conduct and Ethics and Corporate Governance Guidelines, which cover a wide range of business practices and procedures that apply to all of our directors, officers and personnel. In addition, we have implemented Whistleblowing Procedures for Accounting and Auditing Matters that set forth procedures by which personnel may raise, on a confidential basis, concerns regarding any questionable or unethical accounting, internal accounting controls or auditing matters with our Audit Committee.

- We have an insider trading policy that prohibits our directors, officers and personnel from buying or selling our securities on the basis of material nonpublic information and prohibits communicating material nonpublic information about us to others. In addition, we have policies that prohibit our directors, officers and personnel from buying or selling the securities of other issuers on the basis of material nonpublic information that we may possess from time to time.
- We have a formal internal audit function to further the effective functioning of our internal controls and procedures. Our internal audit plan, which is approved annually by our Audit Committee, is based on a formal risk assessment and is intended to provide management and our Audit Committee with an effective tool to identify and address areas of financial or operational concerns and to ensure that appropriate controls and procedures are in place. We have implemented Section 404 of the Sarbanes-Oxley Act of 2002, as amended, or the SOX Act, which requires an evaluation of internal control over financial reporting in association with our financial statements as of December 31, 2016. See Item 9A, “*Controls and Procedures*” included in this Annual Report on Form 10-K.

Competition

Our net income depends, in large part, on our ability to acquire assets at favorable spreads over our borrowing costs. In acquiring our target assets, we compete with other REITs, specialty finance companies, savings and loan associations, banks, mortgage bankers, insurance companies, mutual funds, institutional investors, investment banking firms, financial institutions, governmental agencies, mortgage loan servicers, asset management firms and other entities. Some of these entities may not be subject to the same regulatory constraints that we are (*i.e.*, REIT compliance or maintaining an exemption under the 1940 Act). Many of our competitors are significantly larger than us, have access to greater capital and other resources and may have other advantages over us. In addition, some of our competitors may have higher risk tolerances or different risk assessments, which could allow them to consider a wider variety of investments and establish different counterparty relationships than us. Further, we may from time to time face competition from government agencies in connection with initiatives designed to stimulate the U.S. economy or the mortgage market. Market conditions may from time to time attract more competitors for certain of our target assets, which will not only affect the supply of assets but may also increase the competition for sources of financing for these assets. An increase in the competition for sources of funding could adversely affect the availability and cost of financing, and thereby adversely affect our financial results.

Financial Information

Financial information concerning our business for each of 2016, 2015 and 2014 is set forth in “*Management’s Discussion and Analysis of Financial Condition and Results of Operations*,” “*Qualitative and Quantitative Disclosures about Market Risk*” and the consolidated financial statements and the notes thereto, and the supplemental financial information, which are in Part II, Items 7, 7A and 8 of this Annual Report on Form 10-K.

Available Information

Our website can be found at www.twohARBORSinvestment.com. We make available, free of charge on our website (on the Investor Relations page under “SEC Filings”), our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and any amendments to those reports, as are filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act, as well as our proxy statement with respect to our annual meeting of stockholders, as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. Our Exchange Act reports filed with, or furnished to, the SEC are also available at the SEC’s website at www.sec.gov. The content of any website referred to in this Annual Report on Form 10-K is not incorporated by reference into this Form 10-K unless expressly noted.

We also make available, free of charge, the charters for our Audit Committee, Compensation Committee, Corporate Governance and Nominating Committee, and Risk Oversight Committee, as well as our Corporate Governance Guidelines, Code of Business Conduct and Ethics, Whistleblowing Procedures and Stockholder Communication Policy. Within the time period required by the SEC and the NYSE, 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 of Ethics).

Our Investor Relations Department can be contacted at:

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Attn: Investor Relations
590 Madison Avenue, 36th Floor
New York, NY 10022
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Item 1A. Risk Factors

The following is a summary of the significant risk factors known to us that we believe could have a material adverse effect on our business, financial condition and results of operations. In addition to understanding the key risks described below, investors should understand that it is not possible to predict or identify all risk factors and, consequently, the following is not a complete discussion of all potential risks or uncertainties.

Risks Related to Our Business and Operations

The value of your investment is subject to the significant risks affecting our business described below. If any of the events described below occur, our business, financial condition, liquidity and/or results of operations could be adversely affected in a material way.

Difficult conditions in the residential and commercial mortgage and real estate markets, the financial markets and the economy generally may adversely impact our business, results of operations and financial condition.

Our results of operations are materially affected by conditions in the residential and commercial mortgage and real estate markets, the financial markets and the economy generally. In recent years, concerns about the mortgage market, declines in home prices, increases in home foreclosures, high unemployment, the availability and cost of credit and rising government debt levels, as well as inflation, energy costs, U.S. budget debates, global economic lethargy, geopolitical unrest across various regions worldwide and European sovereign debt issues, have from time to time contributed to increased volatility and uncertainty in the economy and financial markets. The mortgage market continues to be adversely affected by tightened lending standards and decreased availability of credit since the 2008 financial crisis. This has an impact on new demand for homes, which may compress the home ownership rates and weigh heavily on future home price performance. There is a strong correlation between home price growth rates (or losses) and mortgage loan delinquencies. Additionally, adverse unemployment rates, financial market and economic conditions heighten the risks of delinquency and loss related to commercial properties that depend on consumer spending (e.g., hotels, shopping malls and apartment complexes). Any stagnation in or deterioration of the residential or commercial mortgage or real estate markets may limit our ability to acquire our target assets on attractive terms or cause us to experience losses related to our assets. Declines in the market values of our investments may adversely affect our results of operations and credit availability and cost, which may reduce earnings and, in turn, cash available for distribution to our stockholders.

Actions of the U.S. Government, including the U.S. Congress, U.S. Federal Reserve, U.S. Treasury and other governmental and regulatory bodies, to stabilize or reform the financial markets may not achieve their intended effects and may adversely affect our business.

The U.S. Government, including the U.S. Congress, U.S. Federal Reserve, U.S. Treasury and other governmental and regulatory bodies have from time to time taken actions designed to stabilize and reform the financial markets. In recent years, these activities have included the Federal Reserve's purchasing of Treasury and mortgage bonds in connection with its quantitative easing programs. There can be no assurance that, in the long term, these or any future actions will improve the efficiency and stability of the mortgage markets or U.S. financial markets. To the extent the mortgage or financial markets do not respond favorably to any of these actions or such actions do not function as intended, our business may be harmed. In addition, because the programs may be designed, in part, to improve the markets for certain of our target assets, the establishment of these programs may result in increased competition to acquire our target assets or, in the case of government-backed mortgage refinancing and modification programs, may have the effect of reducing the revenues associated with certain of our target assets. We cannot predict whether or when additional actions or initiatives to stabilize and stimulate the economy and the financial markets may occur or the potential impact to our business, operations and financial condition.

Our business model depends in part upon the continuing viability of Fannie Mae and Freddie Mac, or similar institutions, and any significant changes to their structure or creditworthiness could have an adverse impact on us.

We purchase Agency RMBS that are protected from the risk of default on the underlying mortgages by guarantees from Fannie Mae, Freddie Mac or, in the case of the Ginnie Mae, the U.S. Government. In the past, Fannie Mae and Freddie Mac have reported substantial losses and a need for substantial amounts of additional capital. In 2008, in response to the deteriorating financial condition of Fannie Mae and Freddie Mac, the U.S. Government and U.S. Treasury undertook a series of actions designed to stabilize these GSEs, including placing them into a federal conservatorship, under which the Federal Housing Finance Agency, or FHFA, operates Fannie Mae and Freddie Mac. In December 2009, the U.S. Government committed virtually unlimited capital to ensure the continued existence of Fannie Mae and Freddie Mac. Despite projections that the U.S. Treasury will continue to provide financing, there is no assurance that such capital will continue to be available or that the GSEs will honor their guarantees or other obligations. If these GSEs fail to honor their guarantees, the value of any Agency RMBS assets that we hold would decline.

The continued flow of residential mortgage-backed securities from the GSEs is essential to the operation of the mortgage markets in their current form, and crucial to our business model. In the wake of the financial crisis, Fannie Mae and Freddie Mac became the dominant, and in some cases, the only source of mortgage financing in the U.S. Although any reform would be expected to take several years to implement, if the structure of Fannie Mae or Freddie Mac were altered, or if they were eliminated altogether, the amount and type of Agency RMBS and other mortgage-related assets available for investment would be significantly affected. A reduction in supply of Agency RMBS and other mortgage-related assets would result in increased competition for those assets and likely lead to a significant increase in the price we would have to pay for such assets.

A number of legislative proposals have been introduced in recent years that would wind down or phase out the GSEs. It is not possible to predict the scope and nature of the actions that the U.S. Government, including the Trump administration, will ultimately take with respect to the GSEs. As a result, market uncertainty with respect to the treatment of the GSEs, including that which may be created by proposed legislation or the eventual adoption of laws affecting the GSEs, could have the effect of reducing the actual or perceived quality of, and therefore the market value for, the Agency RMBS that we currently hold in our portfolio. Moreover, if the guarantee obligations of Freddie Mac or Fannie Mae were repudiated by FHFA, payments of principal and/or interest to holders of Freddie Mac or Fannie Mae securities would be reduced in the event of any borrower's late payments or failure to pay, or a servicer's failure to remit, borrower payments to the trust. In that case, trust administration and servicing fees could be paid from mortgage payments prior to distributions to holders of agency securities. Any actual direct compensatory damages owed due to the repudiation of Freddie Mac or Fannie Mae's guarantee obligations may not be sufficient to offset any shortfalls experienced by holders of agency securities.

All of the foregoing could materially adversely affect the availability, pricing, liquidity, market value and financing of our target assets and materially adversely affect our business, operations and financial condition.

We operate in a highly regulated environment and may be adversely affected by changes in federal and state laws and regulations.

We operate in a highly regulated environment and are subject to rules, regulations, approvals, licensing, reporting and examination requirements of various federal and state authorities. Any change in applicable federal or state laws, rules and regulations, or the interpretation or enforcement thereof, could have a substantial impact on our assets, operating expenses, business strategies and results of operations. Our inability or failure to comply with the rules, regulations or reporting requirements, to obtain or maintain approvals and licenses applicable to our businesses, or to satisfy annual or periodic examinations may impact our ability to do business and expose us to fines, penalties or other claims and, as a result, could harm our business. Additionally, legislation and regulations may be enacted or adopted in the future that could significantly affect our business and operations, which could have a material adverse effect on our financial condition and results of operations.

The Dodd-Frank Act and regulations implementing such legislation have had a substantial impact on the mortgage industry and the RMBS markets; these regulations as well as new and pending regulations yet to be implemented under Dodd-Frank may have an adverse impact on our business, results of operations and financial condition.

On July 21, 2010, President Obama signed into law the Dodd-Frank Act, which has changed and continues to change the regulation of financial institutions and the financial services industry, including the mortgage industry. The Dodd-Frank Act tasked many agencies with issuing a variety of new regulations, including rules related to mortgage origination, mortgage servicing, securitization transactions and derivatives. While a majority of the rulemaking requirements established by the Dodd-Frank Act have been finalized, some of the rulemakings remain in the proposal phase or have yet to be proposed. In addition, the Trump administration has recently called for a comprehensive review of the act that may result in the modification or repeal of certain components of the act. Consequently, it is not possible to predict how additional regulatory changes under the Dodd-Frank Act will affect our business, and there can be no assurance that new or revised rules and regulations promulgated under the Dodd-Frank Act will not have an adverse effect on our business, results of operations and financial condition.

The Dodd-Frank Act created a new regulator, the CFPB, which is responsible for regulating the offering and provision of financial products and services for personal, family and household purposes. In addition to assuming many of the consumer financial protection functions exercised by other federal regulators under certain enumerated financial protection statutes, such as the Truth in Lending Act (TILA), the Real Estate Settlement Procedures Act (RESPA) and the Fair Credit Reporting Act, the CFPB was granted broad rulemaking and enforcement authority to protect consumers from unfair, deceptive or abusive acts and practices. The CFPB has issued a series of final rules as part of ongoing efforts to effect reforms and create uniform standards for the mortgage lending and servicing industries. These rules include requirements addressing how lenders must evaluate a consumer's ability to repay a mortgage loan, what specific communications must be made to consumers at various stages in the mortgage lending and servicing processes, how consumer account records must be maintained and how servicers must respond to written borrower requests, complaints and notices of errors. The rules also provide specific guidance relating to servicing delinquent loans, undertaking loss mitigation efforts and commencing foreclosure proceedings.

Mortgage servicing rules promulgated by the CFPB to implement certain sections of Dodd-Frank include provisions relating to periodic billing statements and disclosures, responding to borrower inquiries and complaints, force-placed insurance, and adjustable rate mortgage interest rate adjustment notices. Further, the mortgage servicing rules require servicers to, among other things, make good faith early intervention efforts to notify delinquent borrowers of loss mitigation options, to implement specified loss mitigation procedures, and if feasible, exhaust all loss mitigation options before proceeding to foreclosure. In August 2016, the CFPB adopted certain updates to these rules, the majority of which take effect in 2017, designed to expand protections for struggling homeowners. These updates will impact the manner in which servicers are required to communicate with borrowers who have applied for loss mitigation, provide additional protections for successors in interest and require additional disclosures to borrowers in bankruptcy.

The foregoing rules have led and will likely lead to increased costs to originate and service loans across the mortgage industry, and given their complexity, it is anticipated that originators, servicers and other mortgage industry participants will be exposed to greater regulatory scrutiny from federal and state regulators, and increased litigation and complaints from consumers and government officials.

We have incurred and expect to incur in the future operational and system costs necessary to maintain processes to ensure compliance with the rules and regulations applicable to us as well as to monitor compliance by our business partners. Additional rules and regulations implemented by the CFPB could lead to changes in the way we conduct our business and increased costs of compliance, both of which may have an adverse impact on our business and financial condition.

We operate in a highly competitive market and we may not be able to compete successfully.

We operate in a highly competitive market. Our profitability depends, in large part, on our ability to acquire a sufficient supply of our target assets at favorable prices. In acquiring assets, we compete with a variety of investors, including other mortgage REITs, specialty finance companies, public and private investment funds, asset managers, commercial and investment banks, broker-dealers, commercial finance and insurance companies, the GSEs, mortgage servicers and other financial institutions. Many of our competitors are substantially larger and have greater financial, technical, marketing and other resources than we do. Certain competitors may also have a broader investment mandate or higher risk tolerance, which may allow them to consider a wider variety of potential investments. Additionally, we may face significant competition from governmental actions and initiatives designed to stimulate the U.S. economy and mortgage market, which in recent years has included the Federal Reserve purchasing mortgage bonds. Competition for our target assets may lead to the price of such assets increasing and their availability decreasing, which may limit our ability to generate desired returns, reduce our earnings and, in turn, decrease the cash available for distribution to our stockholders.

We may change any of our strategies, policies or procedures without stockholder consent.

We may change any of our strategies, policies or procedures with respect to investments, asset allocation, growth, operations, indebtedness, financing strategy and distributions at any time without the consent of stockholders, which could result in our making investments that are different from, and possibly riskier than, the types of investments described in this Annual Report on Form 10-K. Changes in strategy could also result in the elimination of certain investments and business activities that we no longer view as attractive or in alignment with our business model. Shifts in strategy may increase our exposure to credit risk, interest rate risk, financing risk, default risk, regulatory risk and real estate market fluctuations. We also cannot assure you that we will be able to effectively execute or to realize the potential benefits of changes in strategy. Any such changes could adversely affect our financial condition, risk profile, results of operations, the market price of our common stock and our ability to make distributions to stockholders.

We have invested in and may in the future invest in a variety of mortgage-related and other financial assets that may or may not be closely related to our current business. Additionally, we may enter other operating businesses that may or may not be closely related to our current business. These new assets or business operations may have new, different or increased risks than what we are currently exposed to in our business and we may not be able to manage these risks successfully. Additionally, when investing in new assets or businesses we will be exposed to the risk that those assets, or income generated by those assets or businesses, will affect our ability to meet the requirements to maintain our REIT status or our status as exempt from registration under the 1940 Act. If we are not able to successfully manage the risks associated with new assets types or businesses, it could have an adverse effect on our business, results of operations and financial condition.

Our risk management policies and procedures may not be effective.

We have established and maintain risk management policies and procedures designed to identify, monitor and mitigate financial risks, such as credit risk, interest rate risk, prepayment risk and liquidity risk, as well as operational risks related to our business, assets and liabilities. These policies and procedures may not sufficiently identify all of the risks to which we are or may become exposed or mitigate the risks we have identified. Any expansion of our business activities may result in our being exposed to risks to which we have not previously been exposed or may increase our exposure to certain types of risks. Any failure to effectively identify and mitigate the risks to which we are exposed could have an adverse effect on our business, results of operations and financial condition.

Maintaining our exemptions from registration as an investment company under the 1940 Act imposes limits on our operations.

We intend to conduct our operations so as not to become required to register as an investment company under the 1940 Act. Section 3(a)(1)(A) of the 1940 Act defines an investment company as any issuer that is or holds itself out as being engaged primarily in the business of investing, reinvesting or trading in securities. Section 3(a)(1)(C) of the 1940 Act defines an investment company as any issuer that is engaged or proposes to engage in the business of investing, reinvesting, owning, holding or trading in securities and owns or proposes to acquire investment securities having a value exceeding 40% of the value of the issuer's total assets (exclusive of U.S. Government securities and cash items) on an unconsolidated basis. Excluded from the term "investment securities," among other things, are U.S. Government securities and securities issued by majority-owned subsidiaries that are not themselves investment companies and are not relying on the exception from the definition of investment company set forth in Section 3(c)(1) or Section 3(c)(7) of the 1940 Act.

We are organized as a holding company that conducts its businesses primarily through our subsidiaries. We intend to conduct the operations of Two Harbors and its subsidiaries so that they do not come within the definition of an investment company, either because less than 40% of the value of their total assets on an unconsolidated basis will consist of "investment securities" or because they meet certain other exceptions or exemptions set forth in the 1940 Act based on the nature of their business purpose and activities, such as the Rule 3a-7 structured finance exemption for issuers of asset-backed securities or the Section 3(c)(3) exemption for insurance companies.

Certain of our subsidiaries intend to rely upon the exemption set forth in Section 3(c)(5)(C) of the 1940 Act, which is available for entities "primarily engaged in the business of purchasing or otherwise acquiring mortgages and other liens on and interests in real estate." This exemption generally means that at least 55% of each such subsidiary's portfolio must be comprised of qualifying assets and at least 80% of its portfolio must be comprised of qualifying assets and real estate-related assets under the 1940 Act. Qualifying assets for this purpose include mortgage loans and other assets, such as whole pool Agency and non-Agency RMBS, which are considered the functional equivalent of mortgage loans for the purposes of the 1940 Act. We expect each of our subsidiaries relying on Section 3(c)(5)(C) to invest at least 55% of its assets in whole pool Agency and non-Agency RMBS and other interests in real estate that constitute qualifying assets in accordance with SEC staff guidance and an additional 25% of its assets in either qualifying assets and other types of real estate related assets that do not constitute qualifying assets.

As a result of the foregoing restrictions, we are limited in our ability to make or dispose of certain investments. To the extent the SEC publishes new or different guidance with respect to these matters, we may be required to adjust our strategy accordingly. In addition, we may be limited in our ability to make certain investments, which could result in a subsidiary holding assets that we might wish to sell or selling assets that we might wish to hold. Although we monitor the portfolios of our subsidiaries relying on the Section 3(c)(5)(C) exemption periodically and prior to each acquisition or disposition of assets, there can be no assurance that such subsidiaries will be able to maintain this exemption.

We make the determination as to whether a subsidiary is considered a majority-owned subsidiary. The 1940 Act defines a majority-owned subsidiary of a person as a company 50% or more of the outstanding voting securities of which are owned by such person, or by another company which is a majority-owned subsidiary of such person. The 1940 Act further defines voting securities as any security presently entitling the owner or holder thereof to vote for the election of directors of a company. We treat companies in which we own at least a majority of the outstanding voting securities as majority-owned subsidiaries for purposes of the 40% test. We have not requested the SEC staff to approve our treatment of any company as a majority-owned subsidiary and the SEC staff has not done so. If the SEC or its staff were to disagree with our treatment of one or more companies as majority-owned subsidiaries, we may need to adjust our strategy and our assets in order to continue to pass the 40% test. Any such adjustment in our strategy could have a material adverse effect.

Qualification for exemptions from registration under the 1940 Act limits our ability to make certain investments. For example, these restrictions limit the ability of our subsidiaries to invest directly in mortgage-backed securities that represent less than the entire ownership in a pool of mortgage loans, debt and equity tranches of securitizations and certain asset backed securities and real estate companies or in assets not related to real estate.

Loss of our 1940 Act exemptions would adversely affect us, the market price of shares of our common stock and our ability to distribute dividends, and could result in the termination of our management agreement with PRCM Advisers and certain of our financing or other agreements.

As described above, we intend to conduct operations so that we are not required to register as an investment company under the 1940 Act. Although we monitor our portfolio and our activities periodically, there can be no assurance that we will be able to maintain our exemption from investment company registration under the 1940 Act. In 2011, the SEC issued a “concept release” soliciting public comment on a wide range of issues relating to the exemptions set forth in Section 3(c)(5)(C) of the 1940 Act, including what types of assets should be deemed qualifying interests and whether REITs that invest in RMBS should be regulated in a manner similar to investment companies. Although we believe that we are properly relying on Section 3(c)(5)(C) to exempt us from regulation under the 1940 Act, any modifications to the 1940 Act exemption rules or interpretations may require us to change our business and operations in order for us to continue to rely on such exemption. Additionally, any uncertainty regarding our 1940 Act exemption could negatively impact our ability to raise capital, borrow money, or engage in certain other types of business transactions, which could materially and adversely affect our business, operations, and financial condition. There can be no assurance that the rules, regulations and interpretations governing the exemptions available under the 1940 Act will not change in a manner that adversely affects our operations. If we were no longer able to qualify for exemptions from registration under the 1940 Act, we could be required to restructure our activities or the activities of our subsidiaries, including effecting sales of assets in a manner that, or at a time when, we would not otherwise choose, which could negatively affect the value of our common stock, the sustainability of our business model, and our ability to make distributions. Such sales could occur during adverse market conditions, and we could be forced to accept prices below that which we believe are appropriate. The loss of our 1940 Act exemptions may also result in a default under or permit certain of our counterparties to terminate the many repurchase agreements, financing facilities or other agreements we have in place, including permitting PRCM Advisers to terminate our management agreement. The termination of any of these agreements could result in a material adverse effect on our business and results of operations.

Rapid changes in the values of our assets may make it more difficult for us to maintain our qualification as a REIT or our exemption from the 1940 Act.

If the market value or income potential of our assets declines as a result of increased interest rates, prepayment rates, general market conditions, government actions or other factors, we may need to increase our real estate assets and income or liquidate our non-qualifying assets in order to maintain our REIT qualification or our exemption from the 1940 Act. If the decline in real estate asset values or income occurs quickly, this may be especially difficult to accomplish. This difficulty may be exacerbated by the illiquid nature of any non-real estate assets we may own. We may have to make decisions that we otherwise would not make absent the REIT and 1940 Act considerations.

If we were required to register with the CFTC as a Commodity Pool Operator, it could adversely affect our business model, our financial condition and our results of operations.

Under the Dodd-Frank Act, the U.S. Commodity Futures Trading Commission, or CFTC, was given jurisdiction over the regulation of swaps. Under rules implemented by the CFTC, companies that utilize swaps as part of their business model, including many mortgage REITs, are deemed to fall within the statutory definition of Commodity Pool Operator, or CPO, and are required to register with the CFTC as a CPO. On December 7, 2012, the CFTC issued no-action relief that permits a CPO to receive relief from registration requirements if it meets certain criteria. While we believe we meet the criteria for such relief, there can be no assurance that the CFTC will not withdraw the no-action letter in the future or that we will continue to satisfy the criteria to qualify for relief from CPO registration. If we were required to register as a CPO in the future or change our business model to ensure we can continue to satisfy the criteria to qualify for the no-action relief, it could impact our ability to operate our business and adversely affect our financial condition and results of operations.

The lack of liquidity of our assets may adversely affect our business, including our ability to value, finance and sell our assets.

We have and may in the future acquire assets or other instruments with limited or no liquidity, including securities, commercial real estate assets, MSR and other instruments that are not publicly traded. Market conditions could also significantly and negatively affect the liquidity of our assets. It may be difficult or impossible to obtain third-party pricing on such illiquid assets and validating third-party pricing for illiquid assets may be more subjective than more liquid assets. Illiquid assets typically experience greater price volatility, as a ready market may not exist for such assets, and such assets can be more difficult to value.

Any illiquidity in our assets may make it difficult for us to sell such assets if the need or desire arises. Unlike equity securities, bonds or other exchange-traded instruments with highly liquid markets, the ability to quickly sell certain of our target assets, such as certain securities, commercial real estate assets and MSR, may be constrained by a number of factors, including a small number of willing buyers, lack of transparency as to current market terms and price, and time delays resulting from the buyer's desire to conduct due diligence on the assets, negotiation of a purchase and sale agreement, compliance with any applicable contractual or regulatory requirements, and for certain assets like MSR, the need for certain approvals from the investor in the underlying mortgage loan (e.g., Fannie Mae or Freddie Mac), all of which can result in a sale process that takes several weeks or months. Assets such as commercial mortgages, B-notes, mezzanine and other loans (including participations) and preferred equity, in particular, are relatively illiquid due to their short life, their potential unsuitability for securitization and the greater difficulty of recovery in the event of a borrower's default. Moreover, certain of our assets may not be registered under the relevant securities laws, resulting in prohibitions against their transfer, sale, pledge or their disposition except in transactions that are exempt from registration requirements or are otherwise in accordance with such laws. Consequently, even if we identify a buyer for certain of our securities, mortgage loans, commercial real estate assets and MSR, there is no assurance that we would be able to sell such assets in a timely manner if the need or desire arises. In addition, if we are required to liquidate all or a portion of our portfolio quickly, we may be forced to sell our assets at a price that is significantly less than the value at which we previously attributed to such assets.

Assets that are illiquid are more difficult to finance. As a result, we may be required to finance the assets at unattractive rates or hold them on our balance sheet without the use of leverage. Assets tend to become less liquid during times of financial stress, which is often the time that liquidity is most needed. To the extent that we use leverage to finance assets that later become illiquid, we may lose that leverage if the financing counterparty determines that the collateral is no longer sufficient to secure the financing, or the counterparty could reduce the amount of money that it is willing to lend against the asset.

The illiquidity of certain of our assets may, therefore, adversely impact our ability to manage our portfolio and adversely affect our financial condition and results of operations.

We use leverage in executing our business strategy, which may adversely affect the return on our assets and may reduce cash available for distribution to our stockholders, as well as increase losses when economic conditions are unfavorable.

We use leverage to finance many of our investments and to enhance our financial returns. Our primary source of leverage is short-term repurchase agreement financing for our Agency and Non-Agency RMBS assets and commercial real estate assets. We also use revolving credit facilities to finance MSR. Other sources of leverage may include credit facilities (including term loans, revolving facilities and FHLB advances) as well as the public issuance of debt securities.

Through the use of leverage, we may acquire positions with market exposure significantly greater than the amount of capital committed to the transaction. For example, by entering into repurchase agreements with advance rates, or haircut levels, of 5% (which is not an atypical haircut for Agency RMBS), we could leverage capital allocated to Agency RMBS by a ratio of as much as 20 to 1. It is not uncommon for investors in Agency RMBS to obtain leverage equal to ten or more times equity through the use of repurchase agreement financing. Subject to market conditions, we anticipate that we may deploy, on a debt-to-equity basis, up to ten times leverage on our Agency RMBS assets and up to two times on our non-Agency RMBS assets; however, there is no specific limit on the amount of leverage that we may use.

Leverage will magnify both the gains and the losses of our positions. Leverage will increase our returns as long as we earn a greater return on investments purchased with borrowed funds than our cost of borrowing such funds. However, if we use leverage to acquire an asset and the value of the asset decreases, the leverage will increase our losses. Even if the asset increases in value, if the asset fails to earn a return that equals or exceeds our cost of borrowing, the leverage will decrease our returns.

We may be required to post large amounts of cash as collateral or margin to secure our leveraged positions. In the event of a sudden, precipitous drop in value of our financed assets, we might not be able to liquidate assets quickly enough to repay our borrowings, further magnifying losses. Even a small decrease in the value of a leveraged asset may require us to post additional margin or cash collateral. This may adversely affect our financial condition and results of operations, and decrease the cash available to us for distributions to stockholders.

We may not be able to raise the capital required to finance our assets and grow our business.

The operation of our business may require access to debt and equity capital that may or may not be available on favorable terms or at the desired times, or at all. In addition, we invest in certain assets, including MSR, for which financing has historically been difficult or costly to obtain. Any limitation on our ability to obtain financing for our target assets could require us to seek equity or debt capital that may be more costly or unavailable to us. We cannot assure you that we will have access to any debt or equity capital on favorable terms or at the desired times, or at all. Our inability to raise such capital or obtain financing on favorable terms could materially adversely impact our business, operations, financial condition, liquidity, and our ability to make distributions to stockholders.

We depend on repurchase agreements and other credit facilities to execute our business plan and any limitation on our ability to access funding through these sources could have a material adverse effect on our results of operations, financial condition and business.

Our ability to purchase and hold assets is affected by our ability to secure repurchase agreements and other credit facilities on acceptable terms. We currently have repurchase agreements, revolving credit facilities and other credit facilities in place with several counterparties, including national banks and the FHLB. In the future we may enter into additional or increase commitment amounts under our existing repurchase agreements, revolving credit facilities and credit facilities, but we can provide no assurance that lenders will be willing or able to provide us with sufficient financing through the repurchase markets or otherwise. In addition, because repurchase agreements and similar credit facilities are generally short-term commitments of capital, changes in conditions in the financing markets may make it more difficult for us to secure continued financing during times of market stress. During certain periods of a credit cycle, lenders may lose their ability or curtail their willingness to provide financing. If we are not able to arrange for replacement financing on acceptable terms, or if we default on our covenants or are otherwise unable to access funds under any of our repurchase agreements and credit facilities, we may have to curtail our asset acquisition activities and/or dispose of assets.

Our ability to efficiently access our repurchase agreements may be adversely impacted by counterparty requirements regarding the type of assets that may be sold and the timing and process for such sales. In order for us to borrow funds under our repurchase agreements, counterparties must first review the assets for which we are seeking financing and approve such assets in their sole discretion. This review and approval process may delay the timing in which funding may be provided, or preclude funding altogether. In addition, the review and sale process can be more time consuming with respect to certain asset classes, such as certain commercial real estate assets.

It is possible that the lenders that provide us with financing could experience changes in their ability to advance funds to us, independent of our creditworthiness or the value of our assets. For example, the Basel III regulatory capital reform rules or other regulatory changes, may have the effect of significantly changing or eliminating the sources of financing that are customarily available to us. If regulatory requirements imposed on our lenders change, they may be required to significantly increase the cost of the financing that they provide to us or eliminate it altogether. Our lenders also may revise their eligibility requirements for the types of assets they are willing to finance or the terms of such financings, based on, among other factors, the regulatory environment and their management of perceived risk.

In January 2016, the FHFA issued a final rule that will exclude captive insurers from ongoing FHLB membership. Our subsidiary, TH Insurance Holdings Company LLC, or TH Insurance, is a licensed captive insurer and has been a member of the FHLB of Des Moines since 2013. Pursuant to the final rule, TH Insurance will be allowed to remain an FHLB member through February 19, 2021. During this grace period, any new advances or renewals that mature beyond the grace period will be prohibited. However, any existing advances that mature beyond this grace period will be permitted to remain in place subject to their terms insofar as TH Insurance maintains good standing with the FHLB. If any new advances or renewals occur, TH Insurance's outstanding advances will be limited to forty percent of its assets. While we do not expect the final rule to have a near- or intermediate-term impact on our financing profile, we cannot assure you that, in the future, we will be able to obtain financing on similar terms, if at all, which could have material adverse impact on our business.

Changes in the financing markets could adversely affect the marketability of the assets in which we invest, and this could negatively affect the value of our assets. If our lenders are unwilling or unable to provide us with financing, or if the financing is only available on terms that are uneconomical or otherwise not satisfactory to us, we could be forced to sell assets when prices are depressed. The amount of financing we receive under our repurchase agreements, revolving credit facilities or other credit facilities will be directly related to the lenders' valuation of the assets that secure the outstanding borrowings. Typically, repurchase agreements and similar lending arrangements grant the respective lender the right to reevaluate the market value of the assets that secure outstanding borrowings at any time. If a lender determines that the value of the assets has decreased, it has the right to initiate a margin call, requiring us to transfer additional assets to such lender or repay a portion of the outstanding borrowings. Any such margin call could have a material adverse effect on our results of operations, financial condition, business, liquidity and ability to make distributions to stockholders, and could cause the value of our common stock to decline. We may be forced to sell assets at significantly depressed prices to meet margin calls and to maintain adequate liquidity, which could cause us to incur losses. Moreover, to the extent that we are forced to sell assets because of availability of financing or changes in market conditions, other market participants may face similar pressures, which could exacerbate a difficult market environment and result in significantly greater losses on the sale of such assets. In an extreme case of market duress, a market may not exist for certain of our assets at any price.

Although we generally seek to reduce our exposure to lender concentration-related risk by entering into repurchase agreements and other credit facilities with multiple counterparties, we are not required to observe specific diversification criteria, except as may be set forth in the investment guidelines adopted by our board of directors. To the extent that the number of or net exposure under our lending arrangements may become concentrated with one or more lenders, the adverse impacts of defaults or terminations by such lenders may be significantly greater. As of December 31, 2016, repurchase agreement and other lenders for whom our net exposure (generally, the value of assets sold under repurchase agreements or posted as loan collateral, less the amount of the associated liabilities) exceeded 5% of stockholders' equity included the Royal Bank of Canada, Citibank, N.A., JPMorgan Chase Bank, N.A. and the FHLB. See Note 16 - *Repurchase Agreements* and Note 18 - *Federal Home Loan Bank of Des Moines Advances* for additional information.

Our inability to meet certain financial covenants related to our repurchase agreements, revolving credit facilities or other credit facilities could adversely affect our financial condition, results of operations and cash flows.

In connection with certain of our repurchase agreements, revolving credit facilities and other credit facilities, we are required to comply with certain financial covenants, the most restrictive of which are disclosed within Item 7, "*Management's Discussion and Analysis of Financial Conditions and Results of Operations*" of this Annual Report on Form 10-K. Compliance with these financial covenants will depend on market factors and the strength of our business and operating results. Various risks, uncertainties and events beyond our control could affect our ability to comply with the financial covenants. Failure to comply with our financial covenants could result in an event of default, termination of the lending facility, acceleration of all amounts owing under the lending facility, and gives the counterparty the right to exercise certain other remedies under the lending agreement, including without limitation the sale of the asset subject to repurchase at the time of default, unless we were able to negotiate a waiver. Any such waiver could be conditioned on an amendment to the lending agreement and any related guaranty agreement on terms that may be unfavorable to us. If we are unable to negotiate a covenant waiver or replace or refinance our assets under a new lending facility on favorable terms or at all, our financial condition, results of operations and cash flows could be adversely affected.

If a counterparty to a repurchase agreement defaults on its obligation to resell the underlying security back to us at the end of the purchase agreement term, or if the value of the underlying asset has declined as of the end of that term, or if we default on our obligations under the repurchase agreement, we may incur losses.

When we enter into repurchase agreements, we sell the assets to lenders (*i.e.*, repurchase agreement counterparties) and receive cash from the lenders. The lenders are obligated to resell the same assets back to us at the end of the term of the repurchase agreement. Because the cash that we receive from the lender when we initially sell the assets to the lender is less than the value of those assets (the difference being the "haircut"), if the lender defaults on its obligation to resell the same assets back to us, we would incur a loss on the repurchase agreement equal to the amount of the haircut (assuming there was no change in the value of the securities). We would also incur losses on a repurchase agreement if the value of the underlying assets has declined as of the end of the repurchase agreement term, because we would have to repurchase the assets for their initial value but would receive assets worth less than that amount. Further, if we default on our obligations under a repurchase agreement, the lender will be able to terminate the repurchase agreement and cease entering into any other repurchase agreements with us. Typically, our repurchase agreements contain cross-default provisions, so that if a default occurs under any repurchase agreement, the lender can also declare a default with respect to all other repurchase agreements they have with us. If a default occurs under any of our repurchase agreements and a lender terminates one or more of its repurchase agreements, we may need to enter into replacement repurchase agreements with different lenders. There can be no assurance that we will be successful in entering into such replacement repurchase agreements on the same terms as the repurchase agreements that were terminated or at all. Any losses that we incur on our repurchase agreements could adversely affect our earnings and thus our cash available for distribution to stockholders.

Our rights under our repurchase agreements are subject to the effects of bankruptcy laws in the event of the bankruptcy or insolvency of us or our lenders under the repurchase agreements.

In the event of our insolvency or bankruptcy, certain repurchase agreements may qualify for special treatment under the U.S. Bankruptcy Code, the effect of which, among other things, would be to allow the lender under the applicable repurchase agreement to avoid the automatic stay provisions of the U.S. Bankruptcy Code and to foreclose on the collateral agreement without delay. In the event of the insolvency or bankruptcy of a lender during the term of a repurchase agreement, the lender may be permitted, under applicable insolvency laws, to repudiate the contract, and our claim against the lender for damages may be treated simply as an unsecured creditor. In addition, if the lender is a broker or dealer subject to the Securities Investor Protection Act of 1970, or an insured depository institution subject to the Federal Deposit Insurance Act, our ability to exercise our rights to recover our assets under a repurchase agreement or to be compensated for any damages resulting from the lender's insolvency may be further limited by those statutes. These claims would be subject to significant delay and, if and when received, may be substantially less than the damages we actually incur.

The impairment or negative performance of other financial institutions could adversely affect us.

We have exposure to and routinely execute transactions with counterparties in the financial services industry, including broker-dealers, commercial banks, investment banks, investment funds and other institutions. The operations of U.S. and global financial services institutions are highly interconnected and a decline in the financial condition of one or more financial services institutions may expose us to credit losses or defaults, limit our access to liquidity or otherwise disrupt the operations of our businesses. While we regularly assess our exposure to different counterparties, the performance and financial strength of specific institutions are subject to rapid change, the timing and extent of which cannot be known.

Downgrades in the credit or financial strength ratings assigned to the counterparties with whom we transact or other adverse reputational impacts to such counterparties could create the perception that our business or financial condition will be adversely impacted as a result of potential future defaults by such counterparties. Additionally, we could be adversely affected by a general, negative perception of financial institutions caused by the downgrade or other adverse impact to the reputation of other financial institutions. Accordingly, ratings downgrades or other adverse reputational impacts for other financial institutions could adversely affect our business and financial condition and could limit access to or increase our cost of capital.

We may not have the ability to raise funds necessary to pay principal amounts owed upon maturity of our outstanding convertible senior notes or to purchase such notes upon a fundamental change.

In January 2017, we issued through an underwritten public offering \$287,500,000 in aggregate principal amount of 6.25% convertible senior notes due January 2022. To the extent these notes are not converted by the noteholders prior to their maturity date, we will be obligated to repay the principal amount of all outstanding notes upon maturity. In addition, if a fundamental change occurs (as described in the First Supplemental Indenture governing the notes) noteholders have the right to require us to purchase for cash any or all of their notes. The fundamental change purchase price will equal 100% of the principal amount of the notes to be purchased, plus accrued and unpaid interest, if any, to, but excluding, the fundamental change purchase date. We may not have sufficient funds available at the time we are required to repay principal amounts or to purchase the notes upon a fundamental change, and we may not be able to arrange necessary financing for such payments on acceptable terms, if at all. In addition, our ability to purchase the notes may be limited by law, by regulatory authority or by the agreements governing our other indebtedness outstanding at the time. If we fail to pay any amounts associated with the notes when due, we may be in default under the indenture governing the notes. A default under the indenture or a fundamental change itself could also constitute a default under the agreements governing our other existing and future indebtedness, which would further restrict our ability to make required payments under the notes. As a consequence of the foregoing matters, our business, financial condition and results of operations may be adversely affected.

An increase in our borrowing costs relative to the interest that we receive on our leveraged assets may adversely affect our profitability and our cash available for distribution to stockholders.

As our repurchase agreements and other short-term borrowings mature, we must enter into new borrowings, find other sources of liquidity or sell assets. An increase in short-term interest rates at the time that we seek to enter into new borrowings would reduce the spread between the returns on our assets and the cost of our borrowings. This would adversely affect the returns on our assets, which might reduce earnings and, in turn, cash available for distribution to stockholders.

We are highly dependent on information technology and security breaches or systems failures could significantly disrupt our business, which may, in turn, negatively affect the market price of our common stock and our ability to pay dividends.

Our business is highly dependent on information technology. In the ordinary course of our business, we may store sensitive data, including our proprietary business information and that of our business partners, and personally identifiable information of mortgage borrowers, on our networks. The secure maintenance and transmission of this information is critical to our operations. Despite our security measures, our information technology and infrastructure may be vulnerable to attacks by hackers or breached due to employee error, malfeasance or other disruptions. Any such breach could compromise our networks and the information stored there could be accessed, publicly disclosed, lost or stolen. Any such access, disclosure or other loss of information could result in legal claims or proceedings, liability under laws that protect the privacy of personal information, regulatory penalties, disrupt our operations, disrupt our trading activities, or damage our reputation, which could have a material adverse effect on our financial results and negatively affect the market price of our common stock and our ability to pay dividends to stockholders.

The resources required to protect our information technology and infrastructure, and to comply with the laws and regulations related to data and privacy protection, are subject to uncertainty. Even in circumstances where we are able to successfully protect such technology and infrastructure from attacks, we may incur significant expenses in connection with our responses to such attacks. In addition, recent well-publicized security breaches have led to enhanced government and regulatory scrutiny of the measures taken by companies to protect against cyber-security attacks, and may in the future result in heightened cyber-security requirements and/or additional regulatory oversight. As cyber-security threats and government and regulatory oversight of associated risks continue to evolve, we may be required to expend additional resources to enhance or expand upon the security measures we currently maintain. Any such actions may adversely impact our results of operations and financial condition.

We enter into hedging transactions that expose us to contingent liabilities in the future, which may adversely affect our financial results or cash available for distribution to stockholders.

We engage in transactions intended to hedge against various risks to our portfolio, including the exposure to changes in interest rates. The extent of our hedging activity varies in scope based on, among other things, the level and volatility of interest rates, the type of assets held and other market conditions. Although these transactions are intended to reduce our exposure to various risks, hedging may fail to adequately protect or could adversely affect us because, among other things:

- hedging can be expensive, particularly during periods of volatile or rapidly changing interest rates;
- available hedges may not correspond directly with the risks for which protection is sought;
- the duration of the hedge may not match the duration of the related liability;
- the amount of income that a REIT may earn from certain hedging transactions (other than through our TRSs) is limited by U.S. federal income tax provisions;
- the credit quality of a hedging counterparty may be downgraded to such an extent that it impairs our ability to sell or assign our side of the hedging transaction; and
- the hedging counterparty may default on its obligations.

Subject to maintaining our qualification as a REIT and satisfying the criteria for no-action relief from the CFTC's CPO registration rules, there are no current limitations on the hedging transactions that we may undertake. Our hedging transactions could require us to fund large cash payments in certain circumstances (*e.g.*, the early termination of the hedging instrument caused by an event of default or other early termination event, or a demand by a counterparty that we make increased margin payments).

Our ability to fund these obligations will depend on the liquidity of our assets and our access to capital at the time. The need to fund these obligations could adversely affect our financial condition. Further, hedging transactions, which are intended to limit losses, may actually result in losses, which would adversely affect our earnings and could in turn reduce cash available for distribution to stockholders.

The Dodd-Frank Act regulates derivative transactions, including certain hedging instruments we use in our risk management activities. Rules implemented by the CFTC pursuant to the Dodd-Frank Act require, among other things, that certain derivatives be cleared through a registered clearing facility and traded on a designated exchange or swap execution facility. These regulations could increase the operational and transactional cost of derivatives contracts and affect the number and/or creditworthiness of available counterparties. Furthermore, the enforceability of agreements underlying hedging transactions may depend on compliance with applicable statutory and commodity and other regulatory requirements and, depending on the identity of the counterparty, applicable international requirements. The business failure of a hedging counterparty will most likely result in its default. Default by a hedging counterparty may result in the loss of unrealized profits and force us to cover our commitments, if any, at the then current market price. Although generally we seek to reserve the right to terminate our hedging positions, it may not always be possible to dispose of or close out a hedging position without the consent of the hedging counterparty and we may not be able to enter into an offsetting contract in order to cover our risk. We cannot assure you that a liquid secondary market will exist for hedging instruments purchased or sold, and we may be required to maintain a position until exercise or expiration, which could result in losses.

Our results may experience greater fluctuations due to our decision not to elect hedge accounting treatment on our derivative instruments.

We have elected to not qualify for hedge accounting treatment under Accounting Standards Codification (ASC) 815, *Derivatives and Hedging*, or ASC 815, for our current derivative instruments. The economics of our derivative hedging transactions are not affected by this election; however, our earnings (losses) for U.S. GAAP purposes, or GAAP net income (loss), may be subject to greater fluctuations from period to period as a result of this accounting treatment for changes in fair value of certain interest rate swap agreements or for the accounting of the underlying hedged assets or liabilities in our financial statements, as it does not necessarily align with the accounting used for interest rate swap agreements.

We depend on third-party service providers, including mortgage loan servicers, for a variety of services related to our business. We are, therefore, subject to the risks associated with third-party service providers.

We depend on a variety of services provided by third-party service providers related to our investments in RMBS, MSR and commercial real estate assets as well as for general operating purposes. For example, we rely on the mortgage servicers who service the mortgage loans underlying our RMBS and MSR assets to, among other things, collect principal and interest payments on such mortgage loans and perform loss mitigation services in accordance with applicable laws and regulations. Mortgage servicers and other service providers, such as trustees, bond insurance providers, due diligence vendors and document custodians, may fail to perform or otherwise not perform in a manner that promotes our interests.

For example, legislation intended to reduce or prevent foreclosures through, among other things, loan modifications may reduce the value of mortgage loans, including those underlying our RMBS and MSR assets. Mortgage servicers may be required or otherwise incented by the Federal government to pursue such loan modifications, as well as forbearance plans and other actions intended to prevent foreclosure, even if such loan modifications and other actions are not in the best interests of the beneficial owners of the mortgage loans. Similarly, legislation delaying the initiation or completion of foreclosure proceedings on specified types of residential mortgage loans or otherwise limiting the ability of mortgage servicers to take actions that may be essential to preserve the value of the mortgage loans may also reduce the value of mortgage loans underlying our RMBS. Any such limitations are likely to cause delayed or reduced collections from mortgagors and generally increase servicing costs. As a consequence of the foregoing matters, our business, financial condition and results of operations may be adversely affected.

We may be subject to fines or other penalties based on the conduct of third-party servicers who service the loans underlying the MSR we acquire, which could adversely impact our results of operations, financial condition and business.

We contract with third-party mortgage servicers to perform the actual day-to-day servicing obligations on the mortgage loans underlying our MSR. We and the mortgage loan servicers operate in a highly regulated industry and are required to comply with various federal, state and local laws and regulations, including anti-predatory lending laws and laws and regulations imposing certain restrictions and requirements on “high cost” loans. To the extent these servicers fail to comply with applicable law, it could subject us to monetary penalties or other losses and could result in the borrowers rescinding the affected mortgage loans. Further, if any of our loans are found to have been serviced by us or a third party in violation of applicable law, we could be subject to lawsuits or governmental actions, or we could be fined or incur losses, any of which could adversely impact our business, financial condition, results of operations and our ability to make distributions to our stockholders.

While some of these laws may not explicitly hold us responsible for the legal violations of third party servicers, federal and state agencies and private litigants have increasingly sought to impose such liability. Failure to adequately oversee a mortgage servicer’s compliance with these laws and regulations may subject us to increased regulatory risk and could result in regulatory fines or other limitations in our ability to acquire and manage MSR. Further, it is possible that a third-party servicer’s failure to comply with the new and evolving servicing rules or standards could adversely affect the value of our MSR. Accordingly, we may be subject to fines, penalties or civil liability based upon the conduct of the third-party servicers.

A failure to protect our reputation could adversely affect our businesses.

Our reputation is critical to the success of our business. Damage to our reputation may arise from numerous sources, including for example legal or regulatory actions, failing to deliver minimum or required standards of service, compliance failures, perceived or actual weakness in our financial condition, technological or other security breaches or misconduct on the part of our manager or third-party service providers. In addition, adverse developments with respect to our industry generally or with respect to one or more of our competitors may also, by association, negatively impact our reputation. Negative perceptions or publicity regarding the foregoing matters could lead to difficulties in developing and maintaining relationships with our business counterparties, limit the sources of available funding and/or result in additional legal and regulatory scrutiny, all of which could adversely impact our business and results of operations.

Our ability to own and manage MSR is subject to terms and conditions established by the GSEs, which are subject to change.

Our subsidiary’s continued approval to own and manage MSR by the GSEs is subject to compliance with each of their respective selling and servicing guidelines, minimum capital requirements and other conditions they may impose from time to time at their discretion. Failure to meet such guidelines and conditions could result in the unilateral termination of our subsidiary’s approved status by one or more GSEs. In addition, the implementation of more restrictive or operational intensive guidance may increase the costs associated with owning and managing MSR.

GSEs generally require mortgage servicers to be paid a minimum servicing fee for the services provided. Changes in minimum servicing fee amounts for loans purchased or guaranteed by government-related entities could occur at any time and could negatively impact the value of the income derived from MSR on new origination that we may acquire in the future under our flow agreements or through bulk transactions.

We may not be able to acquire MSR.

MSR is a critical component of our overall portfolio management strategy, and our ability to source a sufficient amount of MSR may be adversely impacted for many reasons. We may be unable to locate originators or other sellers that are able or willing to sell MSR that meet our standards or on acceptable terms and conditions. Additionally, competition for MSR may drive down supply or drive up prices, making it uneconomical to purchase. General economic factors, such as recession, declining home values, unemployment and high interest rates, may limit the supply of available MSR. As a result, we may incur additional costs to acquire a sufficient volume of MSR or be unable to acquire MSR at a reasonable price. If we cannot source an adequate volume of MSR on desirable terms, our results of operations may be adversely impacted.

Our past securitization activities expose us to risk of litigation, which may materially and adversely affect our business and financial condition.

In connection with our past securitization transactions, we prepared disclosure documentation, including term sheets and offering memorandums, which contain disclosures regarding the securitization transactions and the assets securitized. If our disclosure documentation is alleged or found to contain inaccuracies or omissions, we may be liable under federal securities laws, state securities laws or other applicable laws for damages to third parties that invest in these securitization transactions, including in circumstances in which 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 sold or contributed residential mortgage loans to third parties who, in turn, securitize those loans. In these circumstances, we may have also prepared disclosure documentation, including documentation that is included in term sheets and offering memorandums relating to those securitization transactions. We could be liable under federal securities laws, state securities laws, or other applicable 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.

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, we may experience losses.

Defending a lawsuit can consume significant resources and may divert management's attention from our operations. We may be required to establish 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.

We may be subject to representation and warranty risk in our capacity as owner of MSR as well as in connection with our prior securitization transactions and our sales of MSR and other assets.

The MSR we acquire may be subject to existing representations and warranties made to the applicable investor (including, without limitation, the GSEs) regarding, among other things, the origination and prior servicing of those mortgage loans, as well as future servicing practices following our acquisition of such MSR. If such representations and warranties are inaccurate, we may be obligated to repurchase certain mortgage loans, which may result in a loss, or indemnify the applicable investor for any losses suffered as a result of the origination or prior servicing of the mortgage loans. As such, the applicable investor will have direct recourse to us for such origination and/or prior servicing issues.

In connection with our prior securitization transactions and with the sales of our MSR and other assets from time to time, we may have been or be required to make representations and warranties to the purchasers of the assets regarding certain characteristics of those assets. If our representations and warranties are inaccurate, we may be obligated to repurchase the assets, which may result in a loss. Even if we obtain representations and warranties from the parties from whom we acquired the asset, as applicable, they may not correspond with the representations and warranties we make or may otherwise not protect us from losses. For example, if representations and warranties we obtain from those parties do not exactly align with the representations and warranties we make, or if the representations and warranties made to us are not enforceable or if we cannot collect damages for a breach (e.g., due to the financial condition of the party that made the representation or warranty to us or statutes of limitations), we may incur losses.

The commercial real estate debt and related assets in which we invest are subject to delinquency, foreclosure and loss, which may adversely impact our business, results of operations and financial condition.

We invest in the commercial real estate market, with target assets including first mortgage loans, mezzanine loans, B-notes and preferred equity. Such investments are subject to risks of delinquency, foreclosure and loss that are greater than similar risks associated with loans made on the security of residential properties. The ability of a borrower to repay a loan secured by an income-producing property typically is dependent primarily upon the successful operation of the property, as opposed to the borrower's independent income or assets. If the net operating income of the property is reduced, the borrower's ability to repay the loan may be impaired. The net operating income of an income-producing property can be affected by numerous factors, including:

- tenant mix;
- success of tenant businesses;
- property management decisions, including decisions on capital improvements;
- property location and condition;
- competition from similar properties;
- changes in national, regional or local economic conditions;
- changes in regional or local real estate values;
- changes in regional or local rental or occupancy rates;
- changes in interest rates and in the state of the debt and equity capital markets, including the availability of debt financing for commercial real estate;
- changes in governmental rules, regulations and fiscal policies, including real estate taxes, environmental legislation and zoning laws;
- environmental contamination; and
- acts of God, terrorism, social unrest and civil disturbances, which may result in property damage, decrease the availability of or increase the cost of insurance or otherwise result in uninsured losses.

In the event any of the properties or entities underlying or collateralizing our commercial real estate loans or investments is adversely impacted by any of the foregoing events or occurrences, the value of, and return on, such investments could be reduced, which in turn would adversely affect our results of operations and financial condition.

Risks Related To Our Assets

Declines in the market values of our assets may adversely affect our results of operations and financial condition.

A substantial portion of our assets are classified for accounting purposes as "available-for-sale." Changes in the market values of those assets will be directly charged or credited to stockholders' equity. As a result, a decline in values may result in connection with factors that are out of our control and adversely affect our book value. Moreover, if the decline in value of an available-for-sale security is other than temporary, such decline will reduce our earnings.

We may not realize gains or income from our assets.

We seek to generate current income and capital appreciation for our stockholders. However, the assets that we acquire may not appreciate in value and, in fact, may decline in value. Additionally, the securities and loans that we acquire, or the loans underlying certain of our assets, may experience defaults of interest and/or principal payments, which could result in significant losses related to such assets. Accordingly, we may not be able to realize gains or income from our assets. Any gains that we do realize may not be sufficient to offset other losses that we experience. Any income that we realize may not be sufficient to offset our expenses.

Changes in mortgage prepayment rates may adversely affect the value of our assets.

The value of our assets is affected by prepayment rates on mortgage loans, and our investment strategy includes making investments based on our expectations regarding prepayment rates. A prepayment rate is the measurement of how quickly borrowers pay down the unpaid principal balance of their loans or how quickly loans are otherwise brought current, modified, liquidated or charged off.

With respect to our RMBS portfolio, typically the value of a mortgage-backed security includes market assumptions regarding the speed at which the underlying mortgages will be prepaid. Faster than expected prepayments could adversely affect our profitability, including in the following ways:

- We may purchase RMBS that have a higher interest rate than the market interest rate at the time. In exchange for this higher interest rate, we may pay a premium over the par value to acquire the security. In accordance with U.S. GAAP, we may amortize this premium over the estimated term of the RMBS. If the RMBS is prepaid in whole or in part prior to its maturity date, however, we may be required to expense the premium that was prepaid at the time of the prepayment.
- A substantial portion of our adjustable-rate RMBS may bear interest rates that are lower than their fully indexed rates, which are equivalent to the applicable index rate plus a margin. If an adjustable-rate RMBS is prepaid prior to or soon after the time of adjustment to a fully-indexed rate, we will have held that RMBS while it was least profitable and lost the opportunity to receive interest at the fully indexed rate over the remainder of its expected life.
- If we are unable to acquire new RMBS similar to the prepaid RMBS, our financial condition, results of operations and cash flows would suffer.

Prepayment rates also significantly affect the value of MSR because such rights are priced on an assumption of a stable repayment rate. If the prepayment rate is significantly greater than expected, the fair value of the MSR could decline and we may be required to record a non-cash charge, which would have a negative impact on our financial results. Furthermore, a significant increase in the prepayment rate could materially reduce the ultimate cash flows we receive from MSR, and we could ultimately receive substantially less than what we paid for such assets.

Prepayment rates may be affected by a number of factors including the availability of mortgage credit, the relative economic vitality of the area in which the related properties are located, the average remaining life of the loans, the average size of the remaining loans, the servicing of the mortgage loans, changes in tax laws, other opportunities for investment, homeowner mobility and other economic, social, geographic, demographic and legal factors. Consequently, prepayment rates cannot be predicted with certainty. In making investment decisions, we depend on certain assumptions based upon historical trends with respect to the relationship between interest rates and prepayments under normal market conditions. If dislocations in the residential mortgage market or other developments change the way that prepayment trends have historically responded to interest rate changes, our ability to (i) assess the market value of target assets, (ii) implement hedging strategies and (iii) implement techniques to hedge prepayment risks would be significantly affected, which could materially adversely affect our financial position and results of operations. If we make erroneous assumptions regarding prepayment rates, we may experience significant investment losses.

A prolonged economic slowdown, a lengthy or severe recession or declining real estate values could impair our assets and harm our operations.

The risks associated with our business are more severe during periods of economic slowdown or recession, especially if these periods are accompanied by declining real estate values. The ability of a borrower to repay a loan secured by a residential property typically is dependent upon the income or assets of the borrower. During an economic slowdown, unemployment rises and increasing numbers of borrowers have difficulty in making payments on their debts, including on mortgage loans. When a recession is combined with declining real estate values, as was the case in the recession that started in 2008, defaults on mortgages may increase dramatically.

Owners of Agency RMBS are protected from the risk of default on the underlying mortgages by guarantees from Fannie Mae, Freddie Mac or, in the case of the Ginnie Mae, the U.S. Government. However, we also acquire non-Agency RMBS, which are backed by residential real property but, in contrast to Agency RMBS, the principal and interest payments are not guaranteed by GSEs or the U.S. Government. Our non-Agency RMBS investments are therefore particularly sensitive to recessions and declining real estate values.

In the event of a default on a mortgage loan that we hold in our portfolio or a mortgage loan underlying a non-Agency RMBS in our portfolio, we bear the risk of loss as a result of the potential deficiency between the value of the collateral and the debt owed on the mortgage, as well as the costs and delays of foreclosure or other remedies, and the costs of maintaining and ultimately selling a property after foreclosure. Delinquencies and defaults on mortgage loans for which we own the servicing rights will adversely affect the amount of servicing fee income we receive and may result in increased servicing costs and operational risks due to the increased complexity of servicing delinquent and defaulted mortgage loans. If an investor in the mortgage loans for which we own the servicing rights determines that the rate of delinquencies or defaults for the loans it owns is unacceptable, we bear the risk of losing the right to service the related mortgage loans which could adversely affect our revenues, business prospects and financial condition.

Challenging economic conditions may also affect the strength of the commercial real estate market and have in the past resulted in decreased occupancy rates, decreased rents or other declines in income from, or the value of, commercial real estate assets. In past years, declining commercial real estate values, coupled with tighter underwriting standards for commercial real estate loans, prevented many commercial borrowers from refinancing their mortgages, which resulted in increased delinquencies and defaults on commercial mortgage loans. Past declines in commercial real estate values have also resulted in reduced borrower equity, further hindering borrowers' ability to refinance and giving them less incentive to cure delinquencies and avoid foreclosure.

Any sustained period of increased payment delinquencies, defaults, foreclosures or losses on our non-Agency RMBS, mortgage loans, mortgage loans for which we own the servicing rights or commercial real estate assets could adversely affect our revenues, results of operations, financial condition, business prospects and ability to make distributions to stockholders.

Our delayed delivery transactions, including TBAs, subject us to certain risks, including price risks and counterparty risks.

We may purchase Agency RMBS through delayed delivery transactions, including TBAs. In a delayed delivery transaction, we enter into a forward purchase agreement with a counterparty to purchase either (i) an identified Agency RMBS, or (ii) a to-be-issued (or "to-be-announced") Agency RMBS with certain terms. As with any forward purchase contract, the value of the underlying Agency RMBS may decrease between the contract date and the settlement date. Furthermore, a transaction counterparty may fail to deliver the underlying Agency RMBS at the settlement date. If any of the above risks were to occur, our financial condition and results of operations may be materially adversely affected.

We acquire RMBS collateralized by subprime mortgage loans, which are subject to increased risks.

Among other assets, we acquire RMBS backed by collateral pools of subprime mortgage loans, which are mortgage loans that have been originated using underwriting standards that are less conservative than those used in underwriting prime mortgage loans (mortgage loans that generally conform to GSE underwriting guidelines) and Alt-A mortgage loans (mortgage loans made to borrowers whose qualifying mortgage characteristics do not conform to GSE underwriting guidelines and generally allow homeowners to qualify for a mortgage loan with reduced or alternate forms of documentation). These lower standards include mortgage loans made to borrowers having imperfect or impaired credit histories, mortgage loans where the amount of the loan at origination is 80% or more of the value of the mortgage property, mortgage loans made to borrowers with low credit scores, mortgage loans made to borrowers who have other debt that represents a large portion of their income and mortgage loans made to borrowers whose income is not required to be disclosed or verified. Due to economic conditions, including increased interest rates and lower home prices, as well as aggressive lending practices, subprime mortgage loans have in recent periods experienced increased rates of delinquency, foreclosure, bankruptcy and loss, and they are likely to continue to experience delinquency, foreclosure, bankruptcy and loss rates that may be substantially higher, than those experienced by mortgage loans underwritten in a more traditional manner. In acquiring these assets, we endeavor to factor the risk of losses on the underlying mortgages into the purchase price of the asset. If we underestimate those losses, however, the performance of RMBS backed by subprime mortgage loans that we acquire could be adversely affected, which could adversely affect our results of operations, financial condition and business.

Our portfolio of assets may be concentrated in terms of credit risk.

Although as a general policy we seek to acquire and hold a diverse portfolio of assets, we are not required to observe specific diversification criteria, except as may be set forth in the investment guidelines adopted by our board of directors. Therefore, our asset portfolio may at times be concentrated in certain property types that are subject to higher risk of foreclosure, or secured by properties concentrated in a limited number of geographic locations. To the extent that our portfolio is concentrated in any one region or type of asset, downturns relating generally to such region or type of asset may result in defaults on a number of our assets within a short time period, which may reduce our net income and the value of our shares and accordingly reduce our ability to pay dividends to our stockholders. The portfolio may contain other concentrations of risk, and we may fail to identify, detect or hedge against those risks, resulting in large or unexpected losses.

Our subordinated RMBS assets may be in the “first loss” position, subjecting us to greater risk of losses.

We invest in certain tranches of RMBS that are only entitled to a portion of the principal and interest payments made on mortgage loans underlying the securities issued by the trust. In general, losses on a mortgage loan included in such a trust will be borne first by the equity holder of the issuing trust, and then by the “first loss” subordinated security holder and then by the “second loss” mezzanine holder. We may acquire securities at every level of such a trust, from the equity holder to the most senior tranche. In the event of default and the exhaustion of any classes of securities junior to those which we acquire, our securities will suffer losses as well. In addition, if we overvalue the underlying mortgage portfolio, or if the values subsequently decline and, as a result, less collateral is available to satisfy interest and principal payments due on the related RMBS, the securities which we acquire may effectively become the “first loss” position behind the more senior securities, which may result in significant losses. The prices of lower credit quality securities are generally less sensitive to interest rate changes than more highly rated securities, but more sensitive to adverse economic downturns or individual issuer developments. A projection of an economic downturn could cause a decline in the value of lower credit quality securities because the ability of obligors of mortgages underlying RMBS to make principal and interest payments may be impaired. In such event, existing credit support in the securitization structure may be insufficient to protect us against loss of our principal on these securities.

Increases in interest rates could adversely affect the value of our assets and cause our interest expense to increase, which could result in reduced earnings or losses and negatively affect our profitability as well as the cash available for distribution to stockholders.

Our operating results will depend in large part on the difference between the income from our assets, net of credit losses, and financing costs. We anticipate that, in many cases, the income from our assets will respond more slowly to interest rate fluctuations than the cost of our borrowings. Consequently, changes in interest rates, particularly short-term interest rates, may significantly influence our financial results.

Interest rates are highly sensitive to many factors, including governmental monetary and tax policies, domestic and international economic and political considerations and other factors beyond our control. For example, in December 2015 the Federal Reserve elected to raise the target range for the federal funds rate for the first time in eight years, and the Federal Reserve increased the target range again in December 2016. In connection with the most recent increase, the Federal Reserve indicated that current economic conditions remained supportive of future rate increases and that such increases would likely be implemented gradually. We cannot predict the impact that recent rate increases, or any future actions or non-actions with respect to the federal funds rate, may have on the markets or the economy. Interest rate fluctuations present a variety of risks, including the risk of a narrowing of the difference between asset yields and borrowing rates, flattening or inversion of the yield curve and fluctuating prepayment rates.

In a normal yield curve environment, fixed income assets, including many RMBS and certain commercial real estate assets, decline in value if interest rates increase. If long-term rates increased significantly, not only will the market value of these assets be expected to decline, but the duration and weighted-average life of the assets could increase as well because borrowers are less likely to prepay mortgages. Further, an increase in short-term interest rates would increase the rate of interest payable on any repurchase agreements required to finance these securities.

We endeavor to hedge our exposure to changes in interest rates, but there can be no assurances that our hedges will be successful, or that we will be able to enter into or maintain such hedges. As a result, interest rate fluctuations can cause significant losses, reductions in income, and limitations on our cash available for distribution to stockholders.

An increase in interest rates may cause a decrease in the availability of certain of our target assets, which could adversely affect our ability to acquire target assets that satisfy our investment objectives and to generate income and pay dividends.

Rising interest rates generally reduce the demand for mortgage loans due to the higher cost of borrowing. A reduction in the volume of mortgage loans originated may affect the volume of certain target assets available to us, which could adversely affect our ability to acquire assets that satisfy our investment and business objectives. Rising interest rates may also cause certain target assets that were issued prior to an interest rate increase to provide yields that are below prevailing market interest rates. If rising interest rates cause us to be unable to acquire a sufficient volume of our target assets with a yield that is above our borrowing cost, our ability to satisfy our investment objectives and to generate income and pay dividends may be materially and adversely affected.

The assets in our portfolio are recorded at fair value, but there may be substantial uncertainty as to the value of certain assets.

Some of the assets in our portfolio are not publicly traded. The fair value of securities and other assets that are not publicly traded may not be readily determinable. We value these assets quarterly at fair value, as determined in accordance with ASC 820, *Fair Value Measurements and Disclosures*, or ASC 820, which may include unobservable inputs. Because such valuations are subjective, the fair value of certain of our assets may fluctuate over short periods of time and our determinations of fair value may differ materially from the values that would have been used if a ready market for these securities existed. The value of our common stock could be adversely affected if our determinations regarding the fair value of these assets are materially higher than the values that we ultimately realize upon their disposal.

Any MSR we acquire are recorded at fair value on our consolidated balance sheets based upon significant estimates and assumptions. The determination of the fair value of MSR requires our management to make numerous estimates and assumptions. Such estimates and assumptions include, without limitation, estimates of future cash flows associated with MSR based upon assumptions involving interest rates as well as the prepayment rates, delinquencies and foreclosure rates of the underlying mortgage loans. The ultimate realization of the value of MSR may be materially different than the fair values of such MSR as may be reflected in our consolidated balance sheets as of any particular date. The use of different estimates or assumptions in connection with the valuation of these assets could produce materially different fair values for such assets, which could have a material adverse effect on our business, financial condition, results of operations and cash flows. Accordingly, there may be material uncertainty about the fair value of any MSR we acquire.

The value of our RMBS and MSR may be adversely affected by deficiencies in servicing and foreclosure practices, as well as related delays in the foreclosure process.

Deficiencies in servicing and foreclosure practices among servicers of residential mortgage loans have raised and may in the future raise concerns relating to such practices, including the improper execution of the documents used in foreclosure proceedings (so-called “robo signing”), inadequate documentation of transfers and registrations of mortgages and assignments of loans, improper handling and processing of loan modifications, violations of representations and warranties at the date of securitization and failure to enforce put-backs. The integrity of the servicing and foreclosure processes is critical to the value of our RMBS and MSR, and our financial results could be adversely affected by deficiencies in the conduct of those processes. For example, delays in the foreclosure process that may result from improper servicing practices may adversely affect the values of, and our losses on, our mortgage-related assets. Foreclosure delays may also increase the administrative expenses of the securitization trusts for non-Agency RMBS or result in the curtailment of payments to the GSEs, thereby resulting in additional expense and reducing the amount of funds available for distribution to investors. In addition, the subordinate classes of securities issued by the securitization trusts may continue to receive interest payments while the defaulted loans remain in the trusts, rather than absorbing the default losses. This may reduce the amount of credit support available for any senior classes we own, thus possibly adversely affecting these securities.

While we believe that our servicers would be in violation of their servicing contracts to the extent that they have improperly serviced mortgage loans or improperly executed documents in foreclosure or bankruptcy proceedings, or do not comply with the terms of servicing contracts and applicable laws and regulations when assessing loss mitigation options for affected borrowers, it may be difficult, expensive, and time consuming for us to enforce our contractual rights. Such failure to comply may also expose us to regulatory risks. We continue to monitor and review the issues raised by improper servicing practices. While we cannot predict exactly how servicing, loss mitigation and foreclosure matters or any resulting litigation, regulatory actions or settlement agreements will affect our business, there can be no assurance that these matters will not have an adverse impact on our results of operations and financial condition.

Most commercial real estate loans are nonrecourse loans and the assets securing these loans may not be sufficient to protect us from a partial or complete loss if a borrower defaults on a loan, which could materially and adversely affect us.

Except for customary nonrecourse carve-outs for certain “bad acts” and environmental liability, most commercial real estate loans are nonrecourse obligations of the borrower, meaning that there is no recourse against the assets of the borrower other than the underlying collateral. In the event of any default under a commercial real estate loan, we will bear the risk of loss to the extent of any deficiency between the value of the collateral and the principal of and accrued interest on the mortgage loan, which could have a material adverse effect. Even if a commercial real estate loan is recourse to the borrower (or if a nonrecourse carve-out to the borrower applies), in most cases, the borrower’s assets are limited primarily to its interest in the related mortgaged property. Further, although a commercial real estate loan may provide for limited recourse to a principal or affiliate of a borrower, there is no assurance that any recovery from such principal or affiliate will be made or that such principal’s or affiliate’s assets would be sufficient to pay any otherwise recoverable claim. In the event of the bankruptcy of a borrower, the loan to such borrower will be deemed to be secured only to the extent of the value of the underlying collateral at the time of bankruptcy (as determined by the bankruptcy court), and the lien securing the loan will be subject to the avoidance powers of the bankruptcy trustee or debtor-in-possession to the extent the lien is unenforceable under state law.

We may be subject to additional risks associated with commercial real estate loan participations.

Some of our commercial real estate loans may be held in the form of participation interests or co-lender arrangements in which we share the loan rights, obligations and benefits with other lenders. With respect to such participation interests, we may require the consent of these parties to exercise our rights under such loans, including rights with respect to amendment of loan documentation, enforcement proceedings upon a default and the institution of, and control over, foreclosure proceedings. In circumstances where we hold a minority interest, it may become bound to actions of the majority to which it otherwise would object. We may be adversely affected by this lack of control with respect to these interests.

Commercial real estate B-notes may be subject to additional risks related to the privately negotiated structure and terms of the transaction, which may result in losses.

We may originate or acquire commercial real estate B-notes, which are mortgage loans that are typically secured by a first mortgage on a single commercial property or group of related properties, but subordinated to an A-note secured by the same first mortgage on the same collateral. As a result, if a borrower defaults, there may not be sufficient funds remaining for B-notes holders after payment to the A-note holders. Because each transaction is privately negotiated, B-notes can vary in their structural characteristics and risks. For example, the rights of holders of B-notes to control the process following a borrower default may vary from transaction to transaction. Further, B-notes typically are secured by a single property and accordingly reflect the risks associated with significant concentration. Losses related to our B-notes would adversely affect our financial condition and results of operations.

Mezzanine commercial real estate loans involve greater risks of loss than senior loans secured by income-producing properties.

We may originate or acquire mezzanine commercial real estate loans, which are subordinated loans secured by a pledge of the ownership interests of the entity that owns the interest in the entity owning the property. These types of assets involve a higher degree of risk than long-term senior mortgage lending secured by income producing real property, because the loan may become unsecured as a result of foreclosure by the senior lender. In the event of a bankruptcy of the entity providing the pledge of its ownership interests as security, we may not have full recourse to the assets of such entity, or the assets of the entity may not be sufficient to satisfy our mezzanine loan. If a borrower on any debt that is senior to our mezzanine loan, or in the event of a borrower bankruptcy, our mezzanine loan will be satisfied only after the senior debt. As a result, we may not be able to recover all, or possibly any, of our initial expenditure. In addition, mezzanine loans have higher loan-to-value ratios than conventional mortgage loans, resulting in less equity in the property and increasing the risk of loss of principal. Losses related to our mezzanine loans would adversely affect our financial condition and results of operations.

Investments in commercial real estate preferred equity involve a greater risk of loss than traditional debt financing.

We may invest in commercial real estate preferred equity, which involves a higher degree of risk than first mortgage loans due to a variety of factors, including the risk that, similar to mezzanine loans, such investments are subordinate to first mortgage loans and are not collateralized by property underlying the investment. Unlike mezzanine loans, preferred equity investments generally do not have a pledge of the ownership interests of the entity that owns the interest in the entity owning the property. Although as a holder of preferred equity we may protect our position with covenants that limit the activities of the entity in which we hold an interest and protect our equity by obtaining an exclusive right to control the underlying property after an event of default, should such a default occur, we would only be able to proceed against the entity in which it holds an interest, and not the property owned by such entity and underlying the investment. Further, similar to mezzanine loans, preferred equity investments do not ordinarily afford the holder with the full range of traditional creditor protections. As a result, we may not be able to recover all of our investment.

Investments in nonconforming and non-investment grade rated commercial real estate loans or securities involve increased risk of loss.

Certain commercial real estate investments may not conform to conventional loan standards applied by traditional lenders and either will not be rated or will be rated as non-investment grade by the rating agencies. The non-investment grade ratings for these assets typically result from the overall leverage of the loans, the lack of a strong operating history for the properties underlying the loans, the borrowers' credit history, the underlying properties' cash flow or other factors. As a result, these investments should be expected to have a higher risk of default and loss than investment grade rated assets. Losses related to our non-investment grade loans or securities would adversely affect our financial condition and results of operations.

The properties underlying our commercial real estate loans may be subject to unknown liabilities, including environmental liabilities, that could adversely affect the value of these properties and as a result, our investments.

Properties underlying our commercial real estate loans may be subject to unknown or unquantifiable liabilities that may adversely affect the value of our investments. Such defects or deficiencies may include title defects, title disputes, liens, servitudes or other encumbrances on the mortgaged properties. The discovery of such unknown defects, deficiencies and liabilities could affect the ability of our borrowers to make payments to us or could affect our ability to foreclose and sell the underlying properties, which could adversely affect our results of operations and financial condition.

Furthermore, to the extent we foreclose on properties with respect to which we have extended loans, we may be subject to environmental liabilities arising from such foreclosed properties. Under various U.S. federal, state and local laws, an owner or operator of real property may become liable for the costs of removal of certain hazardous substances released on its property. These laws often impose liability without regard to whether the owner or operator knew of, or was responsible for, the release of such hazardous substances. If we foreclose on any properties underlying our investments, the discovery of material environmental liabilities attached to such properties could adversely affect our results of operations and financial condition.

Insurance on commercial real estate loans may not cover all losses.

Our commercial real estate loans may be subject to certain types of losses, generally of a catastrophic nature, such as earthquakes, floods, hurricanes, terrorism or acts of war, which may be uninsurable or not economically insurable. Inflation, changes in building codes and ordinances, environmental considerations and other factors also might result in insurance proceeds insufficient to repair or replace a property if it is damaged or destroyed. Under these circumstances, the insurance proceeds received with respect to a property relating to one of our investments might not be adequate to restore our economic position with respect to our investment. Any uninsured loss could result in the corresponding nonperformance of or loss on our investment related to such property.

We may be subject to lender liability claims that could be subject to losses.

In recent years, a number of judicial decisions have upheld the right of borrowers to sue lending institutions on the basis of various “lender liability” theories. Generally, lender liability is founded on the premise that a lender has either violated a duty, whether implied or contractual, of good faith and fair dealing owed to the borrower or has assumed a degree of control over the borrower resulting in the creation of a fiduciary duty owed to the borrower or its other creditors or stockholders. We cannot assure you that such claims will not arise with respect to our commercial real estate loans or that we will not be subject to significant liability if a claim of this type did arise.

Risks Related to our Management and Relationship with PRCM Advisers and Pine River

We are dependent on PRCM Advisers and Pine River and may not find a suitable replacement if we or PRCM Advisers terminates the management agreement.

We have no employees. Instead, we are completely reliant on the employees provided to us by PRCM Advisers, which has significant discretion as to the implementation and execution of our business strategies and risk management practices. PRCM Advisers may not have sufficient access to Pine River’s employees, systems and facilities in order to comply with its obligations under the management agreement. We are also subject to the risk that PRCM Advisers will terminate the management agreement and that no suitable replacement will be found.

The current term of the management agreement expires on October 28, 2017 and will automatically renew for successive one-year terms unless terminated by us or PRCM Advisers as set forth in the management agreement. If the management agreement is terminated and no suitable replacement is found to manage Two Harbors, we may not be able to continue to execute our business plan.

We will have no recourse to Pine River if it does not fulfill its obligations under the shared facilities and services agreement with PRCM Advisers.

Neither we nor PRCM Advisers has any employees, and PRCM Advisers does not have separate facilities. As a result, PRCM Advisers has entered into a shared facilities and services agreement with Pine River pursuant to which PRCM Advisers is provided with the personnel, services and resources necessary for PRCM Advisers to perform its obligations and responsibilities under the management agreement in exchange for certain amounts payable by PRCM Advisers. Because we are not a party to the shared facilities and services agreement, we will not have any recourse to Pine River if it does not fulfill its obligations under the shared facilities and services agreement, or if Pine River and PRCM Advisers choose to amend or terminate the shared facilities and services agreement.

There are conflicts of interest in our relationship with Pine River and its affiliates, including PRCM Advisers, which could result in decisions that are not in the best interests of our stockholders.

We are subject to conflicts of interest arising out of our relationship with Pine River and its affiliates, including PRCM Advisers. PRCM Advisers is wholly owned by Pine River. Each of Brian Taylor (the Chairman of our board of directors), Thomas Siering (a director, and our Chief Executive Officer and President), and Bill Roth (a director, and our Chief Investment Officer) is a partner and owner of equity interests in Pine River. All of our other executive officers are employees or partners of Pine River. As a result, the management agreement with PRCM Advisers was negotiated between related parties, and its terms, including fees payable to PRCM Advisers, may not be as favorable to us as if they had been negotiated with an unaffiliated third party. In addition, we may choose not to enforce, or to enforce less vigorously, our rights under the management agreement because of our desire to maintain our ongoing relationship with PRCM Advisers.

The management agreement with PRCM Advisers does not prevent PRCM Advisers and its affiliates from engaging in additional management or investment opportunities. Pine River and its affiliates, including PRCM Advisers, engage in additional management or investment opportunities that have overlapping objectives with us, and thus face conflicts in the allocation of resources between us, any other funds they manage and for their own accounts. Additionally, the ability of PRCM Advisers, Pine River and the officers and employees providing services to Two Harbors under the management agreement to engage in other business activities reduces the time PRCM Advisers spends managing Two Harbors. While there are a number of employees of Pine River who allocate 100% of their time to Two Harbors, certain employees who provide services to Two Harbors allocate some, or a material portion, of their time to other businesses and activities of Pine River. Under the management agreement, none of these individuals is required to devote a specific amount of time to Two Harbors' affairs. Accordingly, we compete with Pine River, its existing funds, investment vehicles, other ventures and possibly other entities in the future for the time and attention of these officers and other personnel.

We may enter into additional transactions with Pine River or its affiliates. In particular, we may purchase assets from Pine River or its affiliates or make co-purchases alongside Pine River or its affiliates. These transactions may not be the result of arm's length negotiations and may involve conflicts between our interests and the interests of Pine River and/or its affiliates. There can be no assurance that any procedural protections will be sufficient to assure that these transactions will be made on terms that will be at least as favorable to us as those that would have been obtained in an arm's length transaction.

We compete with current and future investment entities affiliated with Pine River for access to certain of the benefits that our relationship with Pine River provides to us, including access to investment opportunities.

There may be conflicts of interest in allocating investment opportunities among Two Harbors and other funds, investment vehicles and ventures managed by Pine River. There is a significant overlap in the assets and investment strategies of Two Harbors and Pine River's private funds, and additional areas of overlap may develop in the future. Although PRCM Advisers and Pine River have a dedicated team of trading and investment personnel to serve Two Harbors full-time, in some cases certain non-investment personnel may provide services to both entities. Additionally, there are other members of the Pine River investment team that are dedicated full-time to other Pine River strategies and clients and, therefore, do not devote any of their time to Two Harbors and its trading activities. Pine River and its affiliates may in the future form additional funds or sponsor additional investment vehicles and ventures that have overlapping objectives with Two Harbors and therefore may compete with us for investment opportunities and Pine River resources. Pine River has an allocation policy that addresses the manner in which investment opportunities are allocated among the various entities and strategies for which they provide investment management services. However, we cannot assure you that Pine River and PRCM Advisers will always allocate investment opportunities in a manner that is advantageous for us; indeed, we may expect that the allocation of investment opportunities will at times result in our receiving only a portion of, or none of, certain investment opportunities.

The loss of our access to Pine River's investment professionals and principals may adversely affect our ability to achieve our investment objectives.

We depend on PRCM Advisers' access, through a shared facilities and services agreement, to the investment professionals and principals of Pine River and the information opportunities generated by Pine River's investment professionals and principals during the normal course of their investment and portfolio management activities. These investment professionals and principals evaluate, negotiate, structure, close and monitor our investments and our financing activities and we depend on their continued service. The departure of a significant number of the investment professionals or principals of Pine River could have a material adverse effect on our ability to achieve our investment objectives. Certain Pine River investment personnel and principals are dedicated to strategies and clients other than Two Harbors and, as a result, Two Harbors will not benefit from the investment opportunities they generate. Further, we cannot assure you that PRCM Advisers will remain as Two Harbors' manager or that we will continue to have access to Pine River's investment professionals or principals or its information and asset origination opportunities.

Our board of directors has approved very broad investment guidelines for Two Harbors and will not review or approve each investment decision made by PRCM Advisers.

Our board of directors periodically reviews and updates our investment guidelines and also reviews our investment portfolio but does not review or approve specific investments. PRCM Advisers has great latitude within the broad parameters of the investment guidelines set by our board of directors in determining our investments and investment strategies, which could result in investment returns that are substantially below expectations or that result in material losses.

The manner of determining the management fee may not provide sufficient incentive to PRCM Advisers to maximize risk-adjusted returns on our investment portfolio because it is based on our stockholders' equity and not on our financial performance.

PRCM Advisers is entitled to receive a management fee that is based on our stockholders' equity at the end of each quarter, regardless of our financial performance. Accordingly, significant management fees will be payable to PRCM Advisers even if we have a net loss during a quarter. PRCM Advisers' right to such compensation may not provide sufficient incentive to PRCM Advisers to devote sufficient time and effort to maximize risk-adjusted returns on our investment portfolio, which could, in turn, adversely affect our financial results. Further, the management fee structure gives PRCM Advisers the incentive to maximize stockholders' equity by the issuance of new common stock or the retention of existing equity, regardless of the effect of these actions on existing stockholders. In other words, the management fee structure rewards PRCM Advisers primarily based on the size of Two Harbors, and not on our returns to stockholders.

Termination of the management agreement may be difficult and costly, which may adversely affect our inclination to end our relationship with PRCM Advisers.

Termination of the management agreement with PRCM Advisers without cause is difficult and costly. We have the right to terminate for cause; however, the term "cause" is limited to certain specifically described circumstances. In the absence of cause, we may only terminate it after October 28, 2017, upon the vote of at least two-thirds of all of our independent directors or by a vote of the holders of a majority of the outstanding shares of our common stock. Additionally, upon a termination by Two Harbors without cause (or upon a termination by PRCM Advisers due to our material breach), the management agreement requires us to pay PRCM Advisers a termination payment equal to three times the sum of the average annual base management fee received by PRCM Advisers during the 24-month period before such termination, calculated as of the end of the most recently completed fiscal quarter. This provision increases the effective cost to us of terminating our relationship with PRCM Advisers, even if we believe that PRCM Advisers' performance is not satisfactory.

The liability of PRCM Advisers and Pine River is limited under the management agreement, and we have agreed to indemnify PRCM Advisers and its affiliates and advisers, including Pine River, against certain liabilities. As a result, we could experience poor performance or losses for which PRCM Advisers and Pine River would not be liable.

Pursuant to the management agreement, PRCM Advisers does not assume any responsibility other than to render the services called for thereunder and will not be responsible for any action of our board of directors in following or declining to follow its advice or recommendations. PRCM Advisers and its officers, stockholders, members, managers, personnel and directors, any person controlling or controlled by PRCM Advisers and any person providing sub-advisory services to PRCM Advisers will not be liable to Two Harbors, any of our subsidiaries, any of our directors, stockholders or partners or any subsidiary's stockholders, members or partners for acts or omissions performed in accordance with or pursuant to the management agreement, except by reason of acts constituting reckless disregard of PRCM Advisers' duties under the management agreement which has a material adverse effect on Two Harbors, willful misconduct or gross negligence, as determined by a final non-appealable order of a court of competent jurisdiction. We have agreed to indemnify PRCM Advisers and its affiliates and sub-advisers, including Pine River, with respect to all expenses, losses, damages, liabilities, demands, charges and claims arising from acts or omissions of such indemnified parties not constituting reckless disregard of PRCM Advisers' duties under the management agreement which has a material adverse effect on Two Harbors, willful misconduct or gross negligence. As a result, if we experience poor performance or losses, PRCM Advisers would not be liable.

Risks Related to Our Organization and Structure

Certain provisions of Maryland law could inhibit changes in control.

Certain provisions of the Maryland General Corporation Law, or MGCL, may have the effect of deterring a third party from making a proposal to acquire us or of impeding a change in control under circumstances that otherwise could provide the holders of shares of our common stock with the opportunity to realize a premium over the then-prevailing market price of such shares.

We are subject to the “business combination” provisions of the MGCL that, subject to limitations, prohibit certain business combinations (including a merger, consolidation, share exchange, or, in circumstances specified in the statute, an asset transfer or issuance or reclassification of equity securities) between our company and an “interested stockholder” (defined generally as any person who beneficially owns 10% or more of our then outstanding voting stock or an affiliate or associate of our company who, at any time within the two-year period immediately prior to the date in question, was the beneficial owner of 10% or more of the voting power of our then outstanding stock) or an affiliate thereof for five years after the most recent date on which the stockholder becomes an interested stockholder. After the five-year prohibition, any business combination between our company and an interested stockholder generally must be recommended by our board of directors and approved by the affirmative vote of at least (1) 80% of the votes entitled to be cast by holders of outstanding shares of our voting stock; and (2) two-thirds of the votes entitled to be cast by holders of voting stock of the corporation other than shares held by the interested stockholder with whom or with whose affiliate the business combination is to be effected or held by an affiliate or associate of the interested stockholder. These super-majority vote requirements do not apply if our common stockholders receive a minimum price, as defined under Maryland law, for their shares in the form of cash or other consideration in the same form as previously paid by the interested stockholder for its shares. These provisions of the MGCL do not apply to business combinations that are approved or exempted by a board of directors prior to the time that the interested stockholder becomes an interested stockholder. Pursuant to the statute, our board of directors has by resolution exempted business combinations (1) between our company and any person, provided that such business combination is first approved by our board of directors (including a majority of our directors who are not affiliates or associates of such person) and (2) between our company and Pine River or its affiliates. Consequently, the five-year prohibition and the super-majority vote requirements will not apply to any business combination between our company and any person if such combination is approved in accordance with the foregoing procedures. As a result, any person, including Pine River, may be able to enter into business combinations with Two Harbors that may not be in the best interests of our stockholders, without compliance with the super-majority vote requirements and the other provisions of the statute.

The “control share” provisions of the MGCL provide that “control shares” of a Maryland corporation (defined as voting shares of stock which, if aggregated with all other shares of stock owned by the acquirer or in respect of which the acquirer is able to exercise or direct the exercise of voting power (except solely by virtue of a revocable proxy), would entitle the acquirer to exercise one of three increasing ranges of voting power in electing directors) acquired in a “control share acquisition” (defined as the direct or indirect acquisition of ownership or control of “control shares”) have no voting rights except to the extent approved by our stockholders by the affirmative vote of at least two-thirds of all the votes entitled to be cast on the matter, excluding votes entitled to be cast by the acquirer of control shares, our officers and employees who are also our directors. Our bylaws contain a provision exempting from the control share acquisition statute any and all acquisitions by any person of shares of our stock. There can be no assurance that this provision will not be amended or eliminated at any time in the future.

The “unsolicited takeover” provisions of the MGCL (Title 3, Subtitle 8 of the MGCL) permit our board of directors, without stockholder approval and regardless of what is currently provided in our charter or bylaws, to implement takeover defenses, some of which (for example, a classified board) we do not currently have. These provisions may have the effect of inhibiting a third party from making an acquisition proposal for our company or of delaying, deferring or preventing a change in control of our company under circumstances that otherwise could provide the holders of shares of our common stock with the opportunity to realize a premium over the then current market price. Our charter contains a provision whereby our company has elected to be subject to the provisions of Title 3, Subtitle 8 of the MGCL relating to the filling of vacancies on its board of directors.

Our authorized but unissued shares of common and preferred stock and the ownership limitations contained in our charter may prevent a change in control.

Our charter authorizes Two Harbors to issue additional authorized but unissued shares of common or preferred stock. In addition, our board of directors may, with the approval of a majority of the entire board and without stockholder approval, amend our charter to increase or decrease the aggregate number of shares of our stock or the number of shares of stock of any class or series that Two Harbors has the authority to issue and classify or reclassify any unissued shares of common or preferred stock and set the terms of the classified or reclassified shares. As a result, our board may establish a series of shares of common or preferred stock that could delay or prevent a transaction or a change in control that might involve a premium price for shares of our common stock or otherwise be in the best interests of stockholders.

In addition, our charter contains restrictions limiting the ownership and transfer of shares of our common stock and other outstanding shares of capital stock. The relevant sections of our charter provide that, subject to certain exceptions, ownership of shares of our common stock by any person is limited to 9.8% by value or by number of shares, whichever is more restrictive, of our outstanding shares of common stock (the common share ownership limit), and no more than 9.8% by value or number of shares, whichever is more restrictive, of our outstanding capital stock (the aggregate share ownership limit). The common share ownership limit and the aggregate share ownership limit are collectively referred to herein as the “ownership limits.” These charter provisions will restrict the ability of persons to purchase shares in excess of the relevant ownership limits.

Our charter contains provisions that make removal of our directors difficult, which could make it difficult for stockholders to effect changes in management.

Our charter provides that, subject to the rights of any series of preferred stock, a director may be removed only by the affirmative vote of at least two-thirds of all the votes entitled to be cast generally in the election of directors. Our charter and bylaws provide that vacancies generally may be filled only by a majority of the remaining directors in office, even if less than a quorum. These requirements make it more difficult to change management by removing and replacing directors and may prevent a change in control that is in the best interests of stockholders.

Our rights and stockholders' rights to take action against directors and officers are limited, which could limit recourse in the event of actions not in the best interests of stockholders.

As permitted by Maryland law, our charter eliminates the liability of its directors and officers to Two Harbors and its stockholders for money damages, except for liability resulting from:

- actual receipt of an improper benefit or profit in money, property or services; or
- a final judgment based upon a finding of active and deliberate dishonesty by the director or officer that was material to the cause of action adjudicated.

In addition, pursuant to our charter we have agreed contractually to indemnify our present and former directors and officers for actions taken by them in those capacities to the maximum extent permitted by Maryland law. Further, our bylaws require us to indemnify each present or former director or officer, to the maximum extent permitted by Maryland law, who is made, or threatened to be made, a party to any proceeding because of his or her service to Two Harbors. As part of these indemnification obligations, we may be obligated to fund the defense costs incurred by our directors and officers.

Our amended and restated bylaws designate certain Maryland courts as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our amended and restated bylaws provided that, unless we consent in writing to the selection of an alternative forum, the Circuit Court for Baltimore City, Maryland, or, if that Court does not have jurisdiction, the United States District Court for the District of Maryland, Baltimore Division, shall be the sole and exclusive forum for the following: any derivative action or proceeding brought on behalf of the corporation; any action asserting a claim of breach of any duty owed by any of our directors, officers or other employees to the corporation or to our stockholders; any action asserting a claim against the corporation or any of our directors, officers or other employees arising pursuant to any provision of the MGCL or our charter or bylaws; or any action asserting a claim against the corporation or any of our directors, officers or other employees that is governed by the internal affairs doctrine. This choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that the stockholder believes is favorable for disputes with us or our directors, officers or other employees, which may discourage lawsuits against us and our directors, officers and employees. Alternatively, if a court were to find these provisions of our amended and restated certificate of incorporation inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could adversely affect our business, financial condition or results of operations.

Risks Related to Our Securities

Future issuances and sales of shares of our common stock may depress the market price of our common stock or have adverse consequences for our stockholders.

We have 900,000,000 authorized shares of common stock and we may increase our authorized common stock without stockholder approval. As of December 31, 2016, 347,652,326 shares of common stock were issued and outstanding. In May 2015, our stockholders approved our Second Restated 2009 Equity Incentive Plan, or the Plan, which provides for grants of restricted common stock and other equity-based awards, subject to a ceiling of 13,000,000 shares available for issuance under the Plan. As of December 31, 2016, we had granted an aggregate of 5,429,464 shares of common stock to our independent directors and Pine River employees pursuant to the Plan. Additionally, in January 2017, we issued through an underwritten public offering \$287,500,000 in aggregate principal amount of 6.25% convertible senior notes due January 2022. A total of 32,633,349 shares have been reserved for issuance in connection with these notes.

We cannot predict the effect, if any, of future issuances or sales of our common stock on the market price of our common stock. We also cannot predict the amounts and timing of restricted stock awards to be issued pursuant to the Plan. Sales or awards of substantial amounts of common stock or the perception that such sales or awards could occur may adversely affect the market price for our common stock.

Also, we may issue additional shares in subsequent public offerings or private placements to acquire new assets or for other purposes. We are not required to offer any such shares to existing stockholders on a preemptive basis. Therefore, it may not be possible for existing stockholders to participate in such future share issuances, which may dilute the existing stockholders' interests.

Any future offerings of our securities could dilute our existing stockholders and may rank senior for purposes of dividend and liquidating distributions.

In order to grow our business, we may rely on additional issuances of securities which may rank senior and/or be dilutive to our stockholders. For example, in January 2017, we completed an offering of senior unsecured notes due January 2022 that are convertible into shares of our common stock at the election of the noteholder. Any election by noteholders to convert their notes into shares of our common stock will dilute the interests of other stockholders. In addition, upon liquidation, holders of our debt securities would receive a distribution of our available assets before holders of our common shares.

In the future, we may again elect to raise capital through the issuance of convertible or non-convertible debt or equity securities. Upon liquidation, holders of our debt securities and preferred stock, if any, and lenders with respect to other borrowings will be entitled to our available assets prior to the holders of our common stock. Convertible debt and convertible preferred stock may have anti-dilution provisions which are unfavorable to our common stockholders. Additional equity offerings may dilute the holdings of our existing stockholders or reduce the market price of our common stock, or both. Any preferred stock, if issued, could have a preference on liquidating distributions or a preference on dividend payments that could limit our ability to pay dividends to our stockholders or favorable conversion rights. Sales of substantial amounts of our common stock or the sale of securities which have rights and preferences that are superior to our common stock, or the perception that these sales could occur, may have a material adverse effect on the price of our common stock. Because our decision to issue debt or equity securities in any future offering will depend on market conditions and other factors beyond our control, we cannot predict or estimate the amount, timing or nature of our future offerings. Thus, our stockholders bear the risk of our future offerings reducing the market price of our common stock and diluting the value of their holdings.

We have not established a minimum distribution payment level and we cannot assure you of our ability to pay distributions in the future.

We intend to continue to pay quarterly distributions and to make distributions to our stockholders in an amount such that we distribute all or substantially all of our REIT taxable income in each year, subject to certain adjustments. We have not established a minimum distribution payment level and our ability to pay distributions may be adversely affected by a number of factors, including the risk factors described herein. All distributions will be made, subject to Maryland law, at the discretion of our board of directors and will depend on our earnings, our financial condition, any debt covenants, maintenance of our REIT qualification and other factors as our board of directors may deem relevant from time to time. We cannot assure you that we will achieve results that will allow us to make a specified level of cash distributions and distributions in future periods may be significantly lower than in prior quarterly periods.

The market price of our common stock could fluctuate and could cause you to lose a significant part of your investment.

The market price of our common stock may be highly volatile and subject to wide fluctuations. In addition, the trading volume in our common stock may fluctuate and cause significant price variations to occur. The stock market has experienced and may in the future experience extreme price and volume fluctuations that have affected the market price of many companies in industries similar or related to ours and that have been unrelated to these companies' operating performances. If the market price of our common stock declines significantly, you may be unable to resell your shares of our common stock at a gain. Further, fluctuations in the trading price of our common stock may adversely affect the liquidity of the trading market for our common stock and, in the event that we seek to raise capital through future equity financings, our ability to raise such equity capital. We cannot assure you that the market price of our common stock will not fluctuate or decline significantly in the future.

The market price of our common stock may be influenced by many factors, some of which are beyond our control, including those described above and the following:

- changes in financial estimates by analysts;
- fluctuations in our results of operations or financial condition or the results of operations or financial condition of companies perceived to be similar to us;
- general economic and financial and real estate market conditions;
- changes in market valuations of similar companies;
- monetary policy and regulatory developments in the U.S.; and
- additions or departures of key personnel at Pine River.

Resulting fluctuations in the market price of our common stock could cause you to lose a significant part of your investment.

Tax Risks

Our failure to qualify as a REIT would subject us to U.S. federal income tax and potentially increased state and local taxes, which would reduce the amount of our income available for distribution to our stockholders.

We operate in a manner that will enable us to qualify as a REIT and have elected to be taxed as a REIT for U.S. federal income tax purposes commencing with our taxable year ended December 31, 2009. We have not requested and do not intend to request a ruling from the Internal Revenue Service, or IRS, that we qualify as a REIT. The U.S. federal income tax laws governing REITs and the asset they hold are complex, and judicial and administrative interpretations of the U.S. federal income tax laws governing REIT qualification are limited. To continue to qualify as a REIT, we must meet, on an ongoing basis, various tests regarding the nature of our assets and income, the ownership of our outstanding shares, and the amount of our distributions. Moreover, new legislation, court decisions, administrative guidance or actions by federal agencies or others to modify or re-characterize our assets, as a whole or in part, as other than real estate assets, in each case possibly with retroactive effect, may make it more difficult or impossible for us to qualify as a REIT. Thus, while we intend to operate so that we qualify as a REIT, given the highly complex nature of the rules governing REITs, the ongoing importance of factual determinations, and the possibility of future changes in our circumstances, no assurance can be given that we will so qualify for any particular year. These considerations also might restrict the types of assets that we can acquire in the future.

If we fail to qualify as a REIT in any taxable year, and do not qualify for certain statutory relief provisions, we would be required to pay U.S. federal income tax on our taxable income, and distributions to our stockholders would not be deductible by us in determining our taxable income. In such a case, we might need to borrow money or sell assets in order to pay taxes. Our payment of income tax would decrease the amount of income available for distribution to stockholders. Furthermore, if we fail to maintain our qualification as a REIT, we no longer would be required to distribute substantially all of our net taxable income to stockholders. In addition, unless we were eligible for certain statutory relief provisions, we could not re-elect to be taxed as a REIT until the fifth calendar year following the year in which we failed to qualify.

Complying with REIT requirements may cause us to forego otherwise attractive investment opportunities or financing or hedging strategies.

In order to qualify as a REIT for U.S. federal income tax purposes, we must continually satisfy various tests on an annual and quarterly basis regarding the sources of our income, the nature and diversification of our assets, the amounts we distribute to stockholders and the ownership of our stock. To meet these tests, we may be required to forego investments we might otherwise make. We may be required to make distributions to stockholders at disadvantageous times or when we do not have funds readily available for distribution, and may be unable to pursue investments that would be otherwise advantageous to us in order to satisfy the source of income or asset diversification requirements for qualifying as a REIT. Thus, compliance with the REIT requirements may hinder our investment performance.

Complying with REIT requirements may force us to liquidate otherwise profitable assets.

In order to continue to qualify as a REIT, we must ensure that at the end of each calendar quarter, at least 75% of the value of our assets consists of cash, cash items, government securities and designated real estate assets, including certain mortgage loans and shares in other REITs. Subject to certain exceptions, our ownership of securities, other than government securities and securities that constitute real estate assets, generally cannot include more than 10% of the outstanding voting securities of any one issuer or more than 10% of the total value of the outstanding securities of any one issuer. In addition, in general, no more than 5% of the value of our assets, other than government securities and securities that constitute real estate assets, can consist of the securities of any one issuer, and no more than 25% of the value of our total securities can be represented by securities of one or more TRS's. If we fail to comply with these requirements at the end of any calendar quarter after the first calendar quarter for which we qualified as a REIT, we must generally correct such failure within 30 days after the end of such calendar quarter to avoid losing our REIT qualification. As a result, we may be required to liquidate otherwise profitable assets prematurely, which could reduce our return on assets, which could adversely affect our results of operations and financial condition.

The Protecting Americans from Tax Hikes Act of 2015 contains changes to certain aspects of the U.S. federal income tax rules applicable to REITs. In particular, the act will reduce the maximum allowable value of assets attributable to our TRSs from 25% to 20%, which change will be applicable with respect to tax years beginning after December 31, 2017. In addition, the act will adjust the way we may calculate certain earnings and profits calculations to avoid double taxation at the stockholder level. These modifications could result in changes in our tax positions or investments and may adversely impact our financial condition and results of operations.

Potential characterization of distributions or gain on sale may be treated as unrelated business taxable income to tax exempt investors.

If (i) all or a portion of our assets are subject to the rules relating to taxable mortgage pools, (ii) we are a “pension held REIT,” (iii) a tax exempt stockholder has incurred debt to purchase or hold our common stock, or (iv) we purchase residual REMIC interests that generate “excess inclusion income,” then a portion of the distributions to and, in the case of a stockholder described in clause (iii), gains realized on the sale of common stock by such tax exempt stockholder may be subject to U.S. federal income tax as unrelated business taxable income under the Code.

Complying with REIT requirements may limit our ability to hedge effectively.

The REIT provisions of the Code may limit our ability to hedge our assets and operations. Under these provisions, on an annual basis we must derive 75% of our gross income from real estate assets, and 95% of our income from real estate assets and certain other qualifying income sources, in order to maintain our REIT status. Any income that we generate from transactions intended to hedge our interest rate and currency risks will generally be excluded from gross income for purposes of the 75% and 95% gross income tests if the instrument hedges interest rate risk or foreign currency exposure on liabilities used to carry or acquire real estate or income or gain that would be qualifying income under the 75% or 95% gross income tests, and such instrument is properly identified under applicable Treasury regulations. In addition, any income from other hedges would generally constitute non-qualifying income for purposes of both the 75% and 95% gross income tests. As a result of these rules, we may have to limit our use of hedging techniques that might otherwise be advantageous, which could result in greater risks associated with interest rate or other changes than we would otherwise incur.

The failure of our RMBS assets that are subject to a repurchase agreement to qualify as real estate assets would adversely affect our ability to qualify as a REIT.

We may enter into repurchase agreements under which we will nominally sell certain of our RMBS 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 RMBS assets that are the subject of any such agreement notwithstanding that such agreement may transfer record ownership of the assets to the counterparty during the term of the agreement. It is possible, however, that the IRS could assert that we did not own the RMBS assets during the term of the repurchase agreement, in which case we could fail to qualify as a REIT.

The failure of a mezzanine loan to qualify as a real estate asset could adversely affect our ability to continue to qualify as a REIT.

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 expect to treat certain mezzanine loans that may not meet all of the requirements for reliance on this safe harbor as real estate assets giving rise to qualifying mortgage interest for purposes of the REIT asset and income requirements, or otherwise not adversely affecting our qualification as a REIT. 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.

REIT distribution requirements could adversely affect our ability to execute our business plan and may require us to incur debt, sell assets or take other actions to make such distributions.

In order to continue to qualify as a REIT, we must distribute to stockholders, each calendar year, at least 90% of our REIT taxable income (including certain items of non-cash income), determined without regard to the deduction for dividends paid and excluding net capital gain. To the extent that we satisfy the 90% distribution requirement, but distribute less than 100% of our taxable income, we will be subject to U.S. federal corporate income tax on our undistributed income. In addition, we will incur a 4% nondeductible excise tax on the amount, if any, by which our distributions in any calendar year are less than a minimum amount specified under U.S. federal income tax law.

We intend to distribute our net income to stockholders in a manner intended to satisfy the 90% distribution requirement and to avoid both corporate income tax and the 4% nondeductible excise tax. Our taxable income may substantially exceed our net income as determined by U.S. GAAP or differences in timing between the recognition of taxable income and the actual receipt of cash may occur in which case we may have taxable income in excess of cash flow from our operating activities. In such event, we may generate less cash flow than taxable income in a particular year and find it difficult or impossible to meet the REIT distribution requirements in certain circumstances. In such circumstances, in order to satisfy the distribution requirement and to avoid U.S. federal corporate income tax and the 4% nondeductible excise tax in that year, we may be required to: (i) sell assets in adverse market conditions, (ii) borrow on unfavorable terms, (iii) distribute amounts that would otherwise be invested in future acquisitions, capital expenditures or repayment of debt or (iv) make a taxable distribution of our shares as part of a distribution in which stockholders may elect to receive shares or (subject to a limit measured as a percentage of the total distribution) cash, in order to comply with the REIT distribution requirements. Thus, compliance with the REIT distribution requirements may require us to take actions that may not otherwise be advisable given existing market conditions and hinder our ability to grow, which could adversely affect the value of our common stock.

Even though we have elected to be taxed as a REIT, we may be required to pay certain taxes.

Even though we have elected to be taxed as a REIT, we may be subject to certain U.S. federal, state and local taxes on our income and assets, including taxes on any undistributed income, prohibited transactions, tax on income from some activities conducted as a result of a foreclosure, and state or local income, franchise, property and transfer taxes, including mortgage recording taxes. In addition, we will hold some of our assets through wholly owned TRSs. Our TRSs and any other taxable corporations in which we own an interest will be subject to U.S. federal, state and local corporate taxes. Payment of these taxes generally would reduce our cash flow and the amount available to distribute to stockholders.

Our ability to invest in and dispose of TBA securities could be limited by our REIT qualification, and we could fail to qualify as a REIT as a result of these investments.

We may purchase Agency RMBS through TBAs, or dollar roll transactions. In certain instances, rather than take delivery of the Agency RMBS subject to a TBA, we may dispose of the TBA through a dollar roll transaction in which we agree to purchase similar securities in the future at a predetermined price or otherwise, which may result in the recognition of income or gains. We will account for dollar roll transactions as purchases and sales. The law is unclear regarding whether TBAs will be qualifying assets for the 75% asset test and whether income and gains from dispositions of TBAs will be qualifying income for the 75% gross income test.

Unless we are advised by counsel that TBAs should be treated as qualifying assets for purposes of the 75% asset test, we will limit our REIT investment in TBAs and any other non-qualifying assets to no more than 25% of our total assets at the end of any calendar quarter. Furthermore, until we are advised by counsel that income and gains from the disposition of TBAs should be treated as qualifying income for purposes of the 75% gross income test, we will limit our REIT gains from dispositions of TBAs and any other non-qualifying income to no more than 25% of our total gross income for each calendar year. Accordingly, our ability as a REIT to purchase Agency RMBS through TBAs and to dispose of TBAs, through dollar roll transactions or otherwise, could be limited.

Moreover, even if we are advised by counsel that TBAs should be treated as qualifying assets or that income and gains from dispositions of TBAs should be treated as qualifying income, it is possible that the IRS could successfully take the position that such assets are not qualifying assets and such income is not qualifying income. In that event, we could be subject to a penalty tax or could fail to qualify as a REIT if (i) the value of our TBAs, together with our non-qualifying assets for the 75% asset test, exceeded 25% of our gross assets at the end of any calendar quarter, or (ii) our income and gains from the disposition of TBAs, together with our non-qualifying income for the 75% gross income test, exceeded 25% of our gross income for any taxable year.

Although our use of TRSs may be able to partially mitigate the impact of meeting the requirements for qualification as a REIT, our ownership of and relationship with our TRSs is limited and a failure to comply with the limits would jeopardize our REIT qualification and may result in the application of a 100% excise tax.

A REIT may own up to 100% of the stock of one or more TRSs. Other than certain activities relating to lodging and healthcare facilities, a TRS generally may engage in any business and may hold assets and earn income that would not be qualifying assets or income if held or earned directly by a REIT. Overall, no more than 25% of the value of a REIT's assets may consist of stock or securities of one or more TRSs. In addition, the TRS rules limit the deductibility of interest paid or accrued by a TRS to its parent REIT to assure that the TRS is subject to an appropriate level of corporate taxation. The rules also impose a 100% excise tax on certain transactions between a TRS and its parent REIT that are not conducted on an arm's length basis.

Our TRSs will pay U.S. federal, state and local income tax on their taxable income, and their after-tax net income will be available for distribution to Two Harbors but are not required to be distributed to Two Harbors. We anticipate that the aggregate value of the securities of our TRSs will be less than 25% of the value of our total assets (including our TRS securities). Furthermore, we intend to monitor the value of our respective investments in our TRSs for the purpose of ensuring compliance with TRS ownership limitations. In addition, we will review all of our transactions with TRSs to ensure that they are entered into on arm's-length terms to avoid incurring the 100% excise tax described above. There can be no assurance, however, that we will be able to comply with the 25% limitation or to avoid application of the 100% excise tax discussed above.

As discussed above, the Protecting Americans from Tax Hikes Act of 2015 reduces the maximum allowable value of assets attributable to our TRSs from 25% to 20%, which change will be applicable with respect to tax years beginning after December 31, 2017. This modification, as well as other changes promulgated by the act, could result in changes in our tax positions or investments and may adversely impact our financial condition and results of operations.

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

We may acquire interests in debt instruments in the secondary market for less than their face amount. The discount at which such interests in debt instruments are acquired may reflect doubts about their ultimate collectability rather than current market interest rates. The amount of such discount may nevertheless be treated as "market discount" for U.S. federal income tax purposes. Market discount on a debt instrument may accrue based on the assumption that all future payments on the debt instrument will be made. Accrued market discount is reported as income when, and to the extent that, any payment of principal of the debt instrument is made. In the case of residential mortgage loans, principal payments are ordinarily made monthly, and consequently, accrued market discount may have to be included in income each month as if the debt instrument were assured of ultimately being collected in full. If we collect less on a debt instrument than its purchase price plus the market discount we had previously reported as income, we may not be able to benefit from any offsetting loss deduction in a subsequent taxable year.

Similarly, some of the mortgage-backed securities that we purchase will likely have been issued with original issue discount, or OID. We may be required to report such OID based on a constant yield method and income would accrue over the period we own the underlying security. This may lead to an accrual of OID income in excess of the amount that is collected. An offsetting loss deduction will become available only in the later year in which uncollectability is provable or ultimate disposition; and may be subject to limitation.

Finally, in the event that any debt instruments or mortgage-backed securities acquired by us are delinquent as to mandatory principal and interest payments, or in the event a borrower with respect to a particular debt instrument acquired by us encounters financial difficulty rendering it unable to pay stated interest as due, we may nonetheless be required to continue to recognize the unpaid interest as taxable income as it accrues, despite doubt as to its ultimate collectability. Similarly, we may be required to accrue interest income with respect to subordinate mortgage-backed securities at their stated rate regardless of whether corresponding cash payments are received or are ultimately collectible. In each case, while we would in general ultimately have an offsetting loss deduction available to us when such interest was determined to be uncollectable; the utility of that deduction would depend on our having taxable income in that later year or thereafter subject to carryforward limitations.

Dividends payable by REITs generally do not qualify for the reduced tax rates on dividend income from regular corporations, which could adversely affect the value of our shares.

The maximum U.S. federal income tax rate for dividends payable to domestic stockholders that are individuals, trusts and estates is 20%. Dividends payable by REITs, however, are generally not eligible for these reduced rates. Although the reduced U.S. federal income tax rate applicable to dividend income from regular corporate dividends does not adversely affect the taxation of REITs or dividends paid by REITs, the more favorable rates applicable to regular corporate dividends could cause investors who are individuals, trusts and estates to perceive investments in REITs to be relatively less attractive than investments in the stocks of non-REIT corporations that pay dividends, which could adversely affect the value of the shares of REITs, including our shares of common stock. Also, to the extent that tax rates change in the future, the attractiveness of an investment in our shares may decrease, which could adversely affect the value of our securities.

We may be subject to adverse legislative or regulatory tax changes that could reduce the market price of our shares.

At any time, the U.S. federal income tax laws or regulations governing REITs or the administrative interpretations of those laws or regulations may be changed, and the Trump administration has recently called for substantial modifications to U.S. tax policies. We cannot predict if or when any new U.S. federal income tax law, regulation or administrative interpretation, or any amendment to any existing U.S. federal income tax law, regulation or administrative interpretation, will be adopted, promulgated or become effective or whether any such law, regulation or interpretation may take effect retroactively. We and our stockholders could be adversely affected by any such change in, or any new, U.S. federal income tax law, regulation or administrative interpretation.

REIT limitations may affect our ability to dispose of real properties we may acquire in the course of our MSR and commercial real estate businesses, or in meeting our obligations under prior securitization transactions.

The provisions of the Code relating to REITs may limit our ability to sell properties at a profit without incurring unfavorable tax consequences. Generally, sales of property within two years of acquisition, and sale of multiple properties within one year, may result in the gains from such sales being subject to 100% taxation. To the extent we own real property within the REIT, we may face significant restrictions in our ability to dispose of this property.

Our qualification as a REIT may depend on the accuracy of legal opinions or advice rendered or given or statements by the issuers of assets we acquire.

When purchasing securities, we may rely on opinions or advice of counsel for the issuer of such securities, or statements made in related offering documents, for purposes of determining, among other things, whether such securities represent debt or equity securities for U.S. federal income tax purposes, the value of such securities, and also to what extent those securities constitute qualified real estate assets for purposes of the REIT asset tests and produce qualified income for purposes of the 75% gross income test. In addition, we may from time to time obtain and rely upon opinions of counsel regarding the qualification of certain assets and income as real estate assets. The inaccuracy of any such opinions, advice or statements may adversely affect our ability to qualify as a REIT and result in significant corporate-level tax.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our principal place of business is located at 590 Madison Avenue, 36th Floor, New York, New York 10022. In New York, we lease 5,768 square feet of office space pursuant to a lease that expires in August 2017 and 8,934 square feet of office space pursuant to a lease that expires in April 2022. We also have offices located at 601 Carlson Parkway, Suite 1400, Minnetonka, Minnesota 55305 and 8625 Tamiami Trail North, Naples, Florida 34108. In Minnetonka, we lease 27,982 square feet of office space pursuant to a lease that expires in June 2022. In Naples, we lease 4,522 square feet of office space pursuant to a lease that expires in May 2021. In accordance with the shared facilities and services agreement between PRCM Advisers and Pine River, we may utilize additional Pine River office space in Minnetonka and New York.

Item 3. Legal Proceedings

From time to time we may be involved in various legal claims and/or administrative proceedings that arise in the ordinary course of our business. As of the date of this filing, we are not party to any litigation or legal proceedings or, to the best of our knowledge, any threatened litigation or legal proceedings, which, in our opinion, individually or in the aggregate, would have a material adverse effect on our results of operations or financial condition.

Item 4. Mine Safety Disclosures

None.

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

Our common stock is listed on the NYSE under the symbol "TWO". As of February 24, 2017, 348,910,980 shares of common stock were issued and outstanding.

The following table shows the high and low sales prices for our common stock as reported on the NYSE during the calendar years ended December 31, 2016 and 2015:

Quarter Ended	Common Stock	
	High	Low
2016		
December 31	\$ 9.14	\$ 7.91
September 30	\$ 9.18	\$ 8.42
June 30	\$ 8.80	\$ 7.62
March 31	\$ 8.49	\$ 6.91
2015		
December 31	\$ 9.24	\$ 7.80
September 30	\$ 10.30	\$ 8.00
June 30	\$ 10.78	\$ 9.71
March 31	\$ 11.00	\$ 10.00

 Holders

As of February 21, 2017, there were 484 registered holders and approximately 80,272 beneficial owners of our common stock.

 Dividends

On December 15, 2016, we declared a cash dividend to our common stockholders, which was paid on January 27, 2017, totaling \$83.4 million, or \$0.24 per share. The following table presents cash dividends declared on our common stock for the years ended December 31, 2016 and 2015:

Declaration Date	Record Date	Payment Date	Cash Dividend Per Share
December 15, 2016	December 30, 2016	January 27, 2017	\$ 0.24
September 15, 2016	September 30, 2016	October 20, 2016	\$ 0.23
June 16, 2016	June 30, 2016	July 20, 2016	\$ 0.23
March 15, 2016	March 31, 2016	April 21, 2016	\$ 0.23
December 16, 2015	December 30, 2015	January 20, 2016	\$ 0.26
September 16, 2015	September 30, 2015	October 22, 2015	\$ 0.26
June 17, 2015	June 30, 2015	July 21, 2015	\$ 0.26
March 18, 2015	March 31, 2015	April 21, 2015	\$ 0.26

All dividend distributions are authorized by our board of directors, in its discretion, and will depend on such items as our REIT taxable earnings, 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 our common stock. We intend to pay quarterly dividends and currently intend to distribute to our stockholders as dividends 100% of our REIT taxable income, on an annual basis.

We have not established a minimum dividend distribution level for our common stock. See Item 1A, "Risk Factors" and Item 7, "Management's Discussion and Analysis of Financial Conditions and Results of Operations" of this Annual Report on Form 10-K for information regarding the sources of funds used for dividends and for a discussion of factors, if any, which may adversely affect our ability to pay dividends in 2017 and thereafter.

Our stock transfer agent and registrar is Wells Fargo Shareowner Services. Requests for information from Wells Fargo Shareowner Services can be sent to Wells Fargo Shareowner Services, P.O. Box 64856, St. Paul, MN 55164-0856 and their telephone number is 1-800-468-9716.

Securities Authorized for Issuance under Equity Compensation Plans

Our Second Restated 2009 Equity Incentive Plan was adopted by our board of directors and approved by our stockholders for the purpose of enabling us to provide equity compensation to attract and retain qualified directors, officers, advisers, consultants and other personnel, including affiliates and personnel of PRCM Advisers and its affiliates, and any joint venture affiliates of ours. The Plan is administered by the compensation committee of our board of directors and permits the granting of restricted shares of common stock, phantom shares, dividend equivalent rights and other equity-based awards. For a detailed description of the Plan, see Note 21 - *Equity Incentive Plan* of the consolidated financial statements included under Item 8 of this Annual Report on Form 10-K.

The following table presents certain information about the Plan as of December 31, 2016:

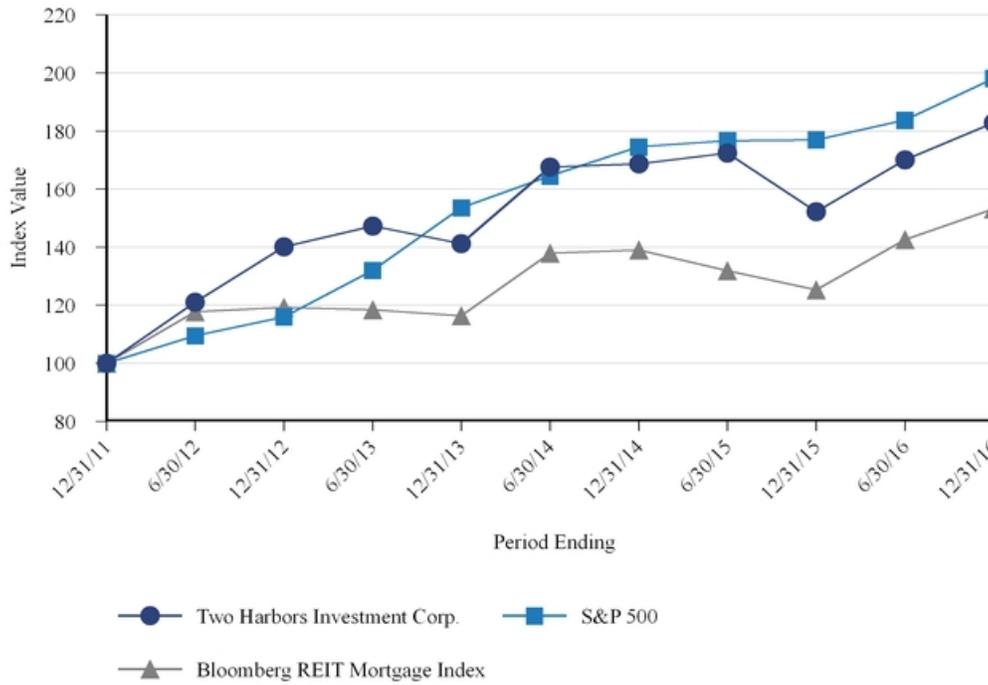
Plan Category	December 31, 2016		
	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in the first column of this table)
Equity compensation plans approved by stockholders ⁽¹⁾	—	\$ —	7,526,278
Equity compensation plans not approved by stockholders	—	—	—
Total	—	\$ —	7,526,278

(1) For a detailed description of the Plan, see Note 21 - *Equity Incentive Plan* of the consolidated financial statements included under Item 8 of this Annual Report on Form 10-K.

Performance Graph

The following graph compares the stockholder’s cumulative total return, assuming \$100 invested at December 31, 2011, with all reinvestment of dividends, as if such amounts had been invested in: (i) our common stock; (ii) the stocks included in the Standard and Poor’s 500 Stock Index, or S&P 500; and (iii) the stocks included in the Bloomberg REIT Mortgage Index.

**COMPARISON OF CUMULATIVE TOTAL RETURN
Among Two Harbors Investment Corp.,
S&P 500 and Bloomberg REIT Mortgage Index**



Index	December 31,				
	2016	2015	2014	2013	2012
Two Harbors Investment Corp.	\$ 182.82	\$ 152.17	\$ 168.65	\$ 141.16	\$ 140.08
S&P 500	\$ 198.10	\$ 176.95	\$ 174.55	\$ 153.55	\$ 115.99
Bloomberg REIT Mortgage Index	\$ 153.14	\$ 125.24	\$ 138.99	\$ 116.38	\$ 119.18

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

Our share repurchase program in effect as of December 31, 2015 allowed for the repurchase of up to an aggregate of 25,000,000 shares of our common stock. During the year ended December 31, 2016, our board of directors approved an increase of 50,000,000 shares, for up to a total of 75,000,000 shares authorized for repurchase by us under the program. Shares may be repurchased from time to time through privately negotiated transactions or open market transactions, pursuant to a trading plan in accordance with Rules 10b5-1 and 10b-18 under the Exchange Act or by any combination of such methods. The manner, price, number and timing of share repurchases are subject to a variety of factors, including market conditions and applicable SEC rules. The share repurchase program does not require the purchase of any minimum number of shares, and, subject to SEC rules, purchases may be commenced or suspended at any time without prior notice. The share repurchase program does not have an expiration date. As of December 31, 2016, a total of 24,135,000 shares had been repurchased under the program for an aggregate cost of \$200.4 million; of these, 8,020,000 shares were repurchased for a total cost of \$61.3 million during the year ended December 31, 2016. We did not repurchase shares during the three months ended December 31, 2016.

Item 6. Selected Financial Data

Our selected financial data set forth below should be read in conjunction with our consolidated financial statements and the accompanying notes included under Item 8 of this Annual Report on Form 10-K. Certain amounts for prior periods have been reclassified to conform to the 2016 presentation.

(in thousands)	For the Years Ended December 31,				
	2016	2015	2014	2013	2012
Interest income:					
Available-for-sale securities	\$ 415,052	\$ 458,515	\$ 506,268	\$ 507,180	\$ 448,620
Trading securities	—	8,676	12,913	5,963	4,873
Residential mortgage loans held-for-sale	23,037	28,966	16,089	22,185	609
Residential mortgage loans held-for-investment in securitization trusts	133,993	95,740	41,220	19,220	—
Commercial real estate assets	59,819	9,138	—	—	—
Cash and cash equivalents	1,589	902	717	1,043	944
Total interest income	633,490	601,937	577,207	555,591	455,046
Interest expense:					
Repurchase agreements	97,461	73,049	76,177	89,470	72,106
Collateralized borrowings in securitization trusts	97,729	57,216	26,760	10,937	—
Federal Home Loan Bank advances	26,101	11,921	4,513	—	—
Revolving credit facilities	604	—	—	—	—
Total interest expense	221,895	142,186	107,450	100,407	72,106
Net interest income	411,595	459,751	469,757	455,184	382,940
Other-than-temporary impairment losses	(1,822)	(535)	(392)	(1,662)	(10,952)
Other income (loss):					
(Loss) gain on investment securities	(107,374)	363,379	87,201	(54,430)	122,466
Gain (loss) on interest rate swap and swaption agreements	45,371	(210,621)	(345,647)	245,229	(159,775)
Gain (loss) on other derivative instruments	99,379	(5,049)	(17,529)	95,345	(40,906)
Gain (loss) on residential mortgage loans held-for-sale	16,085	14,285	17,297	(33,846)	2,270
Servicing income	143,616	127,412	128,160	11,795	—
(Loss) gain on servicing asset	(83,531)	(99,584)	(128,388)	13,881	—
Other (loss) income	(5,955)	(21,790)	18,539	14,835	—
Total other income (loss)	107,591	168,032	(240,367)	292,809	(75,945)
Expenses:					
Management fees	46,434	50,294	48,803	41,707	33,168
Securitization deal costs	6,152	8,971	4,638	4,153	—
Servicing expenses	32,724	28,101	25,925	3,761	—
Other operating expenses	63,483	64,162	56,231	37,259	17,678
Restructuring charges	2,990	—	—	—	—
Total expenses	151,783	151,528	135,597	86,880	50,846
Income from continuing operations before income taxes	365,581	475,720	93,401	659,451	245,197
Provision for (benefit from) income taxes	12,303	(16,490)	(73,738)	84,411	(42,219)
Net income from continuing operations	353,278	492,210	167,139	575,040	287,416
Income from discontinued operations	—	—	—	3,999	4,490
Net income	\$ 353,278	\$ 492,210	\$ 167,139	\$ 579,039	\$ 291,906

(in thousands, except share data)	For the Years Ended December 31,				
	2016	2015	2014	2013	2012
Basic earnings per weighted average share:					
Continuing operations	\$ 1.01	\$ 1.35	\$ 0.46	\$ 1.64	\$ 1.19
Discontinued operations	—	—	—	0.01	0.02
Net income	\$ 1.01	\$ 1.35	\$ 0.46	\$ 1.65	\$ 1.21
Diluted earnings per weighted average share:					
Continuing operations	\$ 1.01	\$ 1.35	\$ 0.46	\$ 1.64	\$ 1.18
Discontinued operations	—	—	—	0.01	0.02
Net income	\$ 1.01	\$ 1.35	\$ 0.46	\$ 1.65	\$ 1.20
Dividends declared per common share	\$ 0.93	\$ 1.04	\$ 1.04	\$ 1.17	\$ 1.71
Weighted average number of shares of common stock:					
Basic	348,073,704	365,247,738	366,011,855	350,361,827	242,014,751
Diluted	348,073,704	365,247,738	366,011,855	350,992,387	242,432,156
Comprehensive income (loss):					
Net income	\$ 353,278	\$ 492,210	\$ 167,139	\$ 579,039	\$ 291,906
Other comprehensive (loss) income, net of tax:					
Unrealized (loss) gain on available-for-sale securities, net	(159,834)	(496,728)	411,054	(251,723)	755,174
Other comprehensive (loss) income	(159,834)	(496,728)	411,054	(251,723)	755,174
Comprehensive income (loss)	\$ 193,444	\$ (4,518)	\$ 578,193	\$ 327,316	\$ 1,047,080
At December 31,					
(in thousands)	2016	2015	2014	2013	2012
Available-for-sale securities	\$ 13,128,857	\$ 7,825,320	\$ 14,341,102	\$ 12,256,727	\$ 13,666,954
Total assets	\$ 20,112,056	\$ 14,575,772	\$ 21,084,309	\$ 17,173,862	\$ 16,813,944
Repurchase agreements	\$ 9,316,351	\$ 5,008,274	\$ 12,932,463	\$ 12,250,450	\$ 12,624,510
Federal Home Loan Bank advances	\$ 4,000,000	\$ 3,785,000	\$ 2,500,000	\$ —	\$ —
Total stockholders' equity	\$ 3,401,111	\$ 3,576,561	\$ 4,068,042	\$ 3,854,995	\$ 3,450,577

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

The following discussion and analysis should be read in conjunction with the consolidated financial statements and accompanying notes included elsewhere in this Annual Report on Form 10-K.

General

We are a Maryland corporation focused on investing in, financing and managing RMBS, MSR, commercial real estate and other financial assets, which we collectively refer to as our target assets. We operate as a REIT, as defined under the Code.

We are externally managed by PRCM Advisers, which is a wholly owned subsidiary of Pine River, a global multi-strategy asset management firm providing comprehensive portfolio management, transparency and liquidity to institutional and high net worth investors.

Our objective is to provide attractive risk-adjusted total return to our stockholders over the long term, primarily through dividends and secondarily through capital appreciation. We selectively acquire and manage an investment portfolio of our target assets, which is constructed to generate attractive returns through market cycles. We focus on asset selection and implement a relative value investment approach across various sectors within the mortgage market. Our target assets include the following:

- Agency RMBS (which includes inverse interest-only Agency securities classified as "Agency Derivatives" for purposes of U.S. GAAP), meaning RMBS whose principal and interest payments are guaranteed by Ginnie Mae, Fannie Mae, or Freddie Mac;
- Non-Agency RMBS, meaning RMBS that are not issued or guaranteed by Ginnie Mae, Fannie Mae or Freddie Mac;
- MSR;
- Commercial real estate assets; and
- Other financial assets comprising approximately 5% to 10% of the portfolio.

We generally view our target assets in three strategies that are based on our core competencies of understanding and managing prepayment and credit risk. Our rates strategy includes assets that are sensitive to changes in interest rates and prepayment speeds, specifically Agency RMBS and MSR. Our credit strategy includes assets with inherent credit risk, including non-Agency RMBS. Our commercial strategy includes as target assets first mortgage loans, mezzanine loans, B-notes and preferred equity. Other assets include financial and mortgage-related assets other than the target assets in our rates, credit and commercial strategies, including residential mortgage loans (see discussion below) and certain non-hedging transactions that may produce non-qualifying income for purposes of the REIT gross income tests.

As opportunities in the residential and commercial mortgage marketplace change, we continue to evolve our business model. From a capital allocation perspective, we expect to continue to increase our allocation towards MSR and commercial real estate assets over time. Additionally, during the year ended December 31, 2016, we increased our allocation towards Agency RMBS due to attractive market prices. Within our non-Agency RMBS portfolio, we have a substantial emphasis on "legacy" securities, which include securities issued prior to 2009. We also hold "new issue" non-Agency RMBS, which we believe have enabled us to find attractive returns and further diversify our non-Agency RMBS portfolio.

In July 2016, we announced our plan to discontinue our mortgage loan conduit and securitization business, through which we acquired prime nonconforming residential mortgage loans from select mortgage loan originators and secondary market institutions with the intent to securitize the loans through the issuance of non-Agency mortgage-backed securities and/or exit through a whole loan sale. During the remainder of 2016, all remaining commitments to purchase mortgage loans were funded, an additional securitization transaction was completed and substantially all of the remaining prime nonconforming residential loans were sold through whole loan sale transactions. The wind down process was completed at the end of 2016, though we currently intend to retain certain subordinated securities from our prior securitization transactions. In addition, we hold a small legacy portfolio of credit sensitive residential mortgage loans, or CSL, which are loans where the borrower has previously experienced payment delinquencies and is more likely to be underwater (*i.e.*, the amount owed on a mortgage loan exceeds the current market value of the home). As a result, there is a higher probability of default on CSL than on newly originated residential mortgage loans.

Within our MSR business, we purchase the right to control the servicing of mortgage loans from high-quality originators. We do not directly service the mortgage loans we acquire, nor the mortgage loans underlying the MSR we acquire; rather, we contract with appropriately licensed third-party subservicers to handle substantially all servicing functions.

We believe our investment model allows management to allocate capital across various sectors within the mortgage market, with a focus on asset selection and the implementation of a relative value investment approach. Our capital allocation decisions factor in the opportunities in the marketplace, the cost of financing and the cost of hedging interest rate, prepayment, credit and other portfolio risks. As a result, capital allocation reflects management's flexible approach to investing in the marketplace. The following table provides our capital allocation in each of our investment strategies as of December 31, 2016 and the four immediately preceding period ends:

	As of				
	December 31, 2016	September 30, 2016	June 30, 2016	March 31, 2016	December 31, 2015
Rates strategy	58%	54%	56%	56%	49%
Credit strategy	27%	31%	31%	33%	43%
Commercial strategy	15%	15%	13%	11%	8%

As our capital allocation shifts, our annualized yields and cost of financing shift. As previously discussed, our investment decisions are not driven solely by annualized yields, but rather a multitude of macroeconomic drivers, including market environments and their respective impacts (e.g., uncertainty of prepayment speeds, extension risk and credit events).

For the three months ended December 31, 2016, our net yield realized on the portfolio was lower than previous periods. Yields and net interest spreads on Agency RMBS and MSR are generally lower than recent quarters, while net yields on non-Agency RMBS and net economic interests in consolidated securitization trusts have increased due to continued improvement in legacy non-Agency fundamentals, credit performance and prepayments and sales of higher-rated retained interests from on-balance sheet securitizations. Net yields on residential mortgage loans held-for-sale and commercial real estate assets have been relatively consistent. Our cost of financing has increased slightly as a result of increases in borrowing rates offered by counterparties. The following table provides the average annualized yield on our assets, including Agency and non-Agency RMBS, residential mortgage loans held-for-sale, residential mortgage loans held-for-investment, net of collateralized borrowings, in securitization trusts, commercial real estate assets and MSR for the three months ended December 31, 2016, and the four immediately preceding quarters:

	Three Months Ended				
	December 31, 2016	September 30, 2016	June 30, 2016	March 31, 2016	December 31, 2015
Average annualized portfolio yield ⁽¹⁾	3.54%	3.50%	3.77%	4.58%	4.56%
Cost of financing ⁽²⁾	1.17%	1.08%	1.18%	1.21%	1.30%
Net portfolio yield	2.37%	2.42%	2.59%	3.37%	3.26%

(1) Average annualized yield incorporates future prepayment, credit loss and other assumptions, all of which are estimates and subject to change.

(2) Cost of financing includes swap interest rate spread.

We seek to deploy moderate leverage as part of our investment strategy. We generally finance our RMBS, including retained interests from our previous on-balance sheet securitizations, and commercial real estate assets through short- and long-term borrowings structured as repurchase agreements and advances from the Federal Home Loan Bank of Des Moines, or the FHLB. We also finance our MSR through revolving credit facilities. Our Agency RMBS, given their liquidity and high credit quality, are eligible for higher levels of leverage, while non-Agency RMBS, commercial real estate assets and MSR, with less liquidity and/or more exposure to credit risk, utilize lower levels of leverage. We believe the debt-to-equity ratio funding our Agency RMBS, non-Agency RMBS, commercial real estate assets and MSR is the most meaningful leverage measure as collateralized borrowings on residential mortgage loans held-for-investment in securitization trusts represents term financing with no stated maturity. As a result, our debt-to-equity ratio is determined by our portfolio mix as well as many additional factors, including the liquidity of our portfolio, the sustainability and price of our financing, diversification of our counterparties and their available capacity to finance our assets, and anticipated regulatory developments. Over the past several quarters, we have generally maintained a debt-to-equity ratio range of 3.0 to 5.0 times to finance our RMBS portfolio, residential mortgage loans held-for-sale, commercial real estate assets and MSR, on a fully deployed capital basis. Our debt-to-equity ratio is directly correlated to the make-up of our portfolio; specifically, the higher percentage of Agency RMBS we hold, the higher our debt-to-equity ratio is, while the higher percentage of non-Agency RMBS, commercial real estate assets and MSR we hold, the lower our debt-to-equity ratio is. We may alter the percentage allocation of our portfolio among our target assets depending on the relative value of the assets that are available to purchase from time to time, including at times when we are deploying proceeds from common stock offerings we conduct. See the section titled “*Management’s Discussion and Analysis of Financial Condition and Results of Operations - Financial Condition - Repurchase Agreements*” for further discussion.

We recognize that investing in our target assets is competitive and we compete with other entities for attractive investment opportunities. We rely on our management team and our dedicated team of investment professionals provided by our external manager to identify investment opportunities. In addition, we have benefited and expect to continue to benefit from our external manager’s analytical and portfolio management expertise and infrastructure. We believe that our significant focus in the residential and commercial mortgage markets, the extensive mortgage market expertise of our investment team, our strong analytics and our disciplined relative value investment approach give us a competitive advantage versus our peers.

We have elected to be treated as a REIT for U.S. federal income tax purposes. To qualify as a REIT we are required to meet certain investment and operating tests and annual distribution requirements. We generally will not be subject to U.S. federal income taxes on our taxable income to the extent that we annually distribute all of our net taxable income to stockholders, do not participate in prohibited transactions and maintain our intended qualification as a REIT. However, certain activities that we may perform may cause us to earn income which will not be qualifying income for REIT purposes. We have designated certain of our subsidiaries as taxable REIT subsidiaries, or TRSs, as defined in the Code, to engage in such activities, and we may form additional TRSs in the future. We also operate our business in a manner that will permit us to maintain our exemption from registration under the Investment Company Act of 1940, as amended, or the 1940 Act. While we do not currently originate or service residential mortgage loans, certain of our subsidiaries have obtained the requisite licenses and approvals to purchase and sell residential mortgage loans in the secondary market and to own and manage MSR. Additionally, certain of our subsidiaries are licensed to originate commercial real estate loans.

Overview

Our 2016 efforts focused on three strategic objectives that we believe have positioned us for long-term success.

- *Managing a portfolio of RMBS to generate attractive returns with balanced risks.* We operate a hybrid REIT model, diversifying our portfolio across Agency and non-Agency RMBS in combination with derivative hedging instruments. We manage to an overall low level of interest rate exposure and leverage. We believe effectively managing an appropriate balance of risks within our portfolio is critical to providing attractive risk-adjusted returns to our stockholders and our ability to adjust our allocations and deploy capital across sectors allows us to optimize portfolio results over time.
- *Executing business diversification opportunities across MSR and commercial real estate assets.* We continue to pursue a variety of opportunities that leverage our core competencies of credit and prepayment risk management. Within our MSR business, we purchase the right to control the servicing of mortgage loans from high-quality originators. During 2016, we expanded our flow-sale arrangements within our originator partner network. In addition, we originate and acquire senior and mezzanine commercial real estate assets. These assets are U.S. domiciled and are secured by a diverse mix of property types including office, retail, multifamily, industrial and hotel properties. As of December 31, 2016, we had invested in first mortgage and mezzanine commercial real estate loans. We are taking a measured approach as we diversify, keeping true to our strategic long-term plans and our core strengths.
- *Maintaining “best in class” investment, corporate governance, investor relations and disclosure practices.* We attribute our growth to portfolio alpha generation, innovation and best practice in corporate governance and disclosure.

Factors Affecting our Operating Results

Our net interest income includes income from our RMBS portfolio, including the amortization of purchase premiums and accretion of purchase discounts, and income from our residential mortgage loans and commercial real estate assets. Net interest income, as well as our servicing income, net of subservicing expenses, will fluctuate primarily as a result of changes in market interest rates, our financing costs and prepayment speeds on our assets. Interest rates, financing costs and prepayment rates vary according to the type of investment, conditions in the financial markets, competition and other factors, none of which can be predicted with any certainty. Our operating results will also be affected by default rates and credit losses with respect to the mortgage loans underlying our non-Agency RMBS and in our residential mortgage loan and commercial real estate portfolios.

Fair Value Measurement

A significant portion of our assets and liabilities are reported at fair value and, therefore, our consolidated balance sheets and statements of comprehensive income (loss) are significantly affected by fluctuations in market prices. At December 31, 2016, approximately 86.8% of our total assets, or \$17.5 billion, and approximately 18.2% of our total liabilities, or \$3.0 billion, consisted of financial instruments recorded at fair value. See Note 14 - *Fair Value* to the consolidated financial statements, included in this Annual Report on Form 10-K, for descriptions of valuation methodologies used to measure material assets and liabilities at fair value and details of the valuation models, key inputs to those models and significant assumptions utilized. Although we execute various hedging strategies to mitigate our exposure to changes in fair value, we cannot fully eliminate our exposure to volatility caused by fluctuations in market prices. Although markets for asset-backed securities, including RMBS, have modestly stabilized since the severe dislocations experienced as a result of the financial crisis, these markets continue to experience volatility and, as a result, our assets and liabilities will be subject to valuation adjustment as well as changes in the inputs we use to measure fair value.

Any temporary change in the fair value of our available-for-sale, or AFS, securities, excluding Agency interest-only mortgage-backed securities and GSE credit risk transfer securities, is recorded as a component of accumulated other comprehensive income and does not impact our earnings. Our reported earnings for U.S. GAAP purposes, or GAAP net income, is affected, however, by fluctuations in market prices on the remainder of our financial assets and liabilities recorded at fair value. For the year ended December 31, 2016, the change in unrealized fair value gains on interest rate swap and swaption agreements, which are accounted for as derivative trading instruments under U.S. GAAP, positively affected our financial results. The change in fair value of interest rate swaps was a result of changes to LIBOR, the swap curve and corresponding counterparty borrowing rates during the year ended December 31, 2016. Our financial results for the year ended December 31, 2016 were positively affected by a change in unrealized fair value gains on Agency interest-only mortgage-backed securities and GSE credit risk transfer securities, residential mortgage loans held-for-sale, net economic interests in consolidated securitization trusts and MSR.

For the year ended December 31, 2015, the change in unrealized fair value gains on interest rate swap and swaption agreements positively affected our financial results. The change in fair value of the interest rate swaps was a result of changes to LIBOR, the swap curve and corresponding counterparty borrowing rates during the year ended December 31, 2015. Our financial results for the year ended December 31, 2015 were negatively affected by a change in unrealized fair value losses on Agency interest-only mortgage-backed securities and GSE credit risk transfer securities, certain U.S. Treasuries classified as trading instruments due to their short-term investment objectives, residential mortgage loans held-for-sale, net economic interests in consolidated securitization trusts and MSR.

In addition, our financial results for the year ended December 31, 2016 and 2015 were affected by the changes in unrealized gains and losses of certain other derivative instruments that were accounted for as trading derivative instruments (*i.e.*, credit default swaps, TBAs, short U.S. Treasuries, put and call options for TBAs and U.S. Treasuries, constant maturity swaps, Markit IOS total return swaps, inverse interest-only securities and forward residential mortgage loan purchase commitments).

We have numerous internal controls in place to help ensure the appropriateness of fair value measurements. Significant fair value measures are subject to detailed analytics and management review and approval. Our entire investment portfolio reported at fair value is priced by third-party brokers and/or by independent pricing providers. We generally receive three or more broker and vendor quotes on pass-through Agency RMBS, and generally receive multiple broker or vendor quotes on all other RMBS instruments, including interest-only Agency RMBS, inverse interest-only Agency RMBS, and non-Agency RMBS. We also typically receive two vendor quotes for the residential mortgage loans and MSR in our investment portfolio. For Agency RMBS, the third-party pricing providers and brokers use pricing models that commonly incorporate such factors as coupons, primary and secondary mortgage rates, rate reset period, issuer, prepayment speeds, credit enhancements and expected life of the security. For non-Agency RMBS, the third-party pricing providers and brokers utilize both observable and unobservable inputs such as pool-specific characteristics (*i.e.*, loan age, loan size, credit quality of borrowers, vintage, servicer quality), floating rate indices, prepayment and default assumptions, and recent trading of the same or similar securities. For residential mortgage loans and MSR, vendors use pricing models that generally incorporate observable inputs such as principal balance, note rate, geographical location, loan-to-value (LTV) ratios, FICO, appraised value and other loan characteristics, along with observed market yields, securitization economics and trading levels. Additionally for MSR, pricing providers will customarily incorporate loan servicing cost, servicing fee, ancillary income, and earnings rate on escrow as observable inputs. Unobservable or model-driven inputs include forecast cumulative defaults, default curve, forecast loss severity and forecast voluntary prepayment.

We evaluate the prices we receive from both brokers and independent pricing providers by comparing those prices to actual purchase and sale transactions, our internally modeled prices calculated based on market observable rates and credit spreads, and to each other both in current and prior periods. We review and may challenge broker quotes and valuations from third-party pricing providers to ensure that such quotes and valuations are indicative of fair value as a result of this analysis. We then estimate the fair value of each security based upon the median of the final broker quotes received, and we estimate the fair value of residential mortgage loans and MSR based upon the average of prices received from independent providers, subject to internally-established hierarchy and override procedures.

We utilize “bid side” pricing for our RMBS assets and, as a result, certain assets, especially the most recent purchases, may realize a markdown due to the “bid-offer” spread. To the extent that this occurs, any economic effect of this would be reflected in accumulated other comprehensive income.

Considerable judgment is used in forming conclusions and estimating inputs to our Level 3 fair value measurements. Level 3 inputs such as interest rate movements, prepayments speeds, credit losses and discount rates are inherently difficult to estimate. Changes to these inputs can have a significant effect on fair value measurements. Accordingly, there is no assurance that our estimates of fair value are indicative of the amounts that would be realized on the ultimate sale or exchange of these assets.

Critical Accounting Estimates

The preparation of financial statements in accordance with U.S. GAAP requires us to make certain judgments and assumptions, based on information available at the time of our preparation of the financial statements, in determining accounting estimates used in preparation of the statements. Our significant accounting policies are described in Note 2 to the consolidated financial statements, included under Item 8 of this Annual Report on Form 10-K.

Accounting estimates are considered critical if the estimate requires us to make assumptions about matters that were highly uncertain at the time the accounting estimate was made and if different estimates reasonably could have been used in the reporting period or changes in the accounting estimate are reasonably likely to occur from period to period that would have a material impact on our financial condition, results of operations or cash flows.

The methods used by us to estimate fair value for AFS securities, residential mortgage loans, MSR and collateralized borrowings may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while we believe that our valuation methods are appropriate and consistent with other market participants, the use of different methodologies, or assumptions, to determine the fair value of certain financial instruments could result in a different estimate of fair value at the reporting date. We use inputs that are current as of the measurement date, which in periods of market dislocation, may have reduced transparency.

Classification and Valuation of Available-for-Sale Securities

Our RMBS investments consist primarily of Agency RMBS and non-Agency RMBS that we classify as available-for-sale, or AFS. All assets classified as AFS, excluding Agency interest-only mortgage-backed securities and GSE credit risk transfer securities, are reported at estimated fair value with changes in fair value included in accumulated other comprehensive income, a separate component of stockholders' equity, on an after-tax basis. On July 1, 2015, we elected the fair value option for Agency interest-only securities and GSE credit risk transfer securities acquired on or after such date. All Agency interest-only securities and GSE credit risk transfer securities acquired on or after July 1, 2015 are carried at estimated fair value with changes in fair value recorded as a component of (loss) gain on investment securities in the consolidated statements of comprehensive income (loss).

When the estimated fair value of an AFS security is less than amortized cost, we consider whether there is an other-than-temporary impairment in the value of the security that is required to be recognized in GAAP net income. The determination of whether a security is other-than-temporarily impaired involves judgments and assumptions based on subjective and objective factors. Consideration is given to whether we (i) have the intent to sell the investment securities, (ii) are more likely than not to be required to sell the investment securities before recovery, or (iii) do not expect to recover the entire amortized cost basis of the investment securities. Investments with unrealized losses are not considered other-than-temporarily impaired if we have the ability and intent to hold the investments for a period of time, to maturity if necessary, sufficient for a forecasted market price recovery up to or beyond the amortized cost basis of the investments. If an impairment is determined to be solely driven by the inability to fully recover the entire amortized cost basis over the remaining life of the security, the security is further analyzed for credit loss (the difference between the present value of cash flows expected to be collected and the amortized cost basis). The credit loss, if any, is then recognized in GAAP net income, while the balance of impairment related to other factors is recognized in other comprehensive (loss) income.

Classification and Valuation of Residential Mortgage Loans Held-for-Investment in Securitization Trusts

Our residential mortgage loans held-for-investment in securitization trusts are carried at fair value as a result of a fair value option election, with changes in fair value recorded in GAAP net income. An entity is allowed to measure both the financial assets and financial liabilities of a qualifying collateralized financing entity, or CFE, it consolidates using the fair value of either the CFE's financial assets or financial liabilities, whichever is more observable. Since our securitization trusts are considered qualifying CFEs, we determine the fair value of these residential mortgage loans based on the fair value of our collateralized borrowings in securitization trusts and our retained interests from on-balance sheet securitizations (eliminated in consolidation in accordance with U.S. GAAP), as the fair value of these instruments is more observable.

Classification and Valuation of Mortgage Servicing Rights

We account for our MSR at fair value, with changes in fair value recorded in GAAP net income, rather than at amortized cost. Fair value is generally determined based on prices obtained from third-party pricing providers. Although MSR transactions are observable in the marketplace, the valuation includes unobservable market data inputs (prepayment speeds, delinquency levels and discount rates).

Classification and Valuation of Collateralized Borrowings in Securitization Trusts

Our collateralized borrowings in securitization trusts are carried at fair value as a result of a fair value option election, with changes in fair value recorded in GAAP net income. Fair value is generally determined based on prices obtained from third-party pricing providers, broker quotes received and other applicable market data.

Impairment of Commercial Real Estate Loans Held-for-Investment

Commercial real estate loans held-for-investment, which are included in commercial real estate assets on the consolidated balance sheets, are reported at cost, net of any unamortized acquisition premiums or discounts, loan fees and origination costs as applicable, unless the loans are deemed impaired. Impairment is indicated when it is deemed probable that we will not be able to collect all amounts due pursuant to the contractual terms of the loan. Because our commercial real estate loans are collateralized either by real property or by equity interests in the commercial real estate borrower, impairment is measured by comparing the estimated fair value of the underlying collateral to the amortized cost of the respective loan. The valuation of the underlying collateral requires significant judgment, which includes assumptions regarding capitalization rates, leasing, credit worthiness of major tenants, occupancy rates, availability of financing, exit plan, loan sponsorship, actions of other lenders, overall economic conditions, the broader commercial real estate market, local geographic sub-markets, and other factors deemed necessary. If a loan is determined to be impaired, we record an allowance to reduce the carrying value of the loan through a charge to provision for loan losses. Actual losses, if any, could ultimately differ from these estimates.

Interest Income Recognition

Our interest income on our Agency and non-Agency RMBS is accrued based on the actual coupon rate and the outstanding principal balance of such securities. Premiums and discounts are amortized or accreted into interest income over the lives of the securities using the effective yield method, as adjusted for actual prepayments. We estimate prepayments for our Agency interest-only securities, which represent our right to receive a specified portion of the contractual interest flows of specific Agency and collateralized mortgage obligations, or CMO, securities. As a result, if prepayments increase (or are expected to increase), we will accelerate the rate of amortization on the premiums. Conversely, if prepayments decrease (or are expected to decrease), we will decelerate the rate of amortization on the premiums.

Our interest income on our non-Agency RMBS rated below AA, including unrated securities, is recognized in accordance with estimated cash flows. Cash flows from a security are estimated by applying assumptions used to determine the fair value of such security and the excess of the future cash flows over the investment are recognized as interest income under the effective yield method. We review and, if appropriate, make adjustments to our cash flow projections at least quarterly and monitor these projections based on input and analysis received from external sources, internal models, and our judgment about interest rates, prepayment rates, the timing and amount of credit losses, and other factors. Changes in cash flows from those originally projected, or from those estimated at the last evaluation, may result in a prospective change in interest income recognized on, or the carrying value of, such securities.

For non-Agency RMBS purchased at a discount, we account for differences between contractual cash flows and cash flows expected to be collected from our initial investment in debt securities acquired if those differences are attributable, at least in part, to credit quality. We limit the yield that may be accreted (accretable yield) to the excess of an estimate of undiscounted expected principal, interest, and other cash flows (cash flows expected at acquisition to be collected) over the initial investment. The excess of contractual cash flows over cash flows expected to be collected (nonaccretable difference or designated credit reserve) is not recognized as an adjustment of yield, loss accrual, or valuation allowance. Subsequent increases in cash flows expected to be collected is recognized prospectively through adjustment of the yield over the remaining life of the security. Decreases in cash flows expected to be collected are recognized as impairments.

Interest income on residential mortgage and commercial real estate loans is recognized at the loan coupon rate. Additionally, any acquisition premiums or discounts, loan fees and origination costs on commercial real estate loans held-for-investment are amortized or accreted into interest income over the lives of the loans using the effective interest method. All residential mortgage and commercial real estate loans are considered past due when they are 30 days past their contractual due date. Interest income recognition is suspended when loans are placed on nonaccrual status. Generally, loans are placed on nonaccrual status when delinquent for more than 60 days or when determined not to be probable of full collection. Interest accrued, but not collected, at the date loans are placed on nonaccrual is reversed and subsequently recognized only to the extent it is received in cash or until it qualifies for return to accrual status. However, where there is doubt regarding the ultimate collectability of loan principal, all cash received is applied to reduce the carrying value of such loans. Loans are restored to accrual status only when contractually current or the collection of future payments is reasonably assured.

Derivative Financial Instruments and Hedging Activities

We apply the provisions of ASC 815, which requires the recognition of all derivatives as either assets or liabilities on our consolidated balance sheets and to measure those instruments at fair value. The fair value adjustments of our current derivative instruments affect net income as the hedge for accounting purposes is being treated as an economic, or trading, hedge and not as a qualifying hedging instrument.

Derivatives are primarily used for hedging purposes rather than speculation. We rely on internal models corroborated by quotations from a third party to determine these fair values. If our hedging activities do not achieve their desired results, our reported GAAP net income may be adversely affected.

Income Taxes

Our financial results are generally not expected to reflect provisions for current or deferred income taxes, except for those taxable benefits or provisions recognized by our taxable REIT subsidiaries. We estimate, based on existence of sufficient evidence, the ability to realize the remainder of any deferred tax asset our TRSs recognize. Any adjustments to such estimates will be made in the period such determination is made. We plan to operate in a manner that will allow us to qualify for taxation as a REIT. As a result of our expected REIT qualification, we do not generally expect to pay U.S. federal corporate level taxes. However, many of the REIT requirements are highly technical and complex. If we were to fail to meet the REIT requirements, we would be subject to U.S. federal, state and local income taxes.

Market Conditions and Outlook

The key macroeconomic factors that impact our business are U.S. residential and commercial property prices, national employment rates and the interest rate environment. Home prices increased modestly through the fourth quarter of 2016 and are expected to gradually appreciate over the next several years. Credit standards remain tight, despite a modest easing in recent periods, and have limited borrowers' ability to refinance their mortgages notwithstanding low interest rates and government programs that promote refinancing. Employment market conditions remain relatively solid as jobless claims, unemployment and payroll data are showing stability, although underemployment levels remain stubbornly high and new job creation has been disappointing. Other than LTV ratios and cash reserves, we believe employment is the most powerful determinant of homeowners' ongoing likelihood to pay their mortgages. Home price performance and employment are particularly important to our non-Agency portfolio.

The interest rate environment remained volatile in the fourth quarter of 2016 as a result of domestic economic data and political events as well as international developments. Interest rates remained low at the beginning of the fourth quarter following decreases experienced in the third quarter largely as a result of Britain's vote to exit the European Union. Rates increased dramatically, however, following the U.S. presidential and congressional election, a strengthening jobs report and the Federal Reserve's rate hike in December. The Trump administration has indicated that it will focus on several issues that could impact interest rates, the U.S. economy and U.S. businesses, including but not limited to tax reform, deregulation, fiscal spending measures and trade. While there is much uncertainty regarding the timing and specifics of any policy changes, any such actions could affect our business. Nevertheless, interest rates remain at historically low levels and that environment is expected to persist in the near term, as the Federal Reserve has reiterated it will take a measured and conservative approach to future interest rate decisions. Additionally, it appears the Federal Reserve will continue to reinvest its mortgage-backed security principal repayments for the foreseeable future.

We believe our blended Agency and non-Agency RMBS portfolio and our investing expertise, as well as our operational capabilities to invest in MSR and commercial real estate assets, will allow us to better navigate the dynamic mortgage market while future regulatory and policy activities take shape. Having a diversified portfolio allows us to mitigate a variety of risks, including interest rate and RMBS spread volatility. As such, we have diversified into several target assets that capitalize on our prepayment and credit expertise.

We expect that the majority of our assets will remain in whole-pool Agency RMBS in light of the long-term attractiveness of the asset class and in order to continue to satisfy the requirements of our exemption from registration under the 1940 Act. Interest-only Agency securities and MSR also provide a complementary investment and risk-management strategy to our principal and interest Agency RMBS investments. Risk-adjusted returns in our Agency RMBS portfolio may decline if we are required to pay higher purchase premiums due to lower interest rates or additional liquidity in the market. Additionally, the Federal Reserve's prior quantitative easing programs and continued reinvestment of its mortgage-backed security principal repayments and other policy changes may impact the returns of our Agency RMBS portfolio.

The following table provides the carrying value of our RMBS portfolio by product type:

(dollars in thousands)	December 31, 2016		December 31, 2015	
Agency				
Fixed Rate	\$ 11,196,011	84.5%	\$ 5,864,294	73.4%
Hybrid ARM	30,463	0.2%	108,596	1.4%
Total Agency	11,226,474	84.7%	5,972,890	74.8%
Agency Derivatives	126,599	1.0%	157,906	2.0%
Non-Agency				
Senior	1,210,462	9.1%	1,313,695	16.4%
Mezzanine	687,644	5.2%	532,572	6.7%
Interest-only securities	4,277	—%	6,163	0.1%
Total Non-Agency	1,902,383	14.3%	1,852,430	23.2%
Total	\$ 13,255,456		\$ 7,983,226	

Prepayment speeds and volatility due to interest rates

Our Agency RMBS portfolio is subject to inherent prepayment risk. We seek to offset a portion of our Agency pool exposure to prepayment speeds through our MSR and interest-only Agency RMBS portfolios. Generally, a decline in interest rates that leads to rising prepayment speeds will cause the market value of our interest-only securities and MSR to deteriorate, and our fixed coupon Agency pools to increase. The inverse relationship occurs when interest rates increase and prepayments slow. As previously discussed, despite the Federal Reserve raising rates again in December 2016, the low interest rate environment is expected to persist in the near term. However, changes in home price performance, key employment metrics and government programs, among other macroeconomic factors, could cause prepayment speeds to increase on many RMBS, which could lead to less attractive reinvestment opportunities. Nonetheless, we believe our portfolio management approach, including our asset selection process, positions us to respond to a variety of market scenarios, including an overall faster prepayment environment.

The following table provides the three-month weighted average constant prepayment rate, or CPR, on our Agency RMBS throughout 2016:

Agency RMBS	Three Months Ended			
	December 31, 2016	September 30, 2016	June 30, 2016	March 31, 2016
Weighted Average CPR	7.1%	9.7%	8.6%	9.2%

Although we are unable to predict the movement in interest rates in 2017 and beyond, our diversified portfolio management strategy is intended to generate attractive yields with a low level of sensitivity to changes in the yield curve, prepayments and interest rate cycles.

Our Agency RMBS are collateralized by pools of fixed-rate mortgage loans and hybrid adjustable-rate mortgage loans, or hybrid ARMs, which are mortgage loans that have interest rates that are fixed for an initial period and adjustable thereafter. Our Agency portfolio also includes securities with implicit or explicit prepayment protection, including lower loan balances (securities collateralized by loans of less than \$175,000 in initial principal balance), higher LTVs (securities collateralized by loans with LTVs greater than or equal to 80%), certain geographic concentrations and lower FICO scores. Our overall allocation of Agency RMBS and holdings of pools with specific characteristics are viewed in the context of our aggregate rates strategy, including MSR and related derivative hedging instruments. Additionally, the selection of securities with certain attributes is driven by the perceived relative value of the securities, which factors in the opportunities in the marketplace, the cost of financing and the cost of hedging interest rate, prepayment, credit and other portfolio risks. As a result, Agency RMBS capital allocation reflects management's flexible approach to investing in the marketplace.

The following tables provide the carrying value of our Agency RMBS portfolio by underlying mortgage loan rate type:

(dollars in thousands)	As of December 31, 2016						
	Principal/ Current Face	Carrying Value	% of Agency Portfolio	% Prepayment Protected	Weighted Average Coupon Rate	Amortized Cost	Weighted Average Loan Age (months)
Agency RMBS AFS:							
30-Year Fixed							
3.0-3.5%	\$ 6,652,972	\$ 6,762,130	59.6%	70.5%	3.3%	\$ 6,909,378	5
4.0-4.5%	3,237,989	3,462,866	30.5%	100.0%	4.2%	3,480,181	42
≥ 5%	455,030	511,738	4.5%	100.0%	5.5%	490,706	96
	10,345,991	10,736,734	94.6%	81.4%	3.7%	10,880,265	21
15-Year & Other Fixed	234,949	229,928	2.0%	0.8%	4.6%	227,918	141
Hybrid ARM	28,582	30,463	0.3%	—%	4.9%	30,165	154
Interest-only	2,961,895	229,349	2.0%	—%	2.3%	246,373	39
Agency Derivatives	740,844	126,599	1.1%	—%	5.2%	109,762	152
Total Agency RMBS	\$ 14,312,261	\$ 11,353,073	100.0%	77.0%		\$ 11,494,483	

As of December 31, 2015

(dollars in thousands)	Principal/ Current Face	Carrying Value	% of Agency Portfolio	% Prepayment Protected	Weighted Average Coupon Rate	Amortized Cost	Weighted Average Loan Age (months)
Agency RMBS AFS:							
30-Year Fixed							
4.0-4.5%	\$ 3,979,110	\$ 4,290,199	70.0%	100.0%	4.2%	\$ 4,284,600	30
≥ 5%	561,874	632,954	10.3%	100.0%	5.5%	607,318	84
	4,540,984	4,923,153	80.3%	100.0%	4.4%	4,891,918	37
15-Year & Other Fixed	330,142	326,745	5.3%	0.7%	4.6%	315,557	116
Home equity conversion mortgages	365,986	386,489	6.3%	—%	4.5%	383,771	43
Hybrid ARM	101,836	108,596	1.8%	—%	3.6%	106,293	142
Interest-only	2,918,082	227,907	3.7%	—%	2.1%	232,299	29
Agency Derivatives	932,037	157,906	2.6%	—%	6.1%	139,859	140
Total Agency RMBS	\$ 9,189,067	\$ 6,130,796	100.0%	80.3%		\$ 6,069,697	

Our non-Agency RMBS yields are expected to increase if prepayment rates on such assets exceed our prepayment assumptions. To the extent that prepayment speeds increase due to macroeconomic factors, we expect to benefit from the ability to recognize the income from the heavily discounted RMBS prices that principally arose from credit or payment default expectations.

The following tables provide discount information on our non-Agency RMBS portfolio:

As of December 31, 2016

(in thousands)	Principal and Interest Securities		Interest-Only Securities	Total
	Senior	Mezzanine		
Face Value	\$ 1,622,604	\$ 924,000	\$ 185,535	\$ 2,732,139
Unamortized discount				
Designated credit reserve	(315,009)	(52,428)	—	(367,437)
Unamortized net discount	(377,017)	(250,786)	(181,172)	(808,975)
Amortized Cost	\$ 930,578	\$ 620,786	\$ 4,363	\$ 1,555,727

As of December 31, 2015

(in thousands)	Principal and Interest Securities		Interest-Only Securities	Total
	Senior	Mezzanine		
Face Value	\$ 1,801,283	\$ 624,253	\$ 229,845	\$ 2,655,381
Unamortized discount				
Designated credit reserve	(373,729)	(35,348)	—	(409,077)
Unamortized net discount	(383,816)	(98,729)	(224,476)	(707,021)
Amortized Cost	\$ 1,043,738	\$ 490,176	\$ 5,369	\$ 1,539,283

Credit losses

Although our Agency portfolio is supported by U.S. government agency and federally chartered corporation guarantees of payment of principal and interest, we are exposed to credit risk in our non-Agency RMBS, residential mortgage loans and commercial real estate assets.

The credit support built into non-Agency RMBS deal structures is designed to provide a level of protection from potential credit losses for more senior tranches. We evaluate credit risk on our non-Agency investments through a comprehensive asset selection process, which is predominantly focused on quantifying and pricing credit risk, including extensive initial modeling and scenario analysis. In addition, the discounted purchase prices paid for our non-Agency RMBS provide additional insulation from credit losses in the event we receive less than 100% of par on such assets. At purchase, we estimate the portion of the discount we do not expect to recover and factor that into our expected yield and accretion methodology. We may also record an other-than-temporary impairment, or OTTI, for a portion of our investment in a security to the extent we believe that the amortized cost exceeds the present value of expected future cash flows. We review our non-Agency RMBS on an ongoing basis using quantitative and qualitative analysis of the risk-adjusted returns on such investments and through on-going asset surveillance. Nevertheless, unanticipated credit losses could occur, adversely impacting our operating results.

We evaluate and review credit risk on our residential mortgage loans on an ongoing basis using quantitative and qualitative analysis and through on-going asset surveillance.

We evaluate credit risk on our commercial real estate assets through a comprehensive asset selection process, which includes valuing the underlying collateral property as well as the financial and operating capability of the borrower, borrowing entity or loan sponsor. We also assess the financial wherewithal of any loan guarantors, the borrower's competency in managing and operating the properties, and the overall economic environment, real estate sector, and geographic sub-market in which the borrower operates. We evaluate each commercial real estate asset for impairment at least quarterly and may record an allowance to reduce the carrying value of the asset to the present value of expected future cash flows, if deemed impaired.

Counterparty exposure and leverage ratio

We monitor counterparty exposure in our broker, banking and lending counterparties on a daily basis. We believe our broker and banking counterparties are well-capitalized organizations and we attempt to manage our cash balances across these organizations to reduce our exposure to a single counterparty.

As of December 31, 2016, we had entered into repurchase agreements with 31 counterparties, 23 of which had outstanding balances at December 31, 2016, including three facilities that provide short-term financing for our commercial real estate collateral with outstanding balances at December 31, 2016. In addition, we held both short- and long-term secured advances from the FHLB as well as short-term borrowings under revolving credit facilities from two counterparties. As of December 31, 2016, we had a total consolidated debt-to-equity ratio of 4.8:1.0. The debt-to-equity ratio funding our RMBS AFS, commercial real estate assets, MSR and Agency Derivatives only was 3.9:1.0. We believe the debt-to-equity ratio funding our RMBS AFS, commercial real estate assets, MSR and Agency Derivatives is the most meaningful debt-to-equity measure as collateralized borrowings on residential mortgage loans held-for-investment in securitization trusts represents term financing with no stated maturity.

As of December 31, 2016, we held \$406.9 million in cash and cash equivalents, approximately \$2.6 million of unpledged Agency securities and derivatives and \$26.1 million of unpledged non-Agency securities and retained interests from our on-balance sheet securitizations, which are eliminated in consolidation in accordance with U.S. GAAP. As a result, we had an overall estimated unused borrowing capacity on our unpledged RMBS and retained interests of approximately \$19.8 million. We also held approximately \$40.1 million of unpledged residential mortgage loans held-for-sale, for which we had no unused borrowing capacity. As of December 31, 2016, we held approximately \$43.9 million of unpledged mezzanine commercial real estate loans and \$10.8 million of unpledged commercial real estate first mortgages, and an overall estimated unused borrowing capacity on unpledged commercial real estate assets of approximately \$36.5 million. We also held approximately \$512.9 million of unpledged MSR, for which we had no unused borrowing capacity. Generally, unused borrowing capacity may be the result of our election not to utilize certain financing, as well as delays in the timing in which funding is provided or the inability to meet lenders' eligibility requirements for specific types of asset classes. If borrowing rates and collateral requirements change in the near term, we believe we are subject to less earnings volatility than if we carried higher leverage.

We also monitor exposure to our mortgage loan and MSR counterparties. In connection with our previous securitization transactions, we were required to make certain representations and warranties to the investors in the RMBS we issued. We may also be required to make representations and warranties to investors in the loans underlying the MSR we own. If the representations and warranties prove to be inaccurate, we may be obligated to repurchase certain mortgage loans, which may impact the profitability of our portfolio. Although we obtain similar representations and warranties from the counterparty from which we acquired the relevant asset, if those representations and warranties do not directly mirror those we make to the investor, or if we are unable to enforce the representations and warranties against the counterparty for a variety of reasons, including the financial condition or insolvency of the counterparty, we may not be able to seek indemnification from our counterparties for any losses attributable to the breach.

Summary of Results of Operations and Financial Condition

Our GAAP net income was \$341.4 million and \$353.3 million (\$0.98 and \$1.01 per weighted share) for the three and twelve months ended December 31, 2016, as compared to GAAP net income of \$210.7 million and \$492.2 million (\$0.59 and \$1.35 per weighted share) for the three and twelve months ended December 31, 2015.

With our accounting treatment for AFS securities, unrealized fluctuations in the market values of AFS securities, excluding Agency interest-only securities and GSE credit risk transfer securities, do not impact our GAAP net income or taxable income but are recognized on our consolidated balance sheets as a change in stockholders' equity under "accumulated other comprehensive income." As a result of this fair value accounting through stockholders' equity, we expect our net income to have less significant fluctuations and result in less U.S. GAAP to taxable income timing differences, than if the portfolio were accounted for as trading instruments. For the three and twelve months ended December 31, 2016, net unrealized losses on AFS securities recognized as other comprehensive income, net of tax, were \$339.2 million and \$159.8 million, respectively. This, combined with GAAP net income of \$341.4 million and \$353.3 million, resulted in comprehensive income of \$2.2 million and \$193.4 million for the three and twelve months ended December 31, 2016, respectively. For the three and twelve months ended December 31, 2015, net unrealized losses on AFS securities recognized as other comprehensive loss, net of tax, were \$213.9 million and \$496.7 million, respectively. This, combined with GAAP net income of \$210.7 million and \$492.2 million, resulted in comprehensive loss of \$3.2 million and \$4.5 million for the three and twelve months ended December 31, 2015, respectively.

On December 15, 2016, we declared a cash dividend of \$0.24 per share, bringing our total 2016 cash dividends declared to \$0.93 per diluted share. Our book value per common share for U.S. GAAP purposes was \$9.78 at December 31, 2016, a decrease from \$10.11 book value per common share at December 31, 2015. During this twelve month period, we recognized comprehensive income of \$193.4 million, but declared cash dividends of \$243.3 million, which drove the overall decrease in book value.

The following tables present the components of our comprehensive income (loss) for the three and twelve months ended December 31, 2016 and 2015, and the twelve months ended December 31, 2014:

(in thousands, except share data)	Three Months Ended		Year Ended		
Income Statement Data:	December 31,		December 31,		
	2016	2015	2016	2015	2014
Interest income:	(unaudited)		(unaudited)		
Available-for-sale securities	\$ 122,719	\$ 88,543	\$ 415,052	\$ 458,515	\$ 506,268
Trading securities	—	—	—	8,676	12,913
Residential mortgage loans held-for-sale	3,248	7,698	23,037	28,966	16,089
Residential mortgage loans held-for-investment in securitization trusts	33,228	30,832	133,993	95,740	41,220
Commercial real estate assets	19,540	6,297	59,819	9,138	—
Cash and cash equivalents	354	235	1,589	902	717
Total interest income	179,089	133,605	633,490	601,937	577,207
Interest expense:					
Repurchase agreements	31,679	14,851	97,461	73,049	76,177
Collateralized borrowings in securitization trusts	26,764	17,815	97,729	57,216	26,760
Federal Home Loan Bank advances	7,297	3,909	26,101	11,921	4,513
Revolving credit facilities	476	—	604	—	—
Total interest expense	66,216	36,575	221,895	142,186	107,450
Net interest income	112,873	97,030	411,595	459,751	469,757
Other-than-temporary impairment losses	—	—	(1,822)	(535)	(392)
Other income (loss):					
(Loss) gain on investment securities	(173,469)	99,867	(107,374)	363,379	87,201
Gain (loss) on interest rate swap and swaption agreements	177,979	42,526	45,371	(210,621)	(345,647)
Gain (loss) on other derivative instruments	143,443	(2,077)	99,379	(5,049)	(17,529)
(Loss) gain on residential mortgage loans held-for-sale	(1,563)	(4,015)	16,085	14,285	17,297
Servicing income	34,959	32,799	143,616	127,412	128,160
Gain (loss) on servicing asset	127,895	(3,267)	(83,531)	(99,584)	(128,388)
Other (loss) income	(4,978)	(5,525)	(5,955)	(21,790)	18,539
Total other income (loss)	304,266	160,308	107,591	168,032	(240,367)
Expenses:					
Management fees	11,166	12,270	46,434	50,294	48,803
Securitization deal costs	(89)	1,200	6,152	8,971	4,638
Servicing expenses	8,214	8,252	32,724	28,101	25,925
Other operating expenses	16,203	16,130	63,483	64,162	56,231
Restructuring charges	1,801	—	2,990	—	—
Total expenses	37,295	37,852	151,783	151,528	135,597
Income before income taxes	379,844	219,486	365,581	475,720	93,401
Provision for (benefit from) income taxes	38,441	8,780	12,303	(16,490)	(73,738)
Net income	\$ 341,403	\$ 210,706	\$ 353,278	\$ 492,210	\$ 167,139
Basic and diluted earnings per weighted average common share	\$ 0.98	\$ 0.59	\$ 1.01	\$ 1.35	\$ 0.46
Dividends declared per common share	\$ 0.24	\$ 0.26	\$ 0.93	\$ 1.04	\$ 1.04
Basic and diluted weighted average number of shares of common stock outstanding	347,643,257	360,090,432	348,073,704	365,247,738	366,011,855

(in thousands) Income Statement Data:	Three Months Ended December 31,		Year Ended December 31,		
	2016	2015	2016	2015	2014
	(unaudited)		(unaudited)		
Comprehensive income (loss):					
Net income	\$ 341,403	\$ 210,706	\$ 353,278	\$ 492,210	\$ 167,139
Other comprehensive (loss) income, net of tax:					
Unrealized (loss) gain on available-for-sale securities	(339,216)	(213,940)	(159,834)	(496,728)	411,054
Other comprehensive (loss) income	(339,216)	(213,940)	(159,834)	(496,728)	411,054
Comprehensive income (loss)	\$ 2,187	\$ (3,234)	\$ 193,444	\$ (4,518)	\$ 578,193

Results of Operations

Year Ended December 31, 2016 Compared to Year Ended December 31, 2015

The following analysis focuses on financial results during the three and twelve months ended December 31, 2016 and 2015.

Interest Income and Average Portfolio Yield

The following tables present the components of interest income and average annualized net asset yield earned by investment type on our AFS securities, trading securities, residential mortgage loans held-for-sale, residential mortgage loans held-for-investment in securitization trusts, commercial real estate assets and Agency Derivatives for the three and twelve months ended December 31, 2016 and 2015:

(dollars in thousands)	Three Months Ended December 31, 2016			Year Ended December 31, 2016		
	Average Balance (1)	Interest Income	Net Asset Yield	Average Balance (1)	Interest Income	Net Asset Yield
Available-for-sale securities	\$ 14,072,745	\$ 122,719	3.5%	\$ 11,791,260	\$ 415,052	3.5%
Trading securities	—	—	—%	—	—	—%
Residential mortgage loans held-for-sale	331,509	3,248	3.9%	566,239	23,037	4.1%
Residential mortgage loans held-for-investment in securitization trusts	3,453,981	33,228	3.8%	3,470,272	133,993	3.9%
Commercial real estate assets	1,275,788	19,540	6.1%	965,234	59,819	6.2%
	19,134,023	178,735	3.7%	16,793,005	631,901	3.8%
Agency derivatives (2)	111,720	4,431	15.9%	117,872	19,789	16.8%
Total	\$ 19,245,743	\$ 183,166	3.8%	\$ 16,910,877	\$ 651,690	3.9%

(dollars in thousands)	Three Months Ended December 31, 2015			Year Ended December 31, 2015		
	Average Balance (1)	Interest Income	Net Asset Yield	Average Balance (1)	Interest Income	Net Asset Yield
Available-for-sale securities	\$ 8,567,123	\$ 88,543	4.1%	\$ 11,533,417	\$ 458,515	4.0%
Trading securities	—	—	—%	908,052	8,676	1.0%
Residential mortgage loans held-for-sale	767,102	7,698	4.0%	749,025	28,966	3.9%
Residential mortgage loans held-for-investment in securitization trusts	3,177,980	30,832	3.9%	2,467,905	95,740	3.9%
Commercial real estate assets	418,946	6,297	6.0%	142,693	9,138	6.4%
	12,931,151	133,370	4.1%	15,801,092	601,035	3.8%
Agency derivatives (2)	142,218	6,575	18.5%	149,601	27,848	18.6%
Total	\$ 13,073,369	\$ 139,945	4.3%	\$ 15,950,693	\$ 628,883	3.9%

(1) Average balance represents average amortized cost on AFS securities, trading securities, commercial real estate assets and Agency Derivatives and average unpaid principal balance, adjusted for purchase price changes, on residential mortgage loans held-for-sale and residential mortgage loans held-for-investment in securitization trusts.

(2) Interest income on Agency Derivatives is included in gain (loss) on other derivative instruments on the consolidated statements of comprehensive income (loss).

Total interest income, including interest income on Agency Derivatives, increased from \$139.9 million and \$628.9 million for the three and twelve months ended December 31, 2015 to \$183.2 million and \$651.7 million for the same periods in 2016, due primarily to the completion of multiple securitization transactions in 2015 and 2016 and the growth of our Agency RMBS and commercial real estate portfolios, offset by sales of non-Agency securities.

The decrease in net yields on AFS securities for the three and twelve months ended December 31, 2016, as compared to the same periods in 2015, was predominantly driven by purchases of Agency RMBS AFS, specifically generic and specified pools, with lower yields during the three and twelve months ended December 31, 2016. We did not recognize any interest income on trading securities during the three and twelve months ended December 31, 2016 as we sold our trading security position during 2015. The decrease in net yields on residential mortgage loans held-for-sale for the three months ended December 31, 2016, as compared to the same period in 2015, was due to the sale of substantially all of our remaining prime nonconforming residential mortgage loans held-for sale during the three months ended December 31, 2016. The increase in net yields on residential mortgage loans held-for-sale for the year ended December 31, 2016, as compared to the same period in 2015, was due in part to the Ginnie Mae buyout residential mortgage loans held throughout the period that underwent successful modifications, returned to performing loans, and were redelivered to future Ginnie Mae pools. Yields on residential mortgage loans held-for-investment in securitization trusts for the three and twelve months ended December 31, 2016 were generally consistent with those for the same periods in 2015. The increase in yields on commercial real estate assets for the three months ended December 31, 2016, as compared to the same period in 2015, was due in part to increases in interest rates during the three months ended December 31, 2016. The decrease in yields on commercial real estate assets for the year ended December 31, 2016, as compared to the same period in 2015, was predominantly driven by originations and purchases of first mortgages with lower yields during the year ended December 31, 2016. The decrease in net yields on Agency Derivatives for the three and twelve months ended December 31, 2016, as compared to the same periods in 2015, was driven by overall faster prepayments throughout the period.

The following tables present the components of the net yield earned by investment type on our RMBS AFS portfolio as a percentage of our average amortized cost of securities for the three and twelve months ended December 31, 2016 and 2015:

	Three Months Ended December 31, 2016			Year Ended December 31, 2016		
	Agency (1)	Non-Agency	Total	Agency (1)	Non-Agency	Total
Gross yield/stated coupon	3.7 %	3.5%	3.7 %	3.9 %	3.5%	3.9 %
Net (premium amortization) discount accretion	(0.9)%	5.2%	(0.2)%	(1.1)%	4.9%	(0.4)%
Net yield (2)	2.8 %	8.7%	3.5 %	2.8 %	8.4%	3.5 %

	Three Months Ended December 31, 2015			Year Ended December 31, 2015		
	Agency ⁽¹⁾	Non-Agency	Total	Agency ⁽¹⁾	Non-Agency	Total
Gross yield/stated coupon	4.7 %	3.4%	4.4 %	4.6 %	3.2%	4.3 %
Net (premium amortization) discount accretion	(1.5)%	4.4%	(0.3)%	(1.4)%	4.6%	(0.3)%
Net yield ⁽²⁾	3.2 %	7.8%	4.1 %	3.1 %	7.8%	4.0 %

(1) Excludes Agency Derivatives. For the three and twelve months ended December 31, 2016, the average annualized net yield on total Agency RMBS, including Agency Derivatives, was 3.0% and 3.0%, respectively, compared to 3.5% and 3.4% for the same periods in 2015.

(2) These yields have not been adjusted for cost of delay and cost to carry purchase premiums.

The following tables provide the components of interest income and net asset yield by investment type on our RMBS AFS portfolio:

(dollars in thousands)	Three Months Ended December 31, 2016			Year Ended December 31, 2016		
	Agency ⁽¹⁾	Non-Agency	Total	Agency ⁽¹⁾	Non-Agency	Total
Average amortized cost	\$ 12,504,473	\$ 1,568,272	\$ 14,072,745	\$ 10,341,218	\$ 1,450,042	\$ 11,791,260
Coupon interest	117,194	13,735	130,929	407,335	50,605	457,940
Net (premium amortization) discount accretion	(28,556)	20,346	(8,210)	(113,837)	70,949	(42,888)
Interest income	\$ 88,638	\$ 34,081	\$ 122,719	\$ 293,498	\$ 121,554	\$ 415,052
Net asset yield	2.8%	8.7%	3.5%	2.8%	8.4%	3.5%

(dollars in thousands)	Three Months Ended December 31, 2015			Year Ended December 31, 2015		
	Agency ⁽¹⁾	Non-Agency	Total	Agency ⁽¹⁾	Non-Agency	Total
Average amortized cost	\$ 6,837,974	\$ 1,729,149	\$ 8,567,123	\$ 9,434,121	\$ 2,099,296	\$ 11,533,417
Coupon interest	80,121	14,554	94,675	429,869	68,224	498,093
Net (premium amortization) discount accretion	(25,331)	19,199	(6,132)	(135,639)	96,061	(39,578)
Interest income	\$ 54,790	\$ 33,753	\$ 88,543	\$ 294,230	\$ 164,285	\$ 458,515
Net asset yield	3.2%	7.8%	4.1%	3.1%	7.8%	4.0%

(1) Excludes Agency Derivatives. For the three and twelve months ended December 31, 2016, the average annualized net yield on total Agency RMBS, including Agency Derivatives, was 3.0% and 3.0%, respectively, compared to 3.5% and 3.4% for the same periods in 2015.

The decrease in net yields on Agency RMBS AFS for the three and twelve months ended December 31, 2016, as compared to the same periods in 2015, was predominantly driven by purchases of Agency RMBS AFS, specifically generic and specified pools, with lower yields during the three and twelve months ended December 31, 2016. The increase in net yields on non-Agency RMBS for the three and twelve months ended December 31, 2016, as compared to the same periods in 2015, was due to continued improvement in legacy non-Agency fundamentals, credit performance and prepayments.

Interest Expense and the Cost of Funds

The following tables present the components of interest expense and average annualized cost of funds on borrowings incurred by investment type on our AFS securities, Agency Derivatives, trading securities, residential mortgage loans held-for-sale, residential mortgage loans held-for-investment in securitization trusts and commercial real estate assets for the three and twelve months ended December 31, 2016 and 2015:

(dollars in thousands)	Three Months Ended December 31, 2016			Year Ended December 31, 2016		
	Average Balance (1)	Interest Expense	Cost of Funds (2)	Average Balance (1)	Interest Expense	Cost of Funds (2)
Available-for-sale securities						
Agency (3)	\$ 11,868,558	\$ 24,763	0.8%	\$ 9,834,224	\$ 73,864	0.8%
Non-Agency	1,278,114	8,641	2.7%	1,173,955	29,123	2.5%
	13,146,672	33,404	1.0%	11,008,179	102,987	0.9%
Agency derivatives	107,433	460	1.7%	111,770	1,729	1.5%
Trading securities	—	—	—%	—	—	—%
Residential mortgage loans held-for-sale	190,503	331	0.7%	376,513	2,733	0.7%
Residential mortgage loans held-for-investment in securitization trusts (4)	3,394,271	27,626	3.3%	3,377,687	103,039	3.1%
Commercial real estate assets	856,724	3,919	1.8%	594,891	10,803	1.8%
Total	\$ 17,695,603	\$ 65,740	1.5%	\$ 15,469,040	\$ 221,291	1.4%

(dollars in thousands)	Three Months Ended December 31, 2015			Year Ended December 31, 2015		
	Average Balance (1)	Interest Expense	Cost of Funds (2)	Average Balance (1)	Interest Expense	Cost of Funds (2)
Available-for-sale securities						
Agency (3)	\$ 6,467,442	\$ 8,429	0.5%	\$ 9,046,108	\$ 40,352	0.4%
Non-Agency	1,442,669	7,281	2.0%	1,764,384	33,786	1.9%
	7,910,111	15,710	0.8%	10,810,492	74,138	0.7%
Agency derivatives	123,115	368	1.2%	129,853	1,404	1.1%
Trading securities	—	—	—%	917,682	1,727	0.2%
Residential mortgage loans held-for-sale	534,970	616	0.5%	508,650	2,139	0.4%
Residential mortgage loans held-for-investment in securitization trusts (4)	2,986,853	19,577	2.6%	2,286,501	62,302	2.7%
Commercial real estate assets	102,051	304	1.2%	34,393	476	1.4%
Total	\$ 11,657,100	\$ 36,575	1.3%	\$ 14,687,571	\$ 142,186	1.0%

(1) Average balance represents average total repurchase agreements and FHLB advances on AFS securities, Agency Derivatives, trading securities, residential mortgage loans held-for-sale and commercial real estate assets, and average collateralized borrowings for residential mortgage loans held-for-investment in securitization trusts.

(2) Cost of funds by investment type is based on the underlying investment type of the asset assigned as collateral. Cost of funds does not include the accrual and settlement of interest associated with interest rate swaps. In accordance with U.S. GAAP, those costs are included in gain (loss) on interest rate swap and swaption agreements in the consolidated statements of comprehensive income (loss). For the three and twelve months ended December 31, 2016, our total average cost of funds on the assets assigned as collateral for repurchase agreements, FHLB advances and collateralized borrowings shown in the table above, including interest spread expense associated with interest rate swaps, was 1.6% and 1.6%, respectively, compared to 1.7% and 1.6% for the same periods in 2015.

(3) Excludes Agency Derivatives. For the three and twelve months ended December 31, 2016, our average cost of funds on total Agency RMBS, including Agency Derivatives, was 0.8% and 0.8%, respectively, compared to 0.5% and 0.5% for the same periods in 2015.

(4) Includes repurchase agreements and FHLB advances collateralized by retained interests from our on-balance sheet securitizations, which are eliminated in consolidation in accordance with U.S. GAAP.

Total interest expense increased from \$36.6 million and \$142.2 million for the three and twelve months ended December 31, 2015 to \$65.7 million and \$221.3 million for the same periods in 2016, due primarily to increased interest expense on collateralized borrowings due to the completion of multiple securitization transactions in 2015 and 2016 as well as increased financing on commercial real estate assets and Agency RMBS AFS due to purchases.

The increase in cost of funds associated with the financing of Agency RMBS AFS, non-Agency RMBS and Agency Derivatives for the three and twelve months ended December 31, 2016, as compared to the same periods in 2015, was the result of increases in the repurchase agreement borrowing rates offered by counterparties. We did not recognize any interest expense on the financing of trading securities during the three and twelve months ended December 31, 2016 as we sold our trading securities position during 2015. The increase in cost of funds associated with the financing of residential mortgage loans held-for-sale for the three and twelve months ended December 31, 2016, as compared to the same periods in 2015, was the result of an increase in the borrowing rate offered by the FHLB. The increase in cost of funds associated with the financing of residential mortgage loans held-for-investment in securitization trusts for the three and twelve months ended December 31, 2016, as compared to the same periods in 2015, was primarily the result of the sale of and corresponding removal of FHLB financing on higher-rated retained interests from our on-balance sheet securitizations. The increase in cost of funds on commercial real estate assets for the three and twelve months ended December 31, 2016, as compared to the same periods in 2015, was the result of an increase in the average balance financed with repurchase agreements.

Net Interest Income

The following tables present the components of net interest income and average annualized net interest rate spread earned by investment type on our AFS securities, trading securities, residential mortgage loans held-for-sale, residential mortgage loans held-for-investment in securitization trusts, commercial real estate assets and Agency Derivatives for the three and twelve months ended December 31, 2016 and 2015:

(dollars in thousands)	Three Months Ended December 31, 2016		Year Ended December 31, 2016	
	Net Interest Income	Net Interest Rate Spread ⁽¹⁾	Net Interest Income	Net Interest Rate Spread ⁽¹⁾
Available-for-sale securities				
Agency ⁽²⁾	\$ 63,875	2.0%	\$ 219,634	2.0%
Non-Agency	25,440	6.0%	92,431	5.9%
	89,315	2.5%	312,065	2.6%
Agency derivatives ⁽³⁾	3,971	14.2%	18,060	15.3%
Trading securities	—	—%	—	—%
Residential mortgage loans held-for-sale	2,917	3.2%	20,304	3.4%
Residential mortgage loans held-for-investment in securitization trusts ⁽⁴⁾	5,602	0.5%	30,954	0.8%
Commercial real estate assets	15,621	4.3%	49,016	4.4%
Total	\$ 117,426	2.3%	\$ 430,399	2.5%

(dollars in thousands)	Three Months Ended December 31, 2015		Year Ended December 31, 2015	
	Net Interest Income	Net Interest Rate Spread ⁽¹⁾	Net Interest Income	Net Interest Rate Spread ⁽¹⁾
Available-for-sale securities				
Agency ⁽²⁾	\$ 46,361	2.7%	\$ 253,878	2.7%
Non-Agency	26,472	5.8%	130,499	5.9%
	72,833	3.3%	384,377	3.3%
Agency derivatives ⁽³⁾	6,207	17.3%	26,444	17.5%
Trading securities	—	—%	6,949	0.8%
Residential mortgage loans held-for-sale	7,082	3.5%	26,827	3.5%
Residential mortgage loans held-for-investment in securitization trusts ⁽⁴⁾	11,255	1.3%	33,438	1.2%
Commercial real estate assets	5,993	4.8%	8,662	5.0%
Total	\$ 103,370	3.0%	\$ 486,697	3.0%

(1) Net interest rate spread does not include the accrual and settlement of interest associated with interest rate swaps. In accordance with U.S. GAAP, those costs are included in gain (loss) on interest rate swap and swaption agreements in the consolidated statements of comprehensive income (loss). For the three and twelve months ended December 31, 2016, our total average net interest rate spread on the assets shown in the table above, including interest spread expense associated with interest rate swaps, was 2.2% and 2.3%, respectively, compared to 2.6% and 2.3% for the same periods in 2015.

(2) Excludes Agency Derivatives. For the three and twelve months ended December 31, 2016, our average annualized net interest rate spread on total Agency RMBS, including Agency Derivatives, was 2.2% and 2.2%, respectively, compared to 3.0% and 2.9% for the same periods in 2015.

(3) Interest income on Agency Derivatives is included in gain (loss) on other derivative instruments on the consolidated statements of comprehensive income (loss), while interest expense on Agency Derivatives is included in interest expense on repurchase agreements on the consolidated statements of comprehensive income (loss).

(4) Net of interest expense on repurchase agreements and FHLB advances collateralized by retained interests from our on-balance sheet securitizations, which are eliminated in consolidation in accordance with U.S. GAAP.

The decrease in net interest rate spread on Agency RMBS AFS, Agency Derivatives and residential mortgage loans held-for-sale for the three and twelve months ended December 31, 2016, as compared to the same periods in 2015, was predominantly driven by higher financing rates, as discussed above. The increase in net interest rate spread on non-Agency RMBS for the three months ended December 31, 2016, as compared to the same period in 2015, was due to continued improvement in legacy non-Agency fundamentals, credit performance and prepayments. The net interest rate spread on non-Agency RMBS for the year ended December 31, 2016 was consistent with that for the same period in 2015. We did not recognize any interest income or expense on trading securities during the three and twelve months ended December 31, 2016 as we sold our trading security position during 2015. The decrease in net interest spread on our residential mortgage loans held-for-investment in securitization trusts for the three and twelve months ended December 31, 2016, as compared to the same periods in 2015, was the result of sales of higher-rated retained interests from our on-balance sheet securitizations. The decrease in net interest rate spread on commercial real estate assets for the three and twelve months ended December 31, 2016, as compared to the same periods in 2015, was driven by purchases of first mortgages with lower yields and increased repurchase agreement financing during the three and twelve months ended December 31, 2016.

Other-Than-Temporary Impairments

We review each of our securities on a quarterly basis to determine if an OTTI charge is necessary. For the three months ended December 31, 2016 and 2015, we did not recognize any OTTI losses, but for the years ended December 31, 2016 and 2015, we recognized \$1.8 million and \$0.5 million in OTTI losses, respectively. For further information about evaluating AFS securities for OTTI, refer to Note 4 - *Available-for-Sale Securities, at Fair Value* of the notes to the consolidated financial statements.

(Loss) Gain on Investment Securities

During the three and twelve months ended December 31, 2016, we sold AFS securities for \$7.8 billion and \$14.4 billion with an amortized cost of \$8.0 billion and \$14.5 billion, for net realized losses of \$189.6 million and \$126.2 million, respectively. During the three and twelve months ended December 31, 2015, we sold AFS securities for \$3.3 billion and \$7.0 billion with an amortized cost of \$3.2 billion and \$6.6 billion, for net realized gains of \$109.5 million and \$369.4 million, respectively. We also sold trading securities for \$2.0 billion with an amortized cost of \$2.0 billion, resulting in realized gains of \$7.4 million for the year ended December 31, 2015. We did not sell any trading securities during the three and twelve months ended December 31, 2016 or the three months ended December 31, 2015. We do not expect to sell assets on a frequent basis, but may sell assets to reallocate capital into new assets that we believe have higher risk-adjusted returns.

For the three and twelve months ended December 31, 2016, Agency interest-only mortgage-backed securities and GSE credit risk transfer securities experienced a change in unrealized gains of \$16.1 million and \$18.9 million, respectively. For the three and twelve months ended December 31, 2015, Agency interest-only mortgage-backed securities and GSE credit risk transfer securities experienced a change in unrealized losses of \$9.7 million and \$12.0 million, respectively. The increase in change in unrealized gains for the three and twelve months ended December 31, 2016, as compared to the same periods in 2015, was predominantly driven by lower prepayment expectations on Agency interest-only mortgage-backed securities.

For the year ended December 31, 2015, trading securities experienced a change in unrealized losses \$1.4 million. We did not hold any trading securities during the three and twelve months ended December 31, 2016 or the three months ended December 31, 2015.

Gain (Loss) on Interest Rate Swap and Swaption Agreements

For the three and twelve months ended December 31, 2016, we recognized \$2.9 million and \$21.1 million, respectively, of expenses for the accrual and/or settlement of the net interest expense associated with our interest rate swaps. The expenses result from paying either a fixed interest rate or LIBOR interest on an average \$17.8 billion and \$15.5 billion notional, respectively, to economically hedge/mitigate interest rate exposure (or duration) risk associated with our investment portfolio and our short-term repurchase agreements and FHLB advances, and receiving either LIBOR interest or a fixed interest rate. For the three and twelve months ended December 31, 2015, we recognized \$12.6 million and \$85.6 million, respectively, of expenses for the accrual and/or settlement of the net interest expense associated with our interest rate swaps. The expenses result from paying either a fixed interest rate or LIBOR interest on an average \$14.1 billion and \$16.1 billion notional, respectively, to economically hedge/mitigate interest rate exposure (or duration) risk associated with our investment portfolio and our short-term repurchase agreements and FHLB advances, and receiving either LIBOR interest or a fixed interest rate.

During the three and twelve months ended December 31, 2016, we terminated, had agreements mature or had options expire on 36 and 117 interest rate swap and swaption positions of \$9.5 billion and \$37.2 billion notional, respectively. Upon settlement of the early terminations and option expirations, we paid \$1.3 million and \$4.0 million in full settlement of our net interest spread liability and recognized \$37.6 million in realized gains and \$82.0 million in realized losses on the swaps and swaptions for the three and twelve months ended December 31, 2016, respectively, including early termination penalties. During the three and twelve months ended December 31, 2015, we terminated, had agreements mature or had options expire on 28 and 97 interest rate swap and swaption positions of \$12.7 billion and \$60.1 billion notional, respectively. Upon settlement of the early terminations and option expirations, we paid \$8.7 million and \$41.0 million in full settlement of our net interest spread liability and recognized \$101.2 million and \$226.1 million in realized losses on the swaps and swaptions for the three and twelve months ended December 31, 2015, respectively, including early termination penalties. We elected to terminate certain swaps and swaptions during these periods to align with our investment portfolio.

Also included in our financial results for the three and twelve months ended December 31, 2016, was the recognition of a change in unrealized valuation gains of \$143.3 million and \$148.4 million, respectively, on our interest rate swap and swaption agreements that were accounted for as trading instruments, compared to a change in unrealized valuation gains of \$156.2 million and \$101.2 million for the same periods in 2015. The change in fair value of interest rate swaps was a result of changes to LIBOR, the swap curve and corresponding counterparty borrowing rates during the three and twelve months ended December 31, 2016 and 2015. Since these swaps and swaptions are used for purposes of hedging our interest rate exposure, their unrealized valuation gains and losses are generally offset by unrealized losses and gains in our Agency RMBS AFS portfolio, which are recorded either directly to stockholders' equity through other comprehensive (loss) income, net of tax, or to (loss) gain on investment securities, in the case of Agency interest-only securities.

The following table provides the net interest spread and gains and losses associated with our interest rate swap and swaption positions:

(in thousands)	Three Months Ended December 31,		Year Ended December 31,	
	2016	2015	2016	2015
Net interest spread	\$ (2,934)	\$ (12,552)	\$ (21,074)	\$ (85,636)
Early termination, agreement maturation and option expiration gains (losses)	37,564	(101,159)	(81,984)	(226,143)
Change in unrealized gain on interest rate swap and swaption agreements, at fair value	143,349	156,237	148,429	101,158
Gain (loss) on interest rate swap and swaption agreements	\$ 177,979	\$ 42,526	\$ 45,371	\$ (210,621)

Gain (Loss) on Other Derivative Instruments

Included in our financial results for the three and twelve months ended December 31, 2016, was the recognition of \$143.4 million and \$99.4 million of gains, respectively, on other derivative instruments we hold for purposes of both hedging and non-hedging activities, principally credit default swaps, TBAs, put and call options for TBAs, Markit IOS total return swaps and inverse interest-only securities. Included within these results for the three and twelve months ended December 31, 2016, was the recognition of \$4.4 million and \$19.8 million of interest income, net of accretion on inverse interest-only securities on an average amortized cost basis of \$111.7 million and \$117.9 million, respectively. The remainder represented realized and unrealized net gains (losses) on other derivative instruments. As these derivative instruments are considered trading instruments, our financial results include both realized and unrealized gains (losses) associated with these instruments.

Included in our financial results for the three and twelve months ended December 31, 2015, was the recognition of \$2.1 million and \$5.0 million of losses, respectively, on other derivative instruments we hold for purposes of both hedging and non-hedging activities, principally credit default swaps, TBAs, short U.S. Treasuries, put and call options for TBAs and U.S. Treasuries, constant maturity swaps, Markit IOS total return swaps and inverse interest-only securities. Included within these results for the three and twelve months ended December 31, 2015, was the recognition of \$6.6 million and \$27.8 million of interest income, net of accretion on inverse interest-only securities on an average amortized cost basis of \$142.2 million and \$149.6 million, respectively. The remainder represented realized and unrealized net gains (losses) on other derivative instruments. Since our derivative instruments are generally used for purposes of hedging our interest rate and credit risk exposure, their unrealized valuation gains and losses are generally offset by unrealized losses and gains in our RMBS AFS and residential mortgage loan portfolios.

(Loss) Gain on Residential Mortgage Loans Held-for-Sale

For the three and twelve months ended December 31, 2016, we recorded losses of \$1.6 million and gains of \$16.1 million, respectively, on residential mortgage loans held-for-sale. Included within these results was the recognition of losses of \$1.5 million and gains of \$13.7 million, respectively, on residential mortgage loans held-for-sale and losses of \$0.1 million and gains of \$2.4 million on commitments to purchase residential mortgage loans held-for-sale for the three and twelve months ended December 31, 2016, respectively. For the three and twelve months ended December 31, 2015, we recorded losses of \$4.0 million and gains of \$14.3 million, respectively, on residential mortgage loans held-for-sale. Included within these results was the recognition of losses of \$3.7 million and gains of \$16.0 million, respectively, on residential mortgage loans held-for-sale and losses of \$0.3 million and \$1.7 million on commitments to purchase residential mortgage loans held-for-sale for the three and twelve months ended December 31, 2015, respectively. The decrease in losses (increase in gains) on residential mortgage loans held-for-sale during the three and twelve months ended December 31, 2016, as compared to the same periods in 2015, was due to the sale of substantially all of our prime nonconforming residential mortgage loans held-for-sale, as well as increases in interest rates, during the three and twelve months ended December 31, 2016.

Servicing Income

For the three and twelve months ended December 31, 2016, we recognized total servicing income of \$34.9 million and \$143.6 million, respectively. These amounts include servicing fee income of \$33.7 million and \$138.4 million, ancillary fee income of \$0.2 million and \$1.7 million, and float income of \$1.0 million and \$3.5 million, respectively. For the three and twelve months ended December 31, 2015, we recognized total servicing income of \$32.8 million and \$127.4 million, respectively. These amounts include servicing fee income of \$31.9 million and \$123.8 million, ancillary fee income of \$0.5 million and \$2.1 million, and float income of \$0.4 million and \$1.4 million, respectively. The increase in servicing income for the three and twelve months ended December 31, 2016, as compared to the same periods in 2015, was the result of an increase in the size of our MSR portfolio.

Gain (Loss) on Servicing Asset

For the three and twelve months ended December 31, 2016, gain on servicing asset of \$127.9 million and loss on servicing asset of \$83.5 million, respectively, includes a decrease in fair value of MSR due to realization of cash flows (runoff) of \$26.0 million and \$78.7 million, respectively, and an increase in fair value of MSR due to changes in valuation inputs or assumptions of \$156.2 million and \$16.6 million, respectively. Additionally, we recognized losses on sales of MSR of \$2.3 million and \$21.4 million for the three and twelve months ended December 31, 2016, respectively. For the three and twelve months ended December 31, 2015, loss on servicing asset of \$3.3 million and \$99.6 million, respectively, includes a decrease in fair value of MSR due to realization of cash flows (runoff) of \$15.2 million and \$48.0 million, respectively, and an increase in fair value of MSR due to changes in valuation inputs or assumptions of \$11.9 million and a decrease in fair value of MSR due to changes in valuation inputs or assumptions of \$51.6 million, respectively. The increase in gain (decrease in loss) on servicing asset for the three and twelve months ended December 31, 2016, as compared to the same periods in 2015, was predominantly driven by a decrease in prepayment speed assumptions, offset by portfolio runoff and losses on sales of MSR during the three and twelve months ended December 31, 2016.

Other (Loss) Income

For the three and twelve months ended December 31, 2016, we recorded other loss of \$5.0 million and \$6.0 million, which includes \$83.5 million and \$19.7 million in losses on residential mortgage loans held-for-investment in securitization trusts and \$76.8 million and \$7.9 million in gains, respectively, on collateralized borrowings in securitization trusts. Also included in other (loss) income for the three and twelve months ended December 31, 2016 was other mortgage loan revenue of \$0.2 million and \$0.4 million and dividend income on our FHLB stock of \$1.4 million and \$5.5 million, respectively. For the three and twelve months ended December 31, 2015, we recorded other loss of \$5.5 million and \$21.8 million, which includes \$19.4 million and \$52.4 million in losses, respectively, on residential mortgage loans held-for-investment in securitization trusts and \$12.3 million and \$25.9 million in gains, respectively, on collateralized borrowings in securitization trusts. Also included in other (loss) income for the three and twelve months ended December 31, 2015 was other mortgage loan revenue of \$0.1 million and \$0.5 million and dividend income on our FHLB stock of \$1.3 million and \$4.0 million, respectively. The decrease in other loss for the three and twelve months ended December 31, 2016, as compared to the same periods in 2015, was driven by increases in interest rates during the three and twelve months ended December 31, 2016.

Management Fees

We incurred management fees of \$11.2 million and \$46.4 million for the three and twelve months ended December 31, 2016 and \$12.3 million and \$50.3 million for the three and twelve months ended December 31, 2015, respectively, which are payable to PRCM Advisers, our external manager, under our management agreement. The management fee is calculated based on our stockholders' equity with certain adjustments outlined in the management agreement. See further discussion of the management fee calculation in Note 25 - *Related Party Transactions* of the notes to the consolidated financial statements.

Securitization Deal Costs

For the three and twelve months ended December 31, 2016, we recognized a reversal of upfront costs related to the sponsoring of securitization trusts of \$0.1 million and net upfront securitization deal costs of \$6.2 million, respectively, compared to \$1.2 million and \$9.0 million in upfront securitization deal costs for the same periods in 2015. These costs are included when evaluating the economics of a securitization; however, the election of the fair value option for the assets and liabilities held in the securitization trusts requires the expense to be recognized upfront on the consolidated statements of comprehensive income (loss). Changes in securitization deal costs are directly related to the number and size of securitization trusts sponsored by either third parties or our subsidiaries during the respective periods.

Servicing Expenses

For the three and twelve months ended December 31, 2016, we recognized \$8.2 million and \$32.7 million, respectively, in servicing expenses generally related to the subservicing of residential mortgage loans, commercial real estate assets and MSR, compared to \$8.3 million and \$28.1 million for the same periods in 2015. Servicing expenses during the three months ended December 31, 2016 were generally consistent those for the same period in 2015. The increase in servicing expenses during the year ended December 31, 2016, as compared to the same period in 2015, was the result of an increase in the size of our MSR and commercial real estate portfolios.

Other Operating Expenses

For the three and twelve months ended December 31, 2016, we recognized \$16.2 million and \$63.5 million of other operating expenses, which represents an annualized expense ratio of 1.9% and 1.8% of average equity, respectively. For the three and twelve months ended December 31, 2015, we recognized \$16.1 million and \$64.2 million of other operating expenses, which represents an annualized expense ratio of 1.7% and 1.6% of average equity, respectively. The increase of our operating expense ratio resulted primarily from a decrease in our average equity balance due to share repurchases in 2015 and 2016.

Included in other operating expenses are direct and allocated costs incurred by PRCM Advisers on our behalf and reimbursed by us. For the three and twelve months ended December 31, 2016, these direct and allocated costs totaled approximately \$6.7 million and \$25.8 million, respectively, compared to \$6.8 million and \$22.9 million for the same periods in 2015. Included in these reimbursed costs was compensation paid to employees of Pine River serving as our principal financial officer and general counsel of \$0.2 million and \$1.8 million for the three and twelve months ended December 31, 2016 and \$0.2 million and \$1.7 million for the three and twelve months ended December 31, 2015, respectively. The allocation of compensation paid to employees of Pine River serving as our principal financial officer and general counsel is based on time spent overseeing our company's activities in accordance with the management agreement; we do not reimburse PRCM Advisers for any expenses related to the compensation of our chief executive officer or chief investment officer. Equity based compensation expense for the three and twelve months ended December 31, 2016 also includes the amortization of the restricted stock awarded to our executive officers in conjunction with the Company's Second Restated 2009 Equity Incentive Plan, or the Plan (see discussion in Note 21 - *Equity Incentive Plan*), including our chief executive officer, chief investment officer, principal financial officer and general counsel of \$1.9 million and \$7.5 million, compared to \$0.8 million and \$4.4 million for the three and twelve months ended December 31, 2015, respectively.

We have direct relationships with the majority of our third-party vendors. We will continue to have certain costs allocated to us by PRCM Advisers for compensation, data services, technology and certain office lease payments, but most of our expenses with third-party vendors are paid directly by us.

Restructuring Charges

On July 28, 2016, we announced that our board of directors had approved a plan to discontinue our mortgage loan conduit and securitization business. This decision was made due to the challenging market environment facing the business, combined with the intent to reduce operating complexity and costs, and allowed for the reallocation of capital to assets we believe will generate higher returns. The wind down process was completed at the end of 2016.

In connection with the closure, we incurred restructuring charges, including termination benefits, contract terminations and other associated costs, of \$1.8 million and \$3.0 million for the three and twelve months ended December 31, 2016, respectively.

Income Taxes

During the three and twelve months ended December 31, 2016, our TRSs recognized a provision for income taxes of \$38.4 million and \$12.3 million, respectively, which was primarily due to gains recognized on MSR and derivative instruments, offset by realized losses on sales of available-for-sale securities, held in the Company's TRSs. During the three and twelve months ended December 31, 2015, our TRSs recognized a provision for income taxes of \$8.8 million and a benefit from income taxes of \$16.5 million, respectively. The provision recognized for the three months ended December 31, 2015 was primarily due to realized gains on sales of AFS securities held in our TRSs. Conversely, the benefit recognized for the year ended December 31, 2015 was primarily due to losses incurred on derivative instruments held in our TRSs. We currently intend to distribute 100% of our REIT taxable income and comply with all requirements to continue to qualify as a REIT.

Year Ended December 31, 2015 Compared to Year Ended December 31, 2014

The following analysis focuses on financial results during the years ended December 31, 2015 and 2014.

Interest Income and Average Portfolio Yield

The following tables present the components of interest income and average annualized net asset yield earned by investment type on our AFS securities, trading securities, residential mortgage loans held-for-sale, residential mortgage loans held-for-investment in securitization trusts, commercial real estate assets and Agency Derivatives for the years ended December 31, 2015 and 2014:

(dollars in thousands)	Year Ended December 31, 2015			Year Ended December 31, 2014		
	Average Balance (1)	Interest Income	Net Asset Yield	Average Balance (1)	Interest Income	Net Asset Yield
Available-for-sale securities	\$ 11,533,417	\$ 458,515	4.0%	\$ 12,202,246	\$ 506,268	4.1%
Trading securities	908,052	8,676	1.0%	1,462,816	12,913	0.9%
Residential mortgage loans held-for-sale	749,025	28,966	3.9%	403,141	16,089	4.0%
Residential mortgage loans held-for-investment in securitization trusts	2,467,905	95,740	3.9%	1,051,533	41,220	3.9%
Commercial real estate assets	142,693	9,138	6.4%	—	—	—%
	15,801,092	601,035	3.8%	15,119,736	576,490	3.8%
Agency derivatives (2)	149,601	27,848	18.6%	188,824	30,171	16.0%
Total	\$ 15,950,693	\$ 628,883	3.9%	\$ 15,308,560	\$ 606,661	4.0%

(1) Average balance represents average amortized cost on AFS securities, trading securities, commercial real estate assets and Agency Derivatives and average unpaid principal balance, adjusted for purchase price changes, on residential mortgage loans held-for-sale and residential mortgage loans held-for-investment in securitization trusts.

(2) Interest income on Agency Derivatives is included in gain (loss) on other derivative instruments on the consolidated statements of comprehensive income (loss).

Total interest income, including interest income on Agency Derivatives, increased from \$606.7 million for the year ended December 31, 2014 to \$628.9 million for the year ended December 31, 2015. The increase in interest income for the year ended December 31, 2015, as compared to the year ended December 31, 2014, due primarily to purchases of residential mortgage loans held-for-sale and the completion of multiple securitization transactions in 2015, offset by sales of AFS securities in 2015.

The decrease in net yields on AFS securities for the year ended December 31, 2015, as compared to the year ended December 31, 2014, was predominantly driven by the sale of securities previously purchased at higher yields that we believe had reached maximum value. The increase in yields on trading securities for the year ended December 31, 2015, as compared to the year ended December 31, 2014, was the result of increases in Treasury rates. Yields on residential mortgage loans held-for-sale and held-for-investment were relatively consistent for the year ended December 31, 2015, as compared to the year ended December 31, 2014, as rates on prime nonconforming residential mortgage loans were generally flat over the course of 2014 and 2015. The yield on commercial real estate assets for the year ended December 31, 2015 represents interest income on assets purchased during 2015, many of which were settled in the latter half of 2015, which, as a result, are not indicative of future yields. The increase in net yields on Agency Derivatives for the year ended December 31, 2015, as compared to the year ended December 31, 2014, was predominantly driven by slower prepayments due to the rising interest rate environment.

The following tables present the components of the net yield earned by investment type on our RMBS AFS portfolio as a percentage of our average amortized cost of securities for the years ended December 31, 2015 and 2014:

	Year Ended December 31, 2015			Year Ended December 31, 2014		
	Agency ⁽¹⁾	Non-Agency	Total	Agency ⁽¹⁾	Non-Agency	Total
Gross yield/stated coupon	4.6 %	3.2%	4.3 %	4.5 %	3.0%	4.3 %
Net (premium amortization) discount accretion	(1.4)%	4.6%	(0.3)%	(1.4)%	5.5%	(0.2)%
Net yield ⁽²⁾	3.1 %	7.8%	4.0 %	3.1 %	8.5%	4.1 %

(1) Excludes Agency Derivatives. For the years ended December 31, 2015 and 2014, the average annualized net yield on total Agency RMBS, including Agency Derivatives, was 3.4% and 3.4%, respectively.

(2) These yields have not been adjusted for cost of delay and cost to carry purchase premiums.

The following tables provide the components of interest income and net asset yield by investment type on our RMBS AFS portfolio for the years ended December 31, 2015 and 2014:

(dollars in thousands)	Year Ended December 31, 2015			Year Ended December 31, 2014		
	Agency ⁽¹⁾	Non-Agency	Total	Agency ⁽¹⁾	Non-Agency	Total
Average amortized cost	\$ 9,434,121	\$ 2,099,296	\$ 11,533,417	\$ 9,893,488	\$ 2,308,758	\$ 12,202,246
Coupon interest	429,869	68,224	498,093	450,001	69,742	519,743
Net (premium amortization) discount accretion	(135,639)	96,061	(39,578)	(140,827)	127,352	(13,475)
Interest income	\$ 294,230	\$ 164,285	\$ 458,515	\$ 309,174	\$ 197,094	\$ 506,268
Net asset yield	3.1%	7.8%	4.0%	3.1%	8.5%	4.1%

(1) Excludes Agency Derivatives. For the years ended December 31, 2015 and 2014, the average annualized net yield on total Agency RMBS, including Agency Derivatives, was 3.4% and 3.4%, respectively.

Net yields on Agency RMBS AFS for the year ended December 31, 2015 were consistent with those for the year ended December 31, 2014. The decrease in net yields on non-Agency RMBS for the year ended December 31, 2015, as compared to the year ended December 31, 2014, was due to the sale of securities previously purchased at higher yields that we believe had reached maximum value.

Interest Expense and the Cost of Funds

The following tables present the components of interest expense and average annualized cost of funds on borrowings incurred by investment type on our AFS securities, Agency Derivatives, trading securities, residential mortgage loans held-for-sale, residential mortgage loans held-for-investment in securitization trusts and commercial real estate assets for the years ended December 31, 2015 and 2014:

(dollars in thousands)	Year Ended December 31, 2015			Year Ended December 31, 2014		
	Average Balance (1)	Interest Expense	Cost of Funds (2)	Average Balance (1)	Interest Expense	Cost of Funds (2)
Available-for-sale securities						
Agency (3)	\$ 9,046,108	\$ 40,352	0.4%	\$ 9,331,350	\$ 38,861	0.4 %
Non-Agency	1,764,384	33,786	1.9%	2,077,668	37,262	1.8 %
	10,810,492	74,138	0.7%	11,409,018	76,123	0.7 %
Agency derivatives	129,853	1,404	1.1%	151,180	1,562	1.0 %
Trading securities	917,682	1,727	0.2%	1,442,268	(15)	— %
Residential mortgage loans held-for-sale	508,650	2,139	0.4%	223,447	3,020	1.4 %
Residential mortgage loans held-for-investment in securitization trusts (4)	2,286,501	62,302	2.7%	764,921	26,760	3.5 %
Commercial real estate assets	34,393	476	1.4%	—	—	— %
Total	\$ 14,687,571	\$ 142,186	1.0%	\$ 13,990,834	\$ 107,450	0.8 %

- (1) Average balance represents average total repurchase agreements and FHLB advances on AFS securities, Agency Derivatives, trading securities, residential mortgage loans held-for-sale and commercial real estate assets, and average collateralized borrowings for residential mortgage loans held-for-investment in securitization trusts.
- (2) Cost of funds by investment type is based on the underlying investment type of the asset assigned as collateral. Cost of funds does not include the accrual and settlement of interest associated with interest rate swaps. In accordance with U.S. GAAP, those costs are included in gain (loss) on interest rate swap and swaption agreements in the consolidated statements of comprehensive income (loss). For the years ended December 31, 2015 and 2014, our total average cost of funds on the assets assigned as collateral for repurchase agreements, FHLB advances and collateralized borrowings shown in the table above, including interest spread expense associated with interest rate swaps, was 1.6% and 1.5%, respectively.
- (3) Excludes Agency Derivatives. For the years ended December 31, 2015 and 2014, our average cost of funds on total Agency RMBS, including Agency Derivatives, was 0.5% and 0.4%, respectively.
- (4) Includes repurchase agreements and FHLB advances collateralized by retained interests from our on-balance sheet securitizations, which are eliminated in consolidation in accordance with U.S. GAAP.

Total interest expense increased from \$107.4 million for the year ended December 31, 2014 to \$142.2 million for the year ended December 31, 2015, due primarily to increased interest expense on collateralized borrowings due to the completion of multiple securitization transactions in 2015.

The cost of funds associated with the financing of Agency RMBS AFS for the year ended December 31, 2015 were consistent with those for the year ended December 31, 2014. The increase in cost of funds associated with the financing of non-Agency RMBS and Agency Derivatives for the year ended December 31, 2015, as compared to the year ended December 31, 2014, was the result of increases in the repurchase agreement borrowing rates offered by counterparties. The increase in cost of funds associated with the financing of trading securities for the year ended December 31, 2015, as compared to the year ended December 31, 2014, was the result of counterparties granting a negative borrowing rate on repurchase agreements financing our U.S. Treasuries in 2014. The decrease in cost of funds associated with the financing of residential mortgage loans held-for-sale for the year ended December 31, 2015, as compared to the year ended December 31, 2014, was the result of a decrease in the outstanding balance under repurchase agreements and increase in the outstanding balance under FHLB advances, which provide lower financing rates. The decrease in cost of funds associated with the financing of residential mortgage loans held-for-investment in securitization trusts for the year ended December 31, 2015, as compared to the year ended December 31, 2014, was primarily the result of an increase in the outstanding balance of FHLB advances collateralized by retained interests from our on-balance sheet securitizations. The cost of funds associated with the financing of commercial real estate assets for the year ended December 31, 2015 represents financing on assets purchased during 2015, many of which were settled in the latter half of 2015, which, as a result, is not indicative of future cost of funds.

Net Interest Income

The following tables present the components of net interest income and average annualized net interest rate spread earned by investment type on our AFS securities, trading securities, residential mortgage loans held-for-sale, residential mortgage loans held-for-investment in securitization trusts, commercial real estate assets and Agency Derivatives for the years ended December 31, 2015 and 2014:

(dollars in thousands)	Year Ended December 31, 2015		Year Ended December 31, 2014	
	Net Interest Income	Net Interest Rate Spread ⁽¹⁾	Net Interest Income	Net Interest Rate Spread ⁽¹⁾
Available-for-sale securities				
Agency ⁽²⁾	\$ 253,878	2.7%	\$ 270,313	2.7%
Non-Agency	130,499	5.9%	159,832	6.7%
	384,377	3.3%	430,145	3.4%
Agency derivatives ⁽³⁾	26,444	17.5%	28,609	15.0%
Trading securities	6,949	0.8%	12,928	0.9%
Residential mortgage loans held-for-sale	26,827	3.5%	13,069	2.6%
Residential mortgage loans held-for-investment in securitization trusts ⁽⁴⁾	33,438	1.2%	14,460	0.4%
Commercial real estate assets	8,662	5.0%	—	—%
Total	\$ 486,697	3.0%	\$ 499,211	3.2%

(1) Net interest rate spread does not include the accrual and settlement of interest associated with interest rate swaps. In accordance with U.S. GAAP, those costs are included in gain (loss) on interest rate swap and swaption agreements in the consolidated statements of comprehensive income (loss). For the years ended December 31, 2015 and 2014, our total average net interest rate spread on the assets shown in the table above, including interest spread expense associated with interest rate swaps, was 2.3% and 2.5%, respectively.

(2) Excludes Agency Derivatives. For the years ended December 31, 2015 and 2014, our average annualized net interest rate spread on total Agency RMBS, including Agency Derivatives, was 2.9% and 3.0%, respectively.

(3) Interest income on Agency Derivatives is included in gain (loss) on other derivative instruments on the consolidated statements of comprehensive income (loss), while interest expense on Agency Derivatives is included in interest expense on repurchase agreements on the consolidated statements of comprehensive income (loss).

(4) Net of interest expense on repurchase agreements and FHLB advances collateralized by retained interests from our on-balance sheet securitizations, which are eliminated in consolidation in accordance with U.S. GAAP.

The net interest spread on Agency RMBS AFS for the year ended December 31, 2015 was consistent with that for the year ended December 31, 2014. The decrease in net interest rate spread on non-Agency RMBS for the year ended December 31, 2015, as compared to the year ended December 31, 2014, was due to the sale of securities previously purchased at higher yields that we believe had reached maximum value, combined with increases in the repurchase agreement borrowing rates offered by counterparties. The increase in net interest rate spread on Agency Derivatives for the year ended December 31, 2015, as compared to the year ended December 31, 2014, was predominantly driven by slower prepayments due to the rising interest rate environment, partially offset by increases in the repurchase agreement borrowing rates offered by counterparties. The decrease in net interest spread on our trading securities for the year ended December 31, 2015, as compared to the year ended December 31, 2014, was generally the result of counterparties granting a negative borrowing rate on repurchase agreements financing our U.S. Treasuries in 2014. The increase in net interest rate spread on our residential mortgage loans held-for-sale for the year ended December 31, 2015, as compared to the year ended December 31, 2014, was generally driven by lower financing rates, as discussed above. The increase in net interest spread on our residential mortgage loans held-for-investment in securitization trusts for the year ended December 31, 2015, as compared to the year ended December 31, 2014, was primarily the result of an increase in the outstanding balance of FHLB advances collateralized by retained interests from our on-balance sheet securitizations. The net interest rate spread on commercial real estate assets for the year ended December 31, 2015 represents interest income, net of interest expense, on assets purchased during 2015, many of which were settled in the latter half of 2015, which, as a result, is not indicative of future spreads.

Other-Than-Temporary Impairments

We review each of our securities on a quarterly basis to determine if an OTTI charge is necessary. For the years ended December 31, 2015 and 2014, we recognized \$0.5 million and \$0.4 million in OTTI losses, respectively. For further information about evaluating AFS securities for OTTI, refer to Note 4 - *Available-for-Sale Securities, at Fair Value* of the notes to the consolidated financial statements.

(Loss) Gain on Investment Securities

During the years ended December 31, 2015 and 2014, we sold AFS securities for \$7.0 billion and \$3.5 billion with an amortized cost of \$6.6 billion and \$3.4 billion, for net realized gains of \$369.4 million and \$84.4 million, respectively. We also sold trading securities for \$2.0 billion and \$1.1 billion with an amortized cost of \$2.0 billion and \$1.1 billion, resulting in realized gains of \$7.4 million and \$5.5 million for the years ended December 31, 2015 and 2014, respectively. We do not expect to sell assets on a frequent basis, but may sell assets to reallocate capital into new assets that we believe have higher risk-adjusted returns.

For the year ended December 31, 2015, Agency interest-only mortgage-backed securities and GSE credit risk transfer securities experienced a change in unrealized losses of \$12.0 million. For the years ended December 31, 2015 and 2014, trading securities experienced a change in unrealized losses \$1.4 million and \$2.7 million, respectively. The decrease in change in unrealized losses on trading securities for the year ended December 31, 2015, as compared to the year ended December 31, 2014, was driven by the sale of our U.S. Treasuries and corresponding recognition of realized gains during 2015.

Gain (Loss) on Interest Rate Swap and Swaption Agreements

For the years ended December 31, 2015 and 2014, we recognized \$85.6 million and \$91.8 million, respectively, of expenses for the accrual and/or settlement of the net interest expense associated with our interest rate swaps. The expenses result from paying either a fixed interest rate or LIBOR interest on an average \$16.1 billion and \$23.3 billion notional, respectively, to economically hedge/mitigate interest rate exposure (or duration) risk associated with our investment portfolio and our short-term repurchase agreements and FHLB advances, and receiving either LIBOR interest or a fixed interest rate.

During the years ended December 31, 2015 and 2014, we terminated, had agreements mature or had options expire on 97 and 68 interest rate swap and swaption positions of \$60.1 billion and \$37.4 billion notional, respectively. Upon settlement of the early terminations and option expirations, we paid \$41.0 million and \$19.6 million in full settlement of our net interest spread liability and recognized \$226.1 million and \$55.4 million in realized losses on the swaps and swaptions for the years ended December 31, 2015 and 2014, respectively, including early termination penalties. We elected to terminate certain swaps and swaptions during these periods to align with our investment portfolio.

Also included in our financial results for the years ended December 31, 2015 and 2014, was the recognition of a change in unrealized valuation gains of \$101.2 million and \$198.5 million, respectively. The change in fair value of interest rate swaps was a result of changes to LIBOR, the swap curve and corresponding counterparty borrowing rates during the years ended December 31, 2015 and 2014. Since these swaps and swaptions are used for purposes of hedging our interest rate exposure, their unrealized valuation gains and losses are generally offset by unrealized losses and gains in our Agency RMBS AFS portfolio, which are recorded either directly to stockholders' equity through other comprehensive (loss) income, net of tax, or to (loss) gain on investment securities, in the case of Agency interest-only securities.

The following table provides the net interest spread and gains and losses associated with our interest rate swap and swaption positions:

(in thousands)	Year Ended December 31,	
	2015	2014
Net interest spread	\$ (85,636)	\$ (91,754)
Early termination, agreement maturation and option expiration losses	(226,143)	(55,389)
Change in unrealized gain (loss) on interest rate swap and swaption agreements, at fair value	101,158	(198,504)
Loss on interest rate swap and swaption agreements	\$ (210,621)	\$ (345,647)

Gain (Loss) on Other Derivative Instruments

Included in our financial results for the years ended December 31, 2015 and 2014, was the recognition of \$5.0 million and \$17.5 million of losses, respectively, on other derivative instruments we hold for purposes of both hedging and non-hedging activities, principally credit default swaps, TBAs, short U.S. Treasuries, put and call options for TBAs and U.S. Treasuries, constant maturity swaps, Markit IOS total return swaps and inverse interest-only securities. Included within these results for the years ended December 31, 2015 and 2014, was the recognition of \$27.8 million and \$30.2 million of interest income, net of accretion on inverse interest-only securities on an average amortized cost basis of \$149.6 million and \$188.8 million, respectively. The remainder represented realized and unrealized net gains (losses) on other derivative instruments. Since our derivative instruments are generally used for purposes of hedging our interest rate and credit risk exposure, their unrealized valuation gains and losses are generally offset by unrealized losses and gains in our RMBS AFS and residential mortgage loan portfolios.

(Loss) Gain on Residential Mortgage Loans Held-for-Sale

For the years ended December 31, 2015 and 2014, we recorded gains of \$14.3 million and \$17.3 million, respectively, on residential mortgage loans held-for-sale. Included within these results was the recognition of gains of \$16.0 million and \$12.6 million, respectively, on residential mortgage loans held-for-sale and losses of \$1.7 million and gains of \$4.7 million on commitments to purchase residential mortgage loans held-for-sale for the years ended December 31, 2015 and 2014, respectively. The decrease in gains on residential mortgage loans held-for-sale during the year ended December 31, 2015, as compared to the year ended December 31, 2014, was due in part to interest rates generally rising during the year ended December 31, 2015, as compared to interest rates generally falling during the year ended December 31, 2014.

Servicing Income

For the years ended December 31, 2015 and 2014, we recognized total servicing income of \$127.4 million and \$128.2 million, respectively. These amounts include servicing fee income of \$123.8 million and \$125.1 million, ancillary fee income of \$2.1 million and \$2.2 million, and float income of \$1.4 million and \$0.9 million, respectively. Servicing income for the year ended December 31, 2015 was generally consistent with that for the year ended December 31, 2014. Our average MSR portfolio size increased during the year ended December 31, 2015; however, the portfolio mix had a higher concentration of conventional product, which carries a lower servicing fee income rate.

Gain (Loss) on Servicing Asset

For the years ended December 31, 2015 and 2014, loss on servicing asset of \$99.6 million and \$128.4 million, respectively, includes a decrease in fair value of MSR due to realization of cash flows (runoff) of \$48.0 million and \$54.8 million, respectively, and a decrease in fair value of MSR due to changes in valuation inputs or assumptions of \$51.6 million and \$73.6 million, respectively. The decrease in loss on servicing asset for the year ended December 31, 2015, as compared to the year ended December 31, 2014, was the result of decreasing prepayment speeds and delinquencies.

Other (Loss) Income

For the years ended December 31, 2015 and 2014, we recorded other loss of \$21.8 million and other income of \$18.5 million, which includes \$52.4 million in losses and \$41.1 million in gains, respectively, on residential mortgage loans held-for-investment in securitization trusts and \$25.9 million in gains and \$24.3 million in losses, respectively, on collateralized borrowings in securitization trusts. Also included in other (loss) income for the years ended December 31, 2015 and 2014 was other mortgage loan revenue of \$0.5 million and \$0.8 million and dividend income on our FHLB stock of \$4.0 million and \$0.9 million, respectively. The decrease in other income (increase in other loss) for the year ended December 31, 2015, as compared to the year ended December 31, 2014, was due in part to interest rates generally rising during the year ended December 31, 2015, as compared to interest rates generally falling during the year ended December 31, 2014.

Management Fees

We incurred management fees of \$50.3 million and \$48.8 million for the years ended December 31, 2015 and 2014, respectively, which are payable to PRCM Advisers, our external manager, under our management agreement. The management fee is calculated based on our stockholders' equity with certain adjustments outlined in the management agreement. See further discussion of the management fee calculation in Note 25 - *Related Party Transactions* of the notes to the consolidated financial statements.

Securitization Deal Costs

For the years ended December 31, 2015 and 2014, we recognized \$9.0 million and \$4.6 million, respectively, in upfront costs related to the sponsoring of securitization trusts. These costs are included when evaluating the economics of a securitization; however, the election of the fair value option for the assets and liabilities held in the securitization trusts requires the expense to be recognized upfront on the consolidated statements of comprehensive income (loss). Changes in securitization deal costs are directly related to the number and size of securitization trusts sponsored by either third parties or our subsidiaries during the respective periods.

Servicing Expenses

For the years ended December 31, 2015 and 2014, we recognized \$28.1 million and \$25.9 million, respectively, in servicing expenses generally related to the subservicing of residential mortgage loans, commercial real estate assets and MSR. The increase in servicing expenses during the year ended December 31, 2015, as compared to the year ended December 31, 2014, was the result of an increase in the size of our MSR portfolio.

Other Operating Expenses

For the years ended December 31, 2015 and 2014, we recognized \$64.2 million and \$56.2 million of other operating expenses, which represents an annualized expense ratio of 1.6% and 1.4% of average equity for the respective periods. The increase of our operating expense ratio resulted primarily from an increase in expenses related to the personnel and infrastructure to support our residential mortgage loan, MSR and commercial real estate activities, as well as a decrease in our average equity balance due to share repurchases and a comprehensive loss recognized for the year ended December 31, 2015, as compared to comprehensive income for the year ended December 31, 2014.

Included in other operating expenses are direct and allocated costs incurred by PRCM Advisers on our behalf and reimbursed by us. For the years ended December 31, 2015 and 2014, these direct and allocated costs totaled approximately \$22.9 million and \$15.5 million, respectively. Included in these reimbursed costs was compensation paid to employees of Pine River serving as our principal financial officer and general counsel of \$1.7 million and \$1.8 million for the years ended December 31, 2015 and 2014, respectively. The allocation of compensation paid to employees of Pine River serving as our principal financial officer and general counsel is based on time spent overseeing our company's activities in accordance with the management agreement; we do not reimburse PRCM Advisers for any expenses related to the compensation of our chief executive officer or chief investment officer. Equity based compensation expense for the years ended December 31, 2015 and 2014 also includes the amortization of the restricted stock awarded to our executive officers in conjunction with the Company's Second Restated 2009 Equity Incentive Plan, or the Plan (see discussion in Note 21 - *Equity Incentive Plan*), including our chief executive officer, chief investment officer, principal financial officer and general counsel of \$4.4 million and \$6.6 million, respectively.

We have direct relationships with the majority of our third-party vendors. We will continue to have certain costs allocated to us by PRCM Advisers for compensation, data services, technology and certain office lease payments, but most of our expenses with third-party vendors are paid directly by us.

Income Taxes

During the years ended December 31, 2015 and 2014, our TRSs recognized a benefit from income taxes of \$16.5 million and \$73.7 million, respectively, which was primarily due to losses incurred on MSR and derivative instruments held in the Company's TRSs. We currently intend to distribute 100% of our REIT taxable income and comply with all requirements to continue to qualify as a REIT.

Financial Condition

Available-for-Sale Securities, at Fair Value

Agency RMBS

Our Agency RMBS AFS portfolio is comprised of adjustable rate and fixed rate mortgage-backed securities backed by single-family and multi-family mortgage loans. All of our principal and interest Agency RMBS AFS were Fannie Mae or Freddie Mac mortgage pass-through certificates or collateralized mortgage obligations that carry an implied rating of "AAA," or Ginnie Mae mortgage pass-through certificates, which are backed by the guarantee of the U.S. Government. The majority of these securities consist of whole pools in which we own all of the investment interests in the securities.

The tables below summarize certain characteristics of our Agency RMBS AFS securities at December 31, 2016 and December 31, 2015:

December 31, 2016								
(dollars in thousands, except purchase price)	Principal/ Current Face	Net (Discount) Premium	Amortized Cost	Unrealized Gain	Unrealized Loss	Carrying Value	Weighted Average Coupon Rate	Weighted Average Purchase Price
Principal and interest securities:								
Fixed	\$ 10,580,940	\$ 527,243	\$ 11,108,183	\$ 66,369	\$ (207,889)	\$ 10,966,663	3.74%	\$ 106.03
Hybrid ARM	28,582	1,583	30,165	599	(301)	30,463	4.95%	\$ 108.27
Total P&I Securities	10,609,522	528,826	11,138,348	66,968	(208,190)	10,997,126	3.74%	\$ 105.85
Interest-only securities								
Fixed	413,164	(348,407)	64,757	3,111	(1,061)	66,807	3.83%	\$ 17.22
Fixed Other ⁽¹⁾	2,548,731	(2,367,115)	181,616	8,961	(28,036)	162,541	1.62%	\$ 9.09
Total	<u>\$ 13,571,417</u>	<u>\$ (2,186,696)</u>	<u>\$ 11,384,721</u>	<u>\$ 79,040</u>	<u>\$ (237,287)</u>	<u>\$ 11,226,474</u>		

December 31, 2015

(dollars in thousands, except purchase price)	Principal/ Current Face	Net (Discount) Premium	Amortized Cost	Unrealized Gain	Unrealized Loss	Carrying Value	Weighted Average Coupon Rate	Weighted Average Purchase Price
Principal and interest securities:								
Fixed	\$ 5,237,112	\$ 354,134	\$ 5,591,246	\$ 82,591	\$ (37,450)	\$ 5,636,387	4.40%	\$ 108.14
Hybrid ARM	101,836	4,457	106,293	2,625	(322)	108,596	3.60%	\$ 106.06
Total P&I Securities	5,338,948	358,591	5,697,539	85,216	(37,772)	5,744,983	4.39%	\$ 108.10
Interest-only securities								
Fixed	299,682	(262,868)	36,814	1,810	(1,856)	36,768	4.23%	\$ 15.15
Fixed Other ⁽¹⁾	2,618,400	(2,422,915)	195,485	11,363	(15,709)	191,139	1.63%	\$ 9.23
Total	\$ 8,257,030	\$ (2,327,192)	\$ 5,929,838	\$ 98,389	\$ (55,337)	\$ 5,972,890		

(1) Fixed Other represents weighted-average coupon interest-only securities that are not generally used for our interest-rate risk management purposes. These securities pay variable coupon interest based on the weighted average of the fixed rates of the underlying loans of the security, less the weighted average rates of the applicable issued principal and interest securities.

Our three-month average constant prepayment rate, or CPR, experienced by Agency RMBS AFS owned by us as of December 31, 2016 and December 31, 2015, on an annualized basis, was 7.0% and 10.2%, respectively.

The following table summarizes the number of months until the next reset for our floating or adjustable rate Agency RMBS AFS mortgage portfolio at December 31, 2016 and December 31, 2015:

(in thousands)	December 31, 2016	December 31, 2015
0-12 months	\$ 30,131	\$ 108,227
13-36 months	332	369
Total	\$ 30,463	\$ 108,596

Non-Agency RMBS

Our non-Agency RMBS portfolio is comprised of senior and mezzanine tranches of mortgage-backed securities, and excludes the retained interests from our on-balance sheet securitizations, as they are eliminated in consolidation in accordance with U.S. GAAP. The following tables provide investment information on our non-Agency RMBS as of December 31, 2016 and December 31, 2015:

As of December 31, 2016

(in thousands)	Principal/current face	Accretible purchase discount	Credit reserve purchase discount	Amortized cost	Unrealized gain	Unrealized loss	Carrying value
Principal and interest securities:							
Senior	\$ 1,622,604	\$ (377,017)	\$ (315,009)	\$ 930,578	\$ 282,479	\$ (2,595)	\$ 1,210,462
Mezzanine	924,000	(250,786)	(52,428)	620,786	70,761	(3,903)	687,644
Total P&I Securities	2,546,604	(627,803)	(367,437)	1,551,364	353,240	(6,498)	1,898,106
Interest-only securities	185,535	(181,172)	—	4,363	118	(204)	4,277
Total	\$ 2,732,139	\$ (808,975)	\$ (367,437)	\$ 1,555,727	\$ 353,358	\$ (6,702)	\$ 1,902,383

As of December 31, 2015							
(in thousands)	Principal/current face	Accretable purchase discount	Credit reserve purchase discount	Amortized cost	Unrealized gain	Unrealized loss	Carrying value
Principal and interest securities:							
Senior	\$ 1,801,283	\$ (383,816)	\$ (373,729)	\$ 1,043,738	\$ 275,565	\$ (5,608)	\$ 1,313,695
Mezzanine	624,253	(98,729)	(35,348)	490,176	52,847	(10,451)	532,572
Total P&I Securities	2,425,536	(482,545)	(409,077)	1,533,914	328,412	(16,059)	1,846,267
Interest-only securities	229,845	(224,476)	—	5,369	794	—	6,163
Total	\$ 2,655,381	\$ (707,021)	\$ (409,077)	\$ 1,539,283	\$ 329,206	\$ (16,059)	\$ 1,852,430

The majority of our non-Agency RMBS were rated at December 31, 2016. Note that credit ratings are based on the par value of the non-Agency RMBS, whereas the distressed non-Agency RMBS assets in our portfolio were acquired at heavily discounted prices. The following table summarizes the credit ratings of our non-Agency RMBS portfolio, based on the Bloomberg Index Rating, a composite of each of the four major credit rating agencies (*i.e.*, DBRS Ltd., Moody's Investors Services, Inc., Standard & Poor's Corporation and Fitch, Inc.), as of December 31, 2016 and December 31, 2015:

	December 31, 2016	December 31, 2015
AAA	0.1%	—%
AA	—%	—%
A	—%	0.1%
BBB	4.2%	0.1%
BB	1.4%	1.8%
B	4.4%	4.7%
Below B	76.7%	73.0%
Not rated	13.2%	20.3%
Total	100.0%	100.0%

Within our non-Agency RMBS portfolio, we have a substantial emphasis on “legacy” securities, which include securities issued prior to 2009, many of which are subprime. We believe these deeply discounted securities can add relative value as the economy and housing markets continue to improve, as there remains upside optionality to lower delinquencies, higher recoveries and faster prepaes. We also hold “new issue” non-Agency RMBS, which we believe have enabled us to find attractive returns and further diversify our non-Agency RMBS portfolio.

Our designated credit reserve as a percentage of total discount and total face value decreased during the year ended December 31, 2016 (as disclosed in Note 4 - *Available-for-Sale Securities, at Fair Value* of the notes to the consolidated financial statements). When focused on principal and interest securities, from December 31, 2015 to December 31, 2016, our designated credit reserve as a percentage of total discount decreased from 45.9% to 36.9% and our designated credit reserve as a percentage of total face value decreased from 16.9% to 14.4%.

A subprime bond may generally be considered higher risk; however, if purchased at a discount that reflects a high expectation of credit losses, it could be viewed as less risky than a prime bond, which is subject to unanticipated credit loss performance. Accordingly, we believe our risk profile in owning a heavily discounted subprime bond with known delinquencies affords us the ability to assume a higher percentage of expected credit loss with comparable risk-adjusted returns to a less discounted prime bond with a lower percentage of expected credit loss.

The following tables present certain information by investment type and, if applicable, their respective underlying loan characteristics for our senior and mezzanine non-Agency RMBS, excluding our non-Agency interest-only portfolio, at December 31, 2016 and December 31, 2015:

Non-Agency Principal and Interest (P&I) RMBS	At December 31, 2016		
	Senior	Mezzanine	Total P&I RMBS
Carrying Value (in thousands)	\$ 1,210,462	\$ 687,644	\$ 1,898,106
% of Non-Agency Portfolio	63.8%	36.2%	100.0%
Average Purchase Price ⁽¹⁾	\$ 53.64	\$ 65.63	\$ 57.86
Average Coupon	2.9%	2.2%	2.6%
Average Fixed Coupon	5.6%	3.5%	4.4%
Average Floating Coupon	2.5%	1.6%	2.2%
Average Hybrid Coupon	5.1%	3.2%	3.8%
Collateral Attributes			
Average Loan Age (months)	124	133	126
Average Loan Size (in thousands)	\$ 361	\$ 315	\$ 347
Average Original Loan-to-Value	70.7%	69.8%	70.4%
Average Original FICO ⁽²⁾	633	584	619
Current Performance			
60+ day delinquencies	24.7%	21.5%	23.8%
Average Credit Enhancement ⁽³⁾	9.6%	20.6%	12.8%
3-Month CPR ⁽⁴⁾	5.9%	7.0%	6.2%

Non-Agency Principal and Interest (P&I) RMBS	At December 31, 2015		
	Senior	Mezzanine	Total P&I RMBS
Carrying Value (in thousands)	\$ 1,313,695	\$ 532,572	\$ 1,846,267
% of Non-Agency Portfolio	71.2%	28.8%	100.0%
Average Purchase Price ⁽¹⁾	\$ 52.88	\$ 79.01	\$ 60.42
Average Coupon	2.8%	3.0%	2.9%
Average Fixed Coupon	5.4%	5.4%	5.4%
Average Floating Coupon	2.5%	2.9%	2.6%
Average Hybrid Coupon	5.2%	—%	5.2%
Collateral Attributes			
Average Loan Age (months)	112	85	105
Average Loan Size (in thousands)	\$ 361	\$ 300	\$ 346
Average Original Loan-to-Value	71.3%	73.0%	71.8%
Average Original FICO ⁽²⁾	634	695	649
Current Performance			
60+ day delinquencies	28.1%	12.2%	24.0%
Average Credit Enhancement ⁽³⁾	9.1%	12.9%	10.1%
3-Month CPR ⁽⁴⁾	4.4%	10.7%	6.2%

(1) Average purchase price utilized carrying value for weighting purposes. If current face were utilized for weighting purposes, the average purchase price for senior, mezzanine, and total non-Agency RMBS, excluding our non-Agency interest-only portfolio, would be \$50.40, \$64.34 and \$55.46, respectively, at December 31, 2016 and \$48.92, \$75.63 and \$55.80, respectively at December 31, 2015.

(2) FICO represents a mortgage industry accepted credit score of a borrower, which was developed by Fair Isaac Corporation.

(3) Average credit enhancement remaining on our non-Agency RMBS portfolio, which is the average amount of protection available to absorb future credit losses due to defaults on the underlying collateral.

(4) Three-month CPR is reflective of the prepayment speed on the underlying securitization; however, it does not necessarily indicate the proceeds received on our investment tranche. Proceeds received for each security are dependent on the position of the individual security within the structure of each deal.

December 31, 2016							
(dollars in thousands)	Senior		Mezzanine		Total P&I RMBS		% of Non-Agency Portfolio
	Carrying Value	% of Senior Portfolio	Carrying Value	% of Mezzanine Portfolio	Carrying Value		
Collateral Type							
Prime	\$ 33,873	2.8%	\$ 17,143	2.5%	\$ 51,016		2.7%
Alt-A	87,655	7.2%	55,836	8.1%	143,491		7.6%
POA	93,388	7.7%	42,097	6.1%	135,485		7.1%
Subprime	982,860	81.2%	367,822	53.5%	1,350,682		71.2%
Other	12,686	1.1%	204,746	29.8%	217,432		11.4%
Total	\$ 1,210,462	100.0%	\$ 687,644	100.0%	\$ 1,898,106		100.0%

December 31, 2015							
(dollars in thousands)	Senior		Mezzanine		Total P&I RMBS		% of Non-Agency Portfolio
	Carrying Value	% of Senior Portfolio	Carrying Value	% of Mezzanine Portfolio	Carrying Value		
Collateral Type							
Prime	\$ 82,775	6.3%	\$ 18,224	3.4%	\$ 100,999		5.5%
Alt-A	59,049	4.5%	21,638	4.1%	80,687		4.4%
POA	120,959	9.2%	28,885	5.4%	149,844		8.1%
Subprime	1,050,912	80.0%	200,210	37.6%	1,251,122		67.7%
Other	—	—%	263,615	49.5%	263,615		14.3%
Total	\$ 1,313,695	100.0%	\$ 532,572	100.0%	\$ 1,846,267		100.0%

December 31, 2016							
(dollars in thousands)	Senior		Mezzanine		Total P&I RMBS		% of Non-Agency Portfolio
	Carrying Value	% of Senior Portfolio	Carrying Value	% of Mezzanine Portfolio	Carrying Value		
Coupon Type							
Fixed Rate	\$ 143,925	11.9%	\$ 190,390	27.7%	\$ 334,315		17.6%
Hybrid or Floating	1,066,537	88.1%	497,254	72.3%	1,563,791		82.4%
Total	\$ 1,210,462	100.0%	\$ 687,644	100.0%	\$ 1,898,106		100.0%

December 31, 2015							
(dollars in thousands)	Senior		Mezzanine		Total P&I RMBS		% of Non-Agency Portfolio
	Carrying Value	% of Senior Portfolio	Carrying Value	% of Mezzanine Portfolio	Carrying Value		
Coupon Type							
Fixed Rate	\$ 156,864	11.9%	\$ 22,528	4.2%	\$ 179,392		9.7%
Hybrid or Floating	1,156,831	88.1%	510,044	95.8%	1,666,875		90.3%
Total	\$ 1,313,695	100.0%	\$ 532,572	100.0%	\$ 1,846,267		100.0%

December 31, 2016							
(dollars in thousands)	Senior		Mezzanine		Total P&I RMBS		% of Non-Agency Portfolio
	Carrying Value	% of Senior Portfolio	Carrying Value	% of Mezzanine Portfolio	Carrying Value		
Origination Year							
2006 and Thereafter	\$ 1,049,738	86.7%	\$ 354,610	51.6%	\$ 1,404,348		74.0%
2002-2005	156,288	12.9%	332,883	48.4%	489,171		25.8%
Pre-2002	4,436	0.4%	151	—%	4,587		0.2%
Total	\$ 1,210,462	100.0%	\$ 687,644	100.0%	\$ 1,898,106		100.0%

(dollars in thousands)	December 31, 2015					
	Senior		Mezzanine		Total P&I RMBS	
	Carrying Value	% of Senior Portfolio	Carrying Value	% of Mezzanine Portfolio	Carrying Value	% of Non-Agency Portfolio
2006 and Thereafter	\$ 1,101,308	83.8%	\$ 323,868	60.8%	\$ 1,425,176	77.2%
2002-2005	208,271	15.9%	208,528	39.2%	416,799	22.6%
Pre-2002	4,116	0.3%	176	—%	4,292	0.2%
Total	\$ 1,313,695	100.0%	\$ 532,572	100.0%	\$ 1,846,267	100.0%

The underlying mortgage loans collateralizing our non-Agency RMBS are located across the U.S. The following table presents the five largest geographic concentrations of the mortgages collateralizing these RMBS at December 31, 2016 and December 31, 2015:

(dollars in thousands)	December 31, 2016		December 31, 2015	
	Carrying Value	% of Non-Agency RMBS	Carrying Value	% of Non-Agency RMBS
	California	\$ 435,227	22.9%	\$ 443,964
New York	224,627	11.8%	200,248	10.8%
Florida	179,434	9.4%	179,885	9.7%
New Jersey	82,731	4.4%	81,207	4.4%
Texas	69,967	3.7%	80,372	4.3%
Total	\$ 991,986	52.2%	\$ 985,676	53.2%

Residential Mortgage Loans Held-for-Sale, at Fair Value

As of December 31, 2016 and December 31, 2015, we held prime nonconforming residential mortgage loans with a carrying value of \$0.9 million and \$764.3 million, respectively. We also had outstanding commitments to purchase \$286.1 million of residential mortgage loans at December 31, 2015, subject to fallout if the loans did not close. In July 2016, we announced a plan to discontinue our mortgage loan conduit and securitization business. During the remainder of 2016, all remaining commitments to purchase mortgage loans were funded, an additional securitization transaction was completed and substantially all of the remaining prime nonconforming residential loans were sold through whole loan sale transactions. The wind down process was completed at the end of 2016.

We also hold a small legacy portfolio of CSL, which are loans where the borrower has previously experienced payment delinquencies and is more likely to be underwater (*i.e.*, the amount owed on a mortgage loan exceeds the current market value of the home). As a result, there is a higher probability of default than on newly originated residential mortgage loans. As of December 31, 2016 and December 31, 2015, we held CSL with a carrying value of \$10.5 million and \$11.0 million, respectively.

Additionally, as the owner of MSR on loans from securitizations guaranteed by Ginnie Mae, we are obligated to purchase these loans from time to time in order to complete modifications on the mortgage loans or to convey foreclosed properties to HUD. We also have the option to buy out delinquent mortgages in order to better control loss mitigation activities. As of December 31, 2016 and December 31, 2015, we held Ginnie Mae buyout residential mortgage loans with a carrying value of \$28.7 million and \$36.1 million, respectively. During the year ended December 31, 2016, we sold substantially all of our Ginnie Mae MSR portfolio. As such, we anticipate these balances will continue to decline.

The following tables present our residential mortgage loans held-for-sale portfolio by loan type as of December 31, 2016 and December 31, 2015:

		December 31, 2016			
(in thousands)	Unpaid Principal Balance	Fair Value - Purchase Price	Fair Value - Unrealized	Carrying Value	
Prime nonconforming residential mortgage loans	\$ 978	\$ 16	\$ (69)	\$ 925	
Credit sensitive residential mortgage loans	17,840	(5,395)	(1,956)	10,489	
Ginnie Mae buyout residential mortgage loans	31,168	(1,519)	(917)	28,732	
Residential mortgage loans held-for-sale	<u>\$ 49,986</u>	<u>\$ (6,898)</u>	<u>\$ (2,942)</u>	<u>\$ 40,146</u>	

		December 31, 2015			
(in thousands)	Unpaid Principal Balance	Fair Value - Purchase Price	Fair Value - Unrealized	Carrying Value	
Prime nonconforming residential mortgage loans	\$ 755,185	\$ 15,678	\$ (6,545)	\$ 764,318	
Credit sensitive residential mortgage loans	19,173	(5,713)	(2,416)	11,044	
Ginnie Mae buyout residential mortgage loans	38,303	(1,912)	(322)	36,069	
Residential mortgage loans held-for-sale	<u>\$ 812,661</u>	<u>\$ 8,053</u>	<u>\$ (9,283)</u>	<u>\$ 811,431</u>	

Residential Mortgage Loans Held-for-Investment in Securitization Trusts, at Fair Value

We retain subordinated debt and excess servicing rights purchased from securitization trusts sponsored by either third parties or our subsidiaries. The underlying residential mortgage loans held by the trusts, which are consolidated on our consolidated balance sheets, are classified as residential mortgage loans held-for-investment in securitization trusts and carried at fair value as a result of a fair value option election. See Note 3 - *Variable Interest Entities* to the consolidated financial statements for additional information regarding consolidation of the securitization trusts. As of December 31, 2016 and December 31, 2015, residential mortgage loans held-for-investment in securitization trusts had a carrying value of \$3.3 billion and \$3.2 billion, respectively.

Commercial Real Estate Assets

We originate and purchase commercial real estate debt and related instruments generally to be held as long-term investments. These assets are classified as commercial real estate assets on the consolidated balance sheets. Additionally, we are the sole certificate holder of a trust entity that holds a commercial real estate loan. The underlying loan held by the trust is consolidated on our consolidated balance sheet and classified as commercial real estate assets. See Note 3 - *Variable Interest Entities* for additional information regarding consolidation of the trust. Commercial real estate assets are reported at cost, net of any unamortized acquisition premiums or discounts, loan fees and origination costs as applicable, unless the assets are deemed impaired.

The following tables summarize our commercial real estate assets by asset type, property type and geographic location as of December 31, 2016 and December 31, 2015:

(dollars in thousands)	December 31, 2016			December 31, 2015		
	Mezzanine Loans	First Mortgages	Total	Mezzanine Loans	First Mortgages	Total
Unpaid principal balance	\$ 138,245	\$ 1,286,200	\$ 1,424,445	\$ 153,913	\$ 513,433	\$ 667,346
Unamortized (discount) premium	(15)	(185)	(200)	(237)	—	(237)
Unamortized net deferred origination fees	(221)	(11,481)	(11,702)	(830)	(5,326)	(6,156)
Carrying value	\$ 138,009	\$ 1,274,534	\$ 1,412,543	\$ 152,846	\$ 508,107	\$ 660,953
Unfunded commitments	\$ 1,580	\$ 166,344	\$ 167,924	\$ 1,900	\$ 50,334	\$ 52,234
Number of loans	6	30	36	6	12	18
Weighted average coupon	8.6%	5.1%	5.4%	8.1%	4.5%	5.4%
Weighted average years to maturity (1)	1.5	2.9	2.8	2.6	3.3	3.1

(1) Based on contractual maturity date. Certain loans are subject to contractual extension options which may be subject to conditions as stipulated in the loan agreement. Actual maturities may differ from contractual maturities stated herein as certain borrowers may have the right to prepay with or without paying a prepayment penalty. We may also extend contractual maturities in connection with loan modifications.

(in thousands)	Property Type	December 31, 2016		December 31, 2015	
		Carrying Value	% of Commercial Portfolio	Carrying Value	% of Commercial Portfolio
	Retail	\$ 237,414	16.8%	\$ 185,883	28.1%
	Hotel	90,585	6.4%	80,843	12.2%
	Industrial	105,081	7.4%	—	—%
	Multifamily	260,683	18.5%	139,011	21.1%
	Office	718,780	50.9%	255,216	38.6%
	Total	\$ 1,412,543	100.0%	\$ 660,953	100.0%

(in thousands)	Geographic Location	December 31, 2016		December 31, 2015	
		Carrying Value	% of Commercial Portfolio	Carrying Value	% of Commercial Portfolio
	West	\$250,044	17.7%	\$131,488	19.9%
	Southeast	239,194	16.9%	79,118	12.0%
	Southwest	267,944	19.0%	161,721	24.4%
	Northeast	578,762	41.0%	238,913	36.2%
	Midwest	76,599	5.4%	49,713	7.5%
	Total	\$1,412,543	100.0%	\$660,953	100.0%

Mortgage Servicing Rights, at Fair Value

One of our wholly owned subsidiaries has approvals from Fannie Mae, Freddie Mac and Ginnie Mae to own and manage MSR, which represent the right to control the servicing of mortgage loans. We do not directly service mortgage loans, and instead contract with appropriately licensed subservicers to handle substantially all servicing functions for the loans underlying our MSR. As of December 31, 2016 and December 31, 2015, our MSR had a fair market value of \$693.8 million and \$493.7 million, respectively.

As of December 31, 2016 and December 31, 2015, our MSR portfolio included MSR on 280,185 and 241,199 loans with an unpaid principal balance of approximately \$62.8 billion and \$48.5 billion, respectively. During the year ended December 31, 2016, we sold substantially all of our Ginnie Mae MSR portfolio. The following tables summarize certain characteristics of the loans underlying our MSR at December 31, 2016 and December 31, 2015:

At December 31, 2016				
	Government FHA ⁽¹⁾	Government VA/USDA ⁽¹⁾	Conventional ⁽²⁾	Total
Unpaid principal balance (in thousands)	\$ 74,106	\$ 3,977	\$ 62,749,892	\$ 62,827,975
Number of loans	521	20	279,644	280,185
Average Coupon	4.2%	4.1%	3.8%	3.8%
Average Loan Age (months)	87	72	24	24
Average Loan Size (in thousands)	\$ 142	\$ 199	\$ 224	\$ 224
Average Original Loan-to-Value	92.7%	101.1%	72.7%	72.7%
Average Original FICO	649	659	757	756
60+ day delinquencies	17.6%	26.4%	0.2%	0.3%
3-Month CPR	10.1%	26.2%	14.5%	14.5%

At December 31, 2015				
	Government FHA ⁽¹⁾	Government VA/USDA ⁽¹⁾	Conventional ⁽²⁾	Total
Unpaid principal balance (in thousands)	\$ 7,450,109	\$ 2,555,552	\$ 38,534,344	\$ 48,540,005
Number of loans	52,502	13,881	174,816	241,199
Average Coupon	4.4%	3.9%	3.8%	3.9%
Average Loan Age (months)	57	45	31	36
Average Loan Size (in thousands)	\$ 142	\$ 184	\$ 221	\$ 201
Average Original Loan-to-Value	92.3%	96.0%	69.5%	74.4%
Average Original FICO	699	719	762	750
60+ day delinquencies	5.2%	2.9%	0.3%	1.2%
3-Month CPR	14.2%	13.3%	12.6%	12.9%

(1) Includes loans issued by Ginnie Mae.

(2) Includes loans issued by Fannie Mae, Freddie Mac or private investors.

Repurchase Agreements, Federal Home Loan Bank of Des Moines Advances and Revolving Credit Facilities

Our borrowings consist primarily of repurchase agreements, FHLB advances and revolving credit facilities collateralized by our pledge of AFS securities, derivative instruments commercial real estate assets, MSR and certain cash balances. Substantially all of our Agency RMBS are currently pledged as collateral, and the majority of our non-Agency RMBS have been pledged, either through repurchase agreements or FHLB advances. As of December 31, 2016, the debt-to-equity ratio funding our RMBS AFS, commercial real estate assets, MSR and Agency Derivatives only was 3.9:1.0. We believe our debt-to-equity ratio provides unused borrowing capacity and, thus, improves our liquidity and the strength of our balance sheet.

At December 31, 2016 and December 31, 2015, borrowings under repurchase agreements, FHLB advances and revolving credit facilities had the following characteristics:

(dollars in thousands)	December 31, 2016			December 31, 2015		
	Amount Outstanding	Weighted Average Borrowing Rate	Weighted Average Haircut on Collateral Value	Amount Outstanding	Weighted Average Borrowing Rate	Weighted Average Haircut on Collateral Value
Agency RMBS	\$ 10,741,681	0.91%	5.0%	\$ 5,586,480	0.62%	6.9%
Non-Agency RMBS ⁽¹⁾	1,435,754	2.60%	30.2%	2,261,504	1.53%	23.6%
Agency Derivatives	102,236	1.69%	26.7%	122,523	1.18%	26.6%
Residential mortgage loans held-for-sale	—	—%	—%	596,156	0.61%	21.7%
Commercial real estate assets	1,036,680	1.84%	21.9%	226,611	1.12%	36.8%
Mortgage servicing rights	70,000	4.53%	37.1%	—	—%	—%
Total	\$ 13,386,351	1.19%	9.4%	\$ 8,793,274	0.88%	13.2%

(1) Includes repurchase agreements and FHLB advances collateralized by retained interests from our on-balance sheet securitizations which are eliminated in consolidation in accordance with U.S. GAAP.

As of December 31, 2016, we had outstanding \$9.3 billion of repurchase agreements, and the term to maturity ranged from three days to over 26 months. Repurchase agreements had a weighted average borrowing rate of 1.3% and weighted average remaining maturities of 77 days as of December 31, 2016.

As of December 31, 2016, we had outstanding \$4.0 billion of FHLB advances with a weighted average term to maturity of 146 months, ranging from 17 days to over 19 years. The weighted average cost of funds for our advances was 0.85% at December 31, 2016.

As of December 31, 2016, we had outstanding \$70.0 million of short-term borrowings under revolving credit facilities with a weighted average borrowing rate of 4.53% and weighted average remaining maturities of 306 days.

The following table provides the quarterly average balances, the quarter-end balances, and the maximum balances at any month-end within that quarterly period, of borrowings under repurchase agreements, FHLB advances and revolving credit facilities for the three months ended December 31, 2016, and the four immediately preceding quarters:

(dollars in thousands)	Quarterly Average ⁽¹⁾	End of Period Balance ⁽¹⁾	Maximum Balance of Any Month-End ⁽¹⁾	End of Period Total Borrowings to Equity Ratio
For the Three Months Ended December 31, 2016	\$ 14,492,271	\$ 13,386,351	\$ 15,636,929	3.9:1.0
For the Three Months Ended September 30, 2016	\$ 14,098,192	\$ 14,667,373	\$ 14,667,373	4.2:1.0
For the Three Months Ended June 30, 2016	\$ 12,303,996	\$ 13,669,848	\$ 13,669,848	4.0:1.0
For the Three Months Ended March 31, 2016	\$ 9,292,057	\$ 10,189,852	\$ 10,189,852	3.0:1.0
For the Three Months Ended December 31, 2015	\$ 9,601,484	\$ 8,793,274	\$ 10,091,255	2.5:1.0

(1) Includes borrowings under repurchase agreements, FHLB advances and revolving credit facilities collateralized by RMBS AFS, residential mortgage loans held-for-sale, commercial real estate assets, MSR and Agency Derivatives and excludes collateralized borrowings in securitization trusts.

Collateralized Borrowings in Securitization Trusts, at Fair Value

We retain subordinated debt and excess servicing rights purchased from securitization trusts sponsored by either third parties or our subsidiaries. The underlying debt held by the trusts, which is consolidated on our consolidated balance sheets, is classified as collateralized borrowings in securitization trusts and carried at fair value as a result of a fair value option election. See Note 3 - *Variable Interest Entities* to the consolidated financial statements for additional information regarding consolidation of the securitization trusts. As of December 31, 2016 and December 31, 2015, collateralized borrowings in securitization trusts had a carrying value of \$3.0 billion and \$2.0 billion with a weighted average interest rate of 3.4% and 3.6%, respectively. The stated maturity dates for all collateralized borrowings were greater than five years from December 31, 2016.

Net Economic Interests in Consolidated Securitization Trusts

The net of the underlying residential mortgage loans and the debt held by the securitization trusts discussed above represents the carrying value of the securities that we retained from these securitizations. Because we consolidate these securitization trusts on our consolidated balance sheets, our retained interests are eliminated in consolidation in accordance with U.S. GAAP. However, the carrying value, characteristics and performance of these securities and those of the underlying collateral are relevant to our portfolio as a whole.

The following table presents the carrying value and coupon of our net economic interests in consolidated securitization trusts and certain attributes of the underlying collateral as of December 31, 2016 and December 31, 2015:

	December 31, 2016	December 31, 2015
Carrying Value (in thousands)	\$ 230,090	\$ 1,169,894
Average Coupon	3.0%	3.1%
Collateral Attributes		
Average Loan Age (months)	23	16
Average Loan Size (in thousands)	\$ 809	\$ 826
Average Original Loan-to-Value	65.3%	65.2%
Average Original FICO	772	772
Current Performance		
60+ day delinquencies	0.07%	0.02%

The following table summarizes the carrying values and credit ratings of our net economic interests in consolidated securitization trusts, based on a composite of credit ratings received from DBRS Ltd., Standard & Poor's Corporation and/or Fitch, Inc. upon issuance of the securities, as of December 31, 2016 and December 31, 2015:

	December 31, 2016		December 31, 2015	
	Carrying Value	% of Retained Portfolio	Carrying Value	% of Retained Portfolio
(dollars in thousands)				
AAA	\$ 30,970	13.4%	\$ 868,590	74.2%
AA	35,956	15.6%	42,900	3.7%
A	27,073	11.8%	49,925	4.3%
BBB	44,337	19.3%	41,685	3.6%
BB	32,403	14.1%	28,438	2.4%
B	—	—%	—	—%
Below B	—	—%	—	—%
Not rated	59,351	25.8%	138,356	11.8%
Total	\$ 230,090	100.0%	\$ 1,169,894	100.0%

Equity

As of December 31, 2016, our stockholders' equity was \$3.4 billion and our book value per share was \$9.78. As of December 31, 2015, our stockholders' equity was \$3.6 billion and our book value per share was \$10.11.

The following table provides details of our changes in stockholders' equity from December 31, 2014 to December 31, 2016:

(dollars in millions, except per share amounts)	Book Value	Common Shares Outstanding	Book Value Per Share
Stockholders' equity at December 31, 2014	\$ 4,068.0	366.4	\$ 11.10
Cumulative effect of adoption of new accounting principle	(3.0)		
Adjusted stockholders' equity at January 1, 2015	4,065.0		
Reconciliation of non-GAAP measures to GAAP net income and Comprehensive loss:			
Core Earnings, net of tax expense of \$0.2 million ⁽¹⁾	325.8		
Realized gains and losses, net of tax benefit of \$24.6 million	134.6		
Unrealized mark-to-market gains and losses, net of tax expense of \$7.8 million	31.8		
GAAP net income	492.2		
Other comprehensive loss, net of tax	(496.7)		
Comprehensive loss	(4.5)		
Dividend declaration	(378.3)		
Other	9.0	1.1	
Balance before capital transactions	3,691.2	367.5	
Repurchase of common stock	(115.2)	(13.7)	
Issuance of common stock, net of offering costs	0.6	0.1	
Stockholders' equity at December 31, 2015	\$ 3,576.6	353.9	\$ 10.11
Reconciliation of non-GAAP measures to GAAP net income and Comprehensive income:			
Core Earnings, net of tax benefit of \$5.7 million ⁽¹⁾	313.9		
Realized gains and losses, net of tax benefit of \$43.4 million	(201.3)		
Unrealized mark-to-market gains and losses, net of tax expense of \$61.4 million	240.7		
GAAP net income	353.3		
Other comprehensive loss, net of tax	(159.9)		
Comprehensive income	193.4		
Dividend declaration	(323.3)		
Other	15.2	1.7	
Balance before capital transactions	3,461.9	355.6	
Repurchase of common stock	(61.3)	(8.0)	
Issuance of common stock, net of offering costs	0.5	0.1	
Stockholders' equity at December 31, 2016	\$ 3,401.1	347.7	\$ 9.78

(1) Core Earnings is a non-U.S. GAAP measure that we define as Comprehensive Income (Loss), excluding "realized gains and losses" (impairment losses, realized gains or losses on the aggregate portfolio, amortization of business combination intangible assets, servicing reserve expenses on MSR, certain upfront costs related to securitization transactions and restructuring charges) and "unrealized mark-to-market gains and losses" (unrealized gains and losses on the aggregate portfolio). As defined, Core Earnings includes interest income or expense and premium income or loss on derivative instruments and servicing income, net of estimated amortization on MSR. Core Earnings is provided for purposes of comparability to other peer issuers.

U.S. GAAP to Taxable Income

The following tables provide reconciliations of our GAAP net income (loss) to our taxable (loss) income split between our REIT and taxable REIT subsidiaries for the years ended December 31, 2016 and December 31, 2015:

(dollars in millions)	Year Ended December 31, 2016			
	TRS	REIT	Securitization Trusts	Consolidated
GAAP net income (loss), pre-tax	\$ 44.2	\$ 325.1	\$ (3.8)	\$ 365.5
State taxes	(0.1)	—	—	(0.1)
Adjusted GAAP net income (loss), pre-tax	44.1	325.1	(3.8)	365.4
<i>Permanent differences</i>				
Securitization trusts consolidated for U.S. GAAP purposes only	—	—	3.8	3.8
Other permanent differences	(9.4)	6.7	—	(2.7)
<i>Temporary differences</i>				
Net accretion of OID and market discount	0.3	60.6	—	60.9
Net unrealized gains and losses on derivatives	(131.5)	(122.8)	—	(254.3)
Other temporary differences	(18.7)	(14.8)	—	(33.5)
Capital loss deferral	9.6	61.2	—	70.8
Taxable (loss) income	(105.6)	316.0	—	210.4
Dividend declaration deduction	—	(316.0)	—	(316.0)
Taxable loss post-dividend deduction	\$ (105.6)	\$ —	\$ —	\$ (105.6)

(dollars in millions)	Year Ended December 31, 2015			
	TRS	REIT	Securitization Trusts	Consolidated
GAAP net (loss) income, pre-tax	\$ (45.9)	\$ 535.0	\$ (13.4)	\$ 475.7
State taxes	(0.2)	—	—	(0.2)
Adjusted GAAP net (loss) income, pre-tax	(46.1)	535.0	(13.4)	475.5
<i>Permanent differences</i>				
Securitization trusts consolidated for U.S. GAAP purposes only	—	—	13.4	13.4
Other permanent differences	—	(2.2)	—	(2.2)
<i>Temporary differences</i>				
Net accretion of OID and market discount	(0.1)	(37.5)	—	(37.6)
Net unrealized gains and losses on trading securities and derivatives	(23.2)	(33.2)	—	(56.4)
Other temporary differences	0.3	(57.3)	—	(57.0)
Capital loss deferral	60.4	—	—	60.4
Net operating loss carryover	(16.1)	—	—	(16.1)
Taxable (loss) income	(24.8)	404.8	—	380.0
Dividend declaration deduction	—	(404.8)	—	(404.8)
Taxable loss post-dividend deduction	\$ (24.8)	\$ —	\$ —	\$ (24.8)

The permanent tax differences recorded in 2016 and 2015 include a recurring difference in the income recognized from the securitization trusts that are consolidated for U.S. GAAP purposes only. The permanent tax differences also include a recurring difference in compensation expense related to restricted stock dividends. Temporary differences are principally timing differences between U.S. GAAP and tax accounting related to unrealized gains and losses from derivative instruments, realized and unrealized gains and losses from MSR and accretion and amortization from RMBS.

Change in Accumulated Other Comprehensive Income

With our accounting treatment for AFS securities, unrealized fluctuations in the market values of AFS securities, excluding Agency interest-only securities and GSE credit risk transfer securities, do not impact our GAAP net income (loss) or taxable income but are recognized on our consolidated balance sheets as a change in stockholders' equity under "accumulated other comprehensive income." As a result of this fair value accounting through stockholders' equity, we expect our net income to have less significant fluctuations and result in less U.S. GAAP to taxable income timing differences, than if the portfolio were accounted for as trading instruments.

Dividends

For the year ended December 31, 2016, we declared dividends totaling \$0.93 per share. As a REIT, we are required to distribute at least 90% of our taxable income to stockholders, subject to certain distribution requirements. For the year ended December 31, 2016, our board of directors elected to distribute the majority of our taxable income to avoid U.S. Federal Income taxes. As such, temporary differences between GAAP net income (loss) and taxable income can generate deterioration in book value on a permanent and temporary basis as taxable income is distributed that has not been earned for U.S. GAAP purposes. The following table presents cash dividends declared on our common stock for the fiscal years ended December 31, 2016, 2015 and 2014:

Declaration Date	Record Date	Payment Date	Cash Dividend Per Share
December 15, 2016	December 30, 2016	January 27, 2017	\$ 0.24
September 15, 2016	September 30, 2016	October 20, 2016	\$ 0.23
June 16, 2016	June 30, 2016	July 20, 2016	\$ 0.23
March 15, 2016	March 31, 2016	April 21, 2016	\$ 0.23
December 16, 2015	December 30, 2015	January 20, 2016	\$ 0.26
September 16, 2015	September 30, 2015	October 22, 2015	\$ 0.26
June 17, 2015	June 30, 2015	July 21, 2015	\$ 0.26
March 18, 2015	March 31, 2015	April 21, 2015	\$ 0.26
December 16, 2014	December 30, 2014	January 20, 2015	\$ 0.26
September 16, 2014	September 30, 2014	October 21, 2014	\$ 0.26
June 17, 2014	July 2, 2014	July 22, 2014	\$ 0.26
March 17, 2014	March 31, 2014	April 21, 2014	\$ 0.26

The following table summarizes dividends declared for the years ended December 31, 2016, 2015 and 2014 and their related tax characterization (per share amounts):

Year Ended December 31,	Dividends Declared	Tax Characterization of Dividends		
		Ordinary Dividends (Non-Qualified)	Qualified Ordinary Dividends	Capital Gain Distribution
2016	\$ 0.93	\$ 0.93	\$ —	\$ —
2015	\$ 1.04	\$ 0.40	\$ —	\$ 0.64
2014	\$ 1.04	\$ 0.96	\$ —	\$ 0.08

Share Repurchase Program

Our share repurchase program in effect as of December 31, 2015 allowed for the repurchase of up to an aggregate of 25,000,000 shares of our common stock. During the year ended December 31, 2016, our board of directors approved an increase of 50,000,000 shares, for up to a total of 75,000,000 shares authorized for repurchase by us under the program. Shares may be repurchased from time to time through privately negotiated transactions or open market transactions, pursuant to a trading plan in accordance with Rules 10b5-1 and 10b-18 under the Exchange Act or by any combination of such methods. The manner, price, number and timing of share repurchases are subject to a variety of factors, including market conditions and applicable SEC rules. The share repurchase program does not require the purchase of any minimum number of shares, and, subject to SEC rules, purchases may be commenced or suspended at any time without prior notice. The share repurchase program does not have an expiration date. As of December 31, 2016, a total of 24,135,000 shares had been repurchased under the program for an aggregate cost of \$200.4 million; of these, 8,020,000 shares were repurchased for a total cost of \$61.3 million during the year ended December 31, 2016.

Liquidity and Capital Resources

Our liquidity and capital resources are managed and forecast on a daily basis. We believe this ensures that we have sufficient liquidity to absorb market events that could negatively impact collateral valuations and result in margin calls, and that we have the flexibility to manage our portfolio to take advantage of market opportunities.

Our principal sources of cash consist of borrowings under repurchase agreements, FHLB advances and revolving credit facilities, payments of principal and interest we receive on our target assets, cash generated from our operating results, and proceeds from capital market transactions. We typically use cash to repay principal and interest on our repurchase agreements, FHLB advances and revolving credit facilities, to purchase our target assets, to make dividend payments on our capital stock, and to fund our operations.

On January 19, 2017, we closed an underwritten public offering of \$287.5 million aggregate principal amount of convertible senior notes, which included \$37.5 million aggregate principal amount sold to the underwriter of the offering pursuant to an overallotment option. The notes are unsecured, pay interest semiannually at a rate of 6.25% per annum and are convertible at the option of the holder into shares of our common stock. The notes will mature in January 2022, unless earlier converted or repurchased in accordance with their terms. We do not have the right to redeem the notes prior to maturity, but may be required to repurchase the notes from holders under certain circumstances. The notes have an initial conversion rate of 100 shares of common stock per \$1,000 principal amount of the notes (equivalent to an initial conversion price of \$10.00 per share), subject to adjustment. The net proceeds from the offering were approximately \$282 million after deducting underwriting discounts and estimated offering expenses. We intend to use the majority of these proceeds to help fund our MSR assets, which to date has largely been funded with cash.

To the extent that we raise additional equity capital through capital market transactions, we anticipate using cash proceeds from such transactions to purchase additional RMBS, MSR, commercial real estate assets and other target assets and for other general corporate purposes.

As of December 31, 2016, we held \$406.9 million in cash and cash equivalents available to support our operations; \$18.9 billion of AFS securities, residential mortgage loans held-for-sale, residential mortgage loans held-for-investment in securitization trusts, commercial real estate assets, MSR and derivative assets held at fair value; and \$16.4 billion of outstanding debt in the form of repurchase agreements, FHLB advances, borrowings under revolving credit facilities and collateralized borrowings in securitization trusts. During the year ended December 31, 2016, our total consolidated debt-to-equity ratio increased from 3.0:1.0 to 4.8:1.0. The debt-to-equity ratio funding our AFS securities, residential mortgage loans held-for-sale, commercial real estate assets, MSR and Agency Derivatives only also increased from 2.5:1.0 to 3.9:1.0 predominantly driven by the purchase of and increased financing on Agency RMBS, commercial real estate assets and MSR, offset by the sale and securitization of the majority of our residential mortgage loans held-for-sale. We believe the debt-to-equity ratio funding our AFS securities, commercial real estate assets, MSR and Agency Derivatives is the most meaningful debt-to-equity measure as collateralized borrowings on residential mortgage loans held-for-investment in securitization trusts represents term financing with no stated maturity.

As of December 31, 2016, we held approximately \$2.6 million of unpledged Agency RMBS AFS and Agency Derivatives and \$26.1 million of unpledged non-Agency securities and retained interests from our on-balance sheet securitizations, which are eliminated in consolidation in accordance with U.S. GAAP. As a result, we had an overall estimated unused borrowing capacity on unpledged RMBS and retained interests of approximately \$19.8 million. We also held approximately \$40.1 million of unpledged residential mortgage loans held-for-sale, for which we had no unused borrowing capacity. As of December 31, 2016, we held approximately \$43.9 million of unpledged mezzanine commercial real estate loans and \$10.8 million of unpledged commercial real estate first mortgages, and an overall estimated unused borrowing capacity on unpledged commercial real estate assets of approximately \$36.5 million. We also held approximately \$512.9 million of unpledged MSR, for which we had no unused borrowing capacity. Generally, unused borrowing capacity may be the result of our election not to utilize certain financing, as well as delays in the timing in which funding is provided or the inability to meet lenders' eligibility requirements for specific types of asset classes. On a daily basis, we monitor and forecast our available, or excess, liquidity. Additionally, we frequently perform shock analyses against various market events to monitor the adequacy of our excess liquidity. If borrowing rates and/or collateral requirements change in the near term, we believe we are subject to less earnings volatility than a more leveraged organization.

During the year ended December 31, 2016, we did not experience any restrictions to our funding sources, although balance sheet capacity of counterparties have tightened due to compliance with the Basel III regulatory capital reform rules as well as management of perceived risk in the volatile interest rate environment. We expect ongoing sources of financing to be primarily repurchase agreements, FHLB advances, revolving credit facilities, convertible notes and similar financing arrangements. We plan to finance our assets with a moderate amount of leverage, the level of which may vary based upon the particular characteristics of our portfolio and market conditions.

As of December 31, 2016, we had master repurchase agreements in place with 31 counterparties (lenders), the majority of which are U.S. domiciled financial institutions, and we continue to evaluate further counterparties to manage and reduce counterparty risk. Under our repurchase agreements, we are required to pledge additional assets as collateral to our lenders when the estimated fair value of the existing pledged collateral under such agreements declines and such lenders, through a margin call, demand additional collateral. Lenders generally make margin calls because of a perceived decline in the value of our assets collateralizing the repurchase agreements. This may occur following the monthly principal reduction of assets due to scheduled amortization and prepayments on the underlying mortgages, or may be caused by changes in market interest rates, a perceived decline in the market value of the investments and other market factors. To cover a margin call, we may pledge additional securities or cash. At maturity, any cash on deposit as collateral is generally applied against the repurchase agreement balance, thereby reducing the amount borrowed. Should the value of our assets suddenly decrease, significant margin calls on our repurchase agreements could result, causing an adverse change in our liquidity position.

The following table summarizes our repurchase agreements and counterparty geographical concentration at December 31, 2016 and December 31, 2015:

(dollars in thousands)	December 31, 2016			December 31, 2015		
	Amount Outstanding	Net Counterparty Exposure ⁽¹⁾	Percent of Funding	Amount Outstanding	Net Counterparty Exposure ⁽¹⁾	Percent of Funding
North America	\$ 4,916,309	\$ 965,621	67.3%	\$ 3,381,616	\$ 693,667	67.0%
Europe ⁽²⁾	2,617,372	355,060	24.7%	1,125,944	303,206	29.3%
Asia ⁽²⁾	1,782,670	114,720	8.0%	500,714	38,912	3.7%
Total	\$ 9,316,351	\$ 1,435,401	100.0%	\$ 5,008,274	\$ 1,035,785	100.0%

(1) Represents the net carrying value of the securities, residential mortgage loans held-for-sale and commercial real estate assets sold under agreements to repurchase, including accrued interest plus any cash or assets on deposit to secure the repurchase obligation, less the amount of the repurchase liability, including accrued interest. Payables due to broker counterparties for unsettled securities purchases are not included in the amounts presented above. However, at both December 31, 2016 and December 31, 2015, the Company did not have any such payables.

(2) Exposure to European and Asian domiciled banks and their U.S. subsidiaries.

In addition to our master repurchase agreements to fund our RMBS and commercial real estate assets, we have three facilities that provide short- and long-term financing for our commercial real estate assets and two revolving credit facilities that provide short-term financing for our MSR portfolio. An overview of the facilities is presented in the table below:

(dollars in thousands)

As of December 31, 2016

Expiration Date ⁽¹⁾	Committed	Amount Outstanding	Unused Capacity	Total Capacity	Eligible Collateral
December 3, 2017	No	\$ 167,569	\$ 82,431	\$ 250,000	Commercial real estate assets
February 18, 2019	No	\$ 185,634	\$ 64,366	\$ 250,000	Commercial real estate assets
November 1, 2017	No	\$ 38,921	\$ 156,079	\$ 195,000	Commercial real estate assets
September 1, 2017	No	\$ 30,000	\$ —	\$ 30,000	Mortgage servicing rights
December 18, 2017	No	\$ 40,000	\$ —	\$ 40,000	Mortgage servicing rights

(1) The facilities are set to mature on the stated expiration date, unless extended pursuant to their terms.

Our wholly owned subsidiary, TH Insurance, is a member of the FHLB. As a member of the FHLB, TH Insurance has access to a variety of products and services offered by the FHLB, including secured advances. As of December 31, 2016, TH Insurance had \$4.0 billion in outstanding secured advances with a weighted average borrowing rate of 0.85%, and had no additional uncommitted capacity to borrow. To the extent TH Insurance has uncommitted capacity, it may be adjusted at the sole discretion of the FHLB.

The ability to borrow from the FHLB is subject to our continued creditworthiness, pledging of sufficient eligible collateral to secure advances, and compliance with certain agreements with the FHLB. Each advance requires approval by the FHLB and is secured by collateral in accordance with the FHLB's credit and collateral guidelines, as may be revised from time to time by the FHLB. Eligible collateral may include conventional 1-4 family residential mortgage loans, commercial real estate loans, Agency RMBS and certain non-Agency RMBS with a rating of A and above.

In January 2016, the FHFA released a final rule regarding membership in the Federal Home Loan Bank system. Among other effects, the final rule excludes captive insurers from membership eligibility, including our subsidiary member, TH Insurance. Since TH Insurance was admitted as a member in 2013, it is eligible for a membership grace period that shall run through February 19, 2021, during which new advances or renewals that mature beyond the grace period will be prohibited; however, any existing advances that mature beyond this grace period will be permitted to remain in place subject to their terms insofar as we maintain good standing with the FHLB. If any new advances or renewals occur, TH Insurance's outstanding advances will be limited to 40% of its total assets. Notwithstanding the FHFA's ruling, we continue to believe our mission aligns well with that of the Federal Home Loan Bank system.

We are subject to a variety of financial covenants under our lending agreements. The following represent the most restrictive financial covenants across the agreements as of December 31, 2016:

- Total indebtedness to net worth must be less than the specified threshold ratio in the repurchase agreement. As of December 31, 2016, our debt to net worth, as defined, was 4.9:1.0 while our threshold ratio, as defined, was 5.5:1.0.
- Liquidity must be greater than the sum of 1.5% of indebtedness related to Agency securities and 5.0% of total indebtedness, excluding indebtedness related to Agency securities. As of December 31, 2016, this sum was \$289.8 million while our liquidity, as defined, was \$865.0 million.
- Net worth must be greater than the sum of \$1.75 billion plus 40% of the aggregate net cash proceeds of any additional equity issuances made and capital contributions received. As of December 31, 2016, our net worth, as defined, was \$3.4 billion.
- Interest coverage must not be less than 2.0:1.0. As of December 31, 2016, our interest coverage ratio, as defined, was 2.7:1.0.

We are also subject to additional financial covenants in connection with various other agreements we enter into in the normal course of our business. We intend to continue to operate in a manner which complies with all of our financial covenants.

The following table summarizes assets at carrying values that are pledged or restricted as collateral for the future payment obligations of repurchase agreements, FHLB advances and revolving credit facilities.

(in thousands)	December 31, 2016	December 31, 2015
Available-for-sale securities, at fair value	\$ 13,117,330	\$ 7,767,074
Residential mortgage loans held-for-sale, at fair value	—	745,454
Commercial real estate assets	1,357,874	361,130
Mortgage servicing rights, at fair value	180,948	—
Net economic interests in consolidated securitization trusts ⁽¹⁾	213,110	1,138,312
Cash and cash equivalents	15,000	15,000
Restricted cash	162,759	119,310
Due from counterparties	48,939	10,211
Derivative assets, at fair value	126,341	157,879
Total	<u>\$ 15,222,301</u>	<u>\$ 10,314,370</u>

(1) Includes the retained interests from our on-balance sheet securitizations, which are eliminated in consolidation in accordance with U.S. GAAP.

Although we generally intend to hold our target assets as long-term investments, we may sell certain of our assets in order to manage our interest rate risk and liquidity needs, to meet other operating objectives and to adapt to market conditions. Our RMBS are generally actively traded and thus, in most circumstances, readily liquid. However, certain of our assets, including residential mortgage loans, commercial real estate assets and MSR, are subject to longer trade timelines, and, as a result, market conditions could significantly and adversely affect the liquidity of our assets. Any illiquidity of our assets may make it difficult for us to sell such assets if the need or desire arises. Our ability to quickly sell certain assets, such as residential mortgage loans, commercial real estate assets and MSR, may be limited by delays encountered while obtaining certain regulatory approvals required for such dispositions and may be further limited by delays due to the time period needed for negotiating transaction documents, conducting diligence, and complying with regulatory requirements regarding the transfer of such assets before settlement may occur. Consequently, even if we identify a buyer for our residential mortgage loans, commercial real estate assets and MSR, there is no assurance that we would be able to quickly sell such assets if the need or desire arises.

In addition, if we are required to liquidate all or a portion of our portfolio quickly, we may realize significantly less than the value at which we previously recorded our assets. Assets that are illiquid are more difficult to finance, and to the extent that we use leverage to finance assets that become illiquid, we may lose that leverage or have it reduced. Assets tend to become less liquid during times of financial stress, which is often the time that liquidity is most needed. As a result, our ability to sell assets or vary our portfolio in response to changes in economic and other conditions may be limited by liquidity constraints, which could adversely affect our results of operations and financial condition.

We cannot predict the timing and impact of future sales of our assets, if any. Because many of our assets are financed with repurchase agreements and FHLB advances, and may be financed with credit facilities (including term loans and revolving facilities), a significant portion of the proceeds from sales of our assets (if any), prepayments and scheduled amortization are used to repay balances under these financing sources.

The following table provides the maturities of our repurchase agreements, FHLB advances and revolving credit facilities as of December 31, 2016 and December 31, 2015:

(in thousands)	December 31, 2016	December 31, 2015
Within 30 days	\$ 3,286,783	\$ 2,689,363
30 to 59 days	2,376,002	1,739,237
60 to 89 days	1,365,394	161,449
90 to 119 days	1,504,056	175,486
120 to 364 days	1,319,720	242,739
One to three years	1,000,658	651,238
Three to five years	—	815,024
Five to ten years	—	—
Ten years and over	2,533,738	2,318,738
Total	<u>\$ 13,386,351</u>	<u>\$ 8,793,274</u>

For the year ended December 31, 2016, our unrestricted cash balance decreased approximately \$330.9 million to \$406.9 million at December 31, 2016. The cash movements can be summarized by the following:

- *Cash flows from operating activities.* For the year ended December 31, 2016, operating activities increased our cash balances by approximately \$239.7 million, primarily driven by our financial results for the year.
- *Cash flows from investing activities.* For the year ended December 31, 2016, investing activities decreased our cash balances by approximately \$5.8 billion, primarily driven by purchases, net of sales, of AFS securities, commercial real estate assets and MSR.
- *Cash flows from financing activities.* For the year ended December 31, 2016, financing activities increased our cash balance by approximately \$5.2 billion, primarily driven by proceeds from repurchase agreements due to purchases of AFS securities and commercial real estate assets and net proceeds from sales of retained interests from our on-balance sheet securitizations.

Off-Balance Sheet Arrangements

We have not participated in transactions that create relationships with unconsolidated entities or financial partnerships which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. Further, we have not guaranteed any obligations of unconsolidated entities or entered into any commitment or intent to provide funding to any such entities. However, as of December 31, 2016, we had unfunded commitments on commercial real estate assets of \$167.9 million to be used for future fundings to borrowers, generally to finance lease-related or capital expenditures.

Aggregate Contractual Obligations

The following table summarizes the effect on our liquidity and cash flows from contractual obligations for repurchase agreements, FHLB advances, revolving credit facilities, interest expense on borrowings, our non-cancelable office leases, management fees payable under our management agreement and unfunded commitments on commercial real estate assets:

(in thousands)	Due During the Year Ended December 31,							Total
	2017	2018	2019	2020	2021	Thereafter		
Repurchase agreements	\$ 9,130,717	\$ —	\$ 185,634	\$ —	\$ —	\$ —	\$ 9,316,351	
Federal Home Loan Bank advances	651,238	—	815,024	—	—	2,533,738	4,000,000	
Revolving credit facilities	70,000	—	—	—	—	—	70,000	
Interest expense on borrowings ⁽¹⁾	67,406	27,786	23,074	19,578	19,578	262,884	420,306	
Long-term operating lease obligations	2,808	2,412	2,483	2,424	2,438	828	13,393	
Management fee - PRCM Advisers ⁽²⁾	175,527	—	—	—	—	—	175,527	
Unfunded commitments on commercial real estate assets ⁽³⁾	25,513	135,818	6,593	—	—	—	167,924	
Total	\$ 10,123,209	\$ 166,016	\$ 1,032,808	\$ 22,002	\$ 22,016	\$ 2,797,450	\$ 14,163,501	

(1) Interest expense on borrowings, including repurchase agreements, FHLB advances and revolving credit facilities, are calculated based on rates at December 31, 2016.

(2) Contractual obligation for the management fee is estimated through the contract expiration date of October 28, 2017, inclusive of the termination fee as defined in the management agreement between us and PRCM Advisers. Disclosure assumes agreement not renewed or terminated without cause.

(3) Allocation of unfunded commitments on commercial real estate assets is based on the earlier of the commitment expiration date or the loan maturity date.

We are party to a management agreement with PRCM Advisers, pursuant to which PRCM Advisers is entitled to receive a management fee and the reimbursement of certain expenses from us. We reimburse PRCM Advisers for (i) our allocable share of the compensation paid by PRCM Advisers to its personnel serving as our principal financial officer and general counsel and personnel employed by PRCM Advisers as in-house legal, tax, accounting, consulting, auditing, administrative, information technology, valuation, computer programming and development and back-office resources to us, and (ii) any amounts for personnel of PRCM Advisers' affiliates arising under a shared facilities and services agreement. We also have certain costs allocated to us by PRCM Advisers for data services and technology, but most direct expenses with third-party vendors are paid directly by us.

We are also party to contracts that contain a variety of indemnification obligations, principally with brokers, underwriters, counterparties to lending agreements and investors in the RMBS we issue and the loans underlying our MSR assets. The maximum potential future payment amount we could be required to pay under these indemnification obligations may be unlimited.

Recently Issued Accounting Standards

Refer to Note 2 of the notes to the consolidated financial statements included in Item 8 of this Form 10-K.

Inflation

Substantially all of our assets and liabilities are financial in nature. As a result, changes in interest rates and other factors impact our performance far more than does inflation. Our financial statements are prepared in accordance with U.S. GAAP and dividends are based upon net ordinary income and capital gains as calculated for tax purposes; in each case, our results of operations and reported assets, liabilities and equity are measured with reference to historical cost or fair value without considering inflation.

Other Matters

We intend to conduct our business so as to maintain our exempt status under, and not to become regulated as, an investment company for purposes of the 1940 Act. If we failed to maintain our exempt status under the 1940 Act and became regulated as an investment company, our ability to, among other things, use leverage would be substantially reduced and, as a result, we would be unable to conduct our business as described in Item 1, “*Business - Other Business - Regulation*” of this Annual Report on Form 10-K. Accordingly, we monitor our compliance with both the 55% Test and the 80% Tests of the 1940 Act in order to maintain our exempt status. As of December 31, 2016, we determined that we maintained compliance with both the 55% Test and the 80% Test requirements.

We calculate that at least 75% of our assets were qualified REIT assets, as defined in the Code for the year ended December 31, 2016. We also calculate that our revenue qualifies for the 75% source of income test and for the 95% source of income test rules for the year ended December 31, 2016. Consequently, we met the REIT income and asset tests. We also met all REIT requirements regarding the ownership of our common stock and the distribution of our net income. Therefore, for the year ended December 31, 2016, we believe that we qualified as a REIT under the Code.

The Protecting Americans from Tax Hikes Act of 2015 contains changes to certain aspects of the U.S. federal income tax rules applicable to REITs. In particular, the act will reduce the maximum allowable value of assets attributable to our TRSs from 25% to 20%, which change will be applicable with respect to tax years beginning after December 31, 2017. We currently monitor our compliance with this TRS asset test and, in light of this change, we intend to continue to meet the requirement.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

We seek to manage our risks related to the credit quality of our assets, interest rates, liquidity, prepayment speeds and market value while providing an opportunity to stockholders to realize attractive risk-adjusted total return through ownership of our capital stock. Although we do not seek to avoid risk completely, we believe that risk can be quantified from historical experience and we seek to manage our risk levels in order to earn sufficient compensation to justify the risks we undertake and to maintain capital levels consistent with taking such risks.

To reduce the risks to our portfolio, we employ portfolio-wide and asset-specific risk measurement and management processes in our daily operations. Risk management tools include software and services licensed or purchased from third parties as well as proprietary and third-party analytical tools and models. There can be no guarantee that these tools and methods will protect us from market risks.

Interest Rate Risk

Interest rates are highly sensitive to many factors, including fiscal and monetary policies and domestic and international economic and political considerations, as well as other factors beyond our control. We are subject to interest rate risk in connection with our assets and related financing obligations. Subject to maintaining our qualification as a REIT, we engage in a variety of interest rate management techniques that seek to mitigate the influence of interest rate changes on the values of our assets.

We may utilize U.S. Treasuries as well as derivative financial instruments, which during the year ended December 31, 2016 were limited to interest rate swaps, swaptions, TBAs, put and call options for TBAs, Markit IOS total return swaps and, to a certain extent, inverse interest-only securities, to hedge the interest rate risk associated with our portfolio. In addition, because MSR are negative duration assets, they provide a natural hedge to interest rate exposure on our RMBS portfolio. We seek to hedge interest rate risk with respect to both the fixed income nature of our assets and the financing of our portfolio. In hedging interest rates with respect to our fixed income assets, we seek to reduce the risk of losses on the value of our investments that may result from changes in interest rates in the broader markets. In utilizing interest rate hedges with respect to our financing, we seek to improve risk-adjusted returns and, where possible, to obtain a favorable spread between the yield on our assets and the cost of our financing. We implement part of our hedging strategy through our TRSs, which are subject to U.S. federal, state and, if applicable, local income tax.

Interest Rate Effect on Net Interest Income

Our operating results depend in large part on differences between the income earned on our assets and our cost of borrowing and hedging activities. The costs associated with our borrowings are generally based on prevailing market interest rates. During a period of rising interest rates, our borrowing costs generally will increase while the yields earned on our existing portfolio of leveraged fixed-rate RMBS and residential mortgage loans held-for-sale will remain static. Moreover, interest rates may rise at a faster pace than the yields earned on our leveraged adjustable-rate and hybrid RMBS and adjustable-rate residential mortgage loans held-for-sale. Both of these factors could result in a decline in our net interest spread and net interest margin. The severity of any such decline would depend on our asset/liability composition at the time, as well as the magnitude and duration of the interest rate increase. Further, an increase in short-term interest rates could also have a negative impact on the market value of our target assets. If any of these events happen, we could experience a decrease in net income or incur a net loss during these periods, which could adversely affect our liquidity and results of operations.

Our hedging techniques are partly based on assumed levels of prepayments of our target assets. If prepayments are slower or faster than assumed, the life of the investment will be longer or shorter, which could reduce the effectiveness of any hedging strategies we may use and may cause losses on such transactions. Hedging strategies involving the use of derivative securities are highly complex and may produce volatile returns.

We acquire adjustable-rate and hybrid RMBS. These are assets in which some of the underlying mortgages are typically subject to periodic and lifetime interest rate caps and floors, which may limit the amount by which the security's interest yield may change during any given period. However, our borrowing costs pursuant to our financing agreements are not subject to similar restrictions. Therefore, in a period of increasing interest rates, interest rate costs on our borrowings could increase without limitation, while the interest-rate yields on our adjustable-rate and hybrid RMBS could effectively be limited by caps. This issue will be magnified to the extent we acquire adjustable-rate and hybrid RMBS that are not based on mortgages that are fully indexed. In addition, adjustable-rate and hybrid RMBS may be subject to periodic payment caps that result in some portion of the interest being deferred and added to the principal outstanding. If this happens, we could receive less cash income on such assets than we would need to pay for interest costs on our related borrowings. These factors could lower our net interest income or cause a net loss during periods of rising interest rates, which would harm our financial condition, cash flows and results of operations.

Our adjustable-rate residential mortgage loans held-for-sale are typically subject to periodic and lifetime interest rate caps and floors, which may limit the amount by which the loan's interest yield may change during any given period. Therefore, in a period of increasing interest rates, the interest-rate yields on our adjustable-rate residential mortgage loans held-for-sale could effectively be limited by caps.

Interest Rate Mismatch Risk

We fund the majority of our adjustable-rate and hybrid Agency RMBS and adjustable-rate commercial real estate assets with borrowings that are based on LIBOR, while the interest rates on these assets may be indexed to other index rates, such as the one-year Constant Maturity Treasury index, or CMT, the Monthly Treasury Average index, or MTA, or the 11th District Cost of Funds Index, or COFI. Accordingly, any increase in LIBOR relative to these indices may result in an increase in our borrowing costs that is not matched by a corresponding increase in the interest earnings on these assets. Any such interest rate index mismatch could adversely affect our profitability, which may negatively impact distributions to our stockholders. To mitigate interest rate mismatches, we utilize the hedging strategies discussed above.

The following table provides the indices of our variable rate RMBS, residential mortgage loans held-for-sale and commercial real estate assets of December 31, 2016 and December 31, 2015, respectively, based on carrying value (dollars in thousands).

Index Type	As of December 31, 2016				As of December 31, 2015			
	Floating	Hybrid ⁽¹⁾	Total	Index %	Floating	Hybrid ⁽¹⁾	Total	Index %
CMT	\$ 13,188	\$ 23,953	\$ 37,141	1%	\$ 1,625	\$ 98,645	\$ 100,270	4%
LIBOR	3,043,945	13,086	3,057,031	96%	2,488,117	38,698	2,526,815	93%
Other ⁽²⁾	45,880	41,760	87,640	3%	68,138	17,031	85,169	3%
Total	\$ 3,103,013	\$ 78,799	\$ 3,181,812	100%	\$ 2,557,880	\$ 154,374	\$ 2,712,254	100%

(1) "Hybrid" amounts reflect those assets with greater than twelve months to reset.

(2) "Other" includes COFI, MTA and other indices.

Our analysis of risks is based on PRCM Advisers' and its affiliates' experience, estimates, models and assumptions. These analyses rely on models which utilize estimates of fair value and interest rate sensitivity. Actual economic conditions or implementation of decisions by PRCM Advisers may produce results that differ significantly from the estimates and assumptions used in our models.

We use a variety of recognized industry models, as well as proprietary models, to perform sensitivity analyses which are derived from primary assumptions for prepayment rates, discount rates and credit losses. The primary assumption used in this model is implied market volatility of interest rates. The information presented in the following interest rate sensitivity table projects the potential impact of sudden parallel changes in interest rates on our financial results and financial condition over the next 12 months, based on our interest sensitive financial instruments at December 31, 2016.

All changes in value are measured as the change from the December 31, 2016 financial position. All projected changes in annualized net interest income are measured as the change from the projected annualized net interest income based off current performance returns.

(dollars in thousands)	Changes in Interest Rates			
	-100 bps	-50 bps	+50 bps	+100 bps
Change in value of financial position:				
Available-for-sale securities	\$ 619,802	\$ 333,370	\$ (352,611)	\$ (733,736)
<i>As a % of December 31, 2016 equity</i>	18.2 %	9.8 %	(10.4)%	(21.6)%
Residential mortgage loans held-for-sale	\$ 497	\$ 143	\$ (272)	\$ (893)
<i>As a % of December 31, 2016 equity</i>	— %	— %	— %	— %
Residential mortgage loans held-for-investment in securitization trusts	\$ 109,957	\$ 71,149	\$ (84,085)	\$ (171,404)
<i>As a % of December 31, 2016 equity</i>	3.2 %	2.1 %	(2.5)%	(5.0)%
Commercial real estate assets	\$ 137	\$ 68	\$ (264)	\$ (527)
<i>As a % of December 31, 2016 equity</i>	— %	— %	— %	— %
Mortgage servicing rights	\$ (109,267)	\$ (38,788)	\$ 25,516	\$ 43,074
<i>As a % of December 31, 2016 equity</i>	(3.2)%	(1.1)%	0.7 %	1.3 %
Derivatives, net	\$ (599,139)	\$ (300,352)	\$ 316,385	\$ 638,007
<i>As a % of December 31, 2016 equity</i>	(17.6)%	(8.8)%	9.3 %	18.7 %
Repurchase Agreements	\$ (13,576)	\$ (7,214)	\$ 7,214	\$ 14,427
<i>As a % of December 31, 2016 equity</i>	(0.4)%	(0.2)%	0.2 %	0.4 %
Collateralized borrowings in securitization trusts	\$ (120,958)	\$ (74,239)	\$ 80,457	\$ 162,159
<i>As a % of December 31, 2016 equity</i>	(3.5)%	(2.2)%	2.4 %	4.8 %
Federal Home Loan Bank advances	\$ (3,572)	\$ (1,925)	\$ 1,925	\$ 3,850
<i>As a % of December 31, 2016 equity</i>	(0.1)%	(0.1)%	0.1 %	0.1 %
Revolving credit facilities	\$ (26)	\$ (14)	\$ 14	\$ 29
<i>As a % of December 31, 2016 equity</i>	— %	— %	— %	— %
Total Net Assets	\$ (116,145)	\$ (17,802)	\$ (5,721)	\$ (45,014)
<i>As a % of December 31, 2016 total assets</i>	(0.6)%	(0.1)%	— %	(0.2)%
<i>As a % of December 31, 2016 equity</i>	(3.4)%	(0.5)%	(0.2)%	(1.3)%
	-100 bps	-50 bps	+50 bps	+100 bps
Change in annualized net interest income:	\$ (12,432)	\$ (135)	\$ 1,078	\$ 2,155
<i>% change in net interest income</i>	(3.7)%	— %	0.3 %	0.6 %

The interest rate sensitivity table quantifies the potential changes in annualized net interest income, including float income from custodial accounts associated with our MSR, and portfolio value, which includes the value of our derivative assets and liabilities, should interest rates immediately change. The interest rate sensitivity table presents the estimated impact of interest rates instantaneously rising 50 and 100 basis points, and falling 50 and 100 basis points. The cash flows associated with the portfolio for each rate change are calculated based on assumptions, including prepayment speeds, yield on future acquisitions, slope of the yield curve, and size of the portfolio. Assumptions made on the interest rate sensitive liabilities include anticipated interest rates, collateral requirements as a percentage of borrowings and amount and term of borrowing.

Certain assumptions have been made in connection with the calculation of the information set forth in the foregoing interest rate sensitivity table and, as such, there can be no assurance that assumed events will occur or that other events will not occur that would affect the outcomes. The base interest rate scenario assumes interest rates at December 31, 2016. The analysis utilizes assumptions and estimates based on management's judgment and experience. Furthermore, while we generally expect to retain such assets and the associated interest rate risk to maturity, future purchases and sales of assets could materially change our interest rate risk profile.

The change in annualized net interest income does not include any benefit or detriment from faster or slower prepayment rates on our Agency and non-Agency RMBS, instruments that represent the interest payments (but not the principal) on a pool of mortgages, or interest-only securities and MSR. We anticipate that faster prepayment speeds in lower interest rate scenarios will generate lower realized yields on Agency RMBS purchased at a premium premium, interest-only securities and MSR and higher realized yields on Agency and non-Agency RMBS purchased at a discount. Similarly, we anticipate that slower prepayment speeds in higher interest rate scenarios will generate higher realized yields on Agency RMBS purchased at a premium, interest-only securities and MSR and lower realized yields Agency and non-Agency RMBS purchased at a discount. Although we have sought to construct the portfolio to limit the effect of changes in prepayment speeds, there can be no assurance this will actually occur, and the realized yield of the portfolio may be significantly different than we anticipate in changing interest rate scenarios.

Given the low interest rate environment at December 31, 2016, we applied a floor of 0% for all anticipated interest rates included in our assumptions. Because of this floor, we anticipate that any hypothetical interest rate shock decrease would have a limited positive impact on our funding costs; however, because prepayment speeds are unaffected by this floor, we expect that any increase in our prepayment speeds (occurring as a result of any interest rate decrease or otherwise) could result in an acceleration of our premium amortization on Agency RMBS purchased at a premium, interest-only securities and MSR, and accretion of discount on our Agency and non-Agency RMBS purchased at a discount. As a result, because this floor limits the positive impact of any interest rate decrease on our funding costs, hypothetical interest rate decreases could cause the fair value of our financial instruments and our net interest income to decline.

The information set forth in the interest rate sensitivity table above and all related disclosures constitutes forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. Actual results could differ significantly from those estimated in the foregoing interest rate sensitivity table.

Prepayment Risk

Prepayment risk is the risk that principal will be repaid at a different rate than anticipated. As we receive prepayments of principal on our RMBS assets, premiums paid on such assets will be amortized against interest income. In general, an increase in prepayment rates will accelerate the amortization of purchase premiums, thereby reducing the interest income earned on the assets. Conversely, discounts on such assets are accreted into interest income. In general, an increase in prepayment rates will accelerate the accretion of purchase discounts, thereby increasing the interest income earned on the assets.

We believe that we will be able to reinvest proceeds from scheduled principal payments and prepayments at acceptable yields; however, no assurances can be given that, should significant prepayments occur, market conditions would be such that acceptable investments could be identified and the proceeds timely reinvested.

MSR are also subject to prepayment risk in that, generally, an increase in prepayment rates would result in a decline in value of the MSR.

Market Risk

Market Value Risk. Our AFS securities are reflected at their estimated fair value, with the difference between amortized cost and estimated fair value for all AFS securities except Agency interest-only securities and GSE credit risk transfer securities reflected in accumulated other comprehensive income. The estimated fair value of these securities fluctuates primarily due to changes in interest rates, market valuation of credit risks, and other factors. Generally, in a rising interest rate environment, we would expect the fair value of these securities to decrease; conversely, in a decreasing interest rate environment, we would expect the fair value of these securities to increase. As market volatility increases or liquidity decreases, the fair value of our assets may be adversely impacted.

Our residential mortgage loans are reflected at their estimated fair value. The estimated fair value fluctuates primarily due to changes in interest rates, market valuation of credit risks and other factors. Generally in a rising rate environment, we would expect the fair value of these loans to decrease; conversely, in a decreasing rate environment, we would expect the fair value of these loans to increase. However, the fair value of the CSL and Ginnie Mae buyout residential mortgage loans included in residential mortgage loans held-for-sale is generally less sensitive to interest rate changes.

Our MSR are reflected at their estimated fair value. The estimated fair value fluctuates primarily due to changes in interest rates and other factors. Generally, in a rising interest rate environment, we would expect prepayments to decrease, resulting in an increase in the fair value of our MSR. Conversely, in a decreasing interest rate environment, we would expect prepayments to increase, resulting in a decline in fair value.

Real estate risk. Both residential and commercial property values are subject to volatility and may be affected adversely by a number of factors, including national, regional and local economic conditions; local real estate conditions (such as an oversupply of housing); changes or continued weakness in specific industry segments; construction quality, age and design; demographic factors; retroactive changes to building or similar codes; and natural disasters and other catastrophes. Decreases in property values reduce the value of the collateral for residential mortgage and commercial real estate loans and the potential proceeds available to borrowers to repay the loans, which could cause us to suffer losses on our non-Agency RMBS investments and residential mortgage and commercial real estate loans.

Liquidity Risk

Our liquidity risk is principally associated with our financing of long-maturity assets with shorter-term borrowings in the form of repurchase agreements, FHLB advances and borrowings under revolving credit facilities. Although the interest rate adjustments of these assets and liabilities fall within the guidelines established by our operating policies, maturities are not required to be, nor are they, matched.

Should the value of our assets pledged as collateral suddenly decrease, lender margin calls could increase, causing an adverse change in our liquidity position. Moreover, the portfolio construction of MSR, which generally have negative duration, combined with levered RMBS, which generally have positive duration, may in certain market scenarios lead to variation margin calls, which could negatively impact our excess cash position. Additionally, if the FHLB or one or more of our repurchase agreement or revolving credit facility counterparties chose not to provide ongoing funding, our ability to finance would decline or exist at possibly less advantageous terms. As such, we cannot assure that we will always be able to roll over our repurchase agreements, FHLB advances and revolving credit facilities. See Item 2, “*Management’s Discussion and Analysis of Financial Condition and Results of Operations - Liquidity and Capital Resources*” in this Annual Report on Form 10-K for further information about our liquidity and capital resource management.

Credit Risk

We believe that our investment strategy will generally keep our risk of credit losses low to moderate. However, we retain the risk of potential credit losses on all of the loans underlying our non-Agency RMBS and on our residential mortgage and commercial real estate loans. With respect to our non-Agency RMBS that are senior in the credit structure, credit support contained in RMBS deal structures provide a level of protection from losses. We seek to manage the remaining credit risk through our pre-acquisition due diligence process, which includes comprehensive underwriting, and by factoring assumed credit losses into the purchase prices we pay for non-Agency RMBS and residential mortgage and commercial real estate assets. In addition, with respect to any particular target asset, we evaluate relative valuation, supply and demand trends, shape of yield curves, prepayment rates, delinquency and default rates, recovery of various sectors and vintage of collateral. We further mitigate credit risk in our residential mortgage and commercial real estate loan portfolios through (i) selecting servicers whose specialties are well matched against the underlying attributes of the borrowers contained in the loan pools, and (ii) an actively managed internal servicer oversight and surveillance program. At times, we enter into credit default swaps or other derivative instruments in an attempt to manage our credit risk. Nevertheless, unanticipated credit losses could adversely affect our operating results.

Item 8. Financial Statements and Supplementary Data

**TWO HARBORS INVESTMENT CORP.
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS AND SCHEDULES**

	Page
Report of Independent Registered Public Accounting Firm	103
Consolidated Balance Sheets at December 31, 2016 and December 31, 2015	104
Consolidated Statements of Comprehensive Income (Loss) for the Years Ended December 31, 2016, 2015 and 2014	105
Consolidated Statements of Stockholders' Equity for the Years Ended December 31, 2016, 2015 and 2014	107
Consolidated Statements of Cash Flows for the Years Ended December 31, 2016, 2015 and 2014	108
Notes to the Consolidated Financial Statements	111
Schedule IV - Mortgage Loans on Real Estate	164

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders
of Two Harbors Investment Corp.

We have audited the accompanying consolidated balance sheets of Two Harbors Investment Corp. (the Company) as of December 31, 2016 and 2015, and the related consolidated statements of comprehensive income (loss), stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2016. Our audits also included the financial statement schedule listed in the Index at Item 15(a)(2). These financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of the Company at December 31, 2016 and 2015, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2016, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2016, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 28, 2017 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP
Minneapolis, Minnesota
February 28, 2017

TWO HARBORS INVESTMENT CORP.
CONSOLIDATED BALANCE SHEETS
(in thousands, except share data)

	December 31, 2016	December 31, 2015
ASSETS		
Available-for-sale securities, at fair value	\$ 13,128,857	\$ 7,825,320
Residential mortgage loans held-for-sale, at fair value	40,146	811,431
Residential mortgage loans held-for-investment in securitization trusts, at fair value	3,271,317	3,173,727
Commercial real estate assets	1,412,543	660,953
Mortgage servicing rights, at fair value	693,815	493,688
Cash and cash equivalents	406,883	737,831
Restricted cash	408,312	262,562
Accrued interest receivable	62,751	49,970
Due from counterparties	60,380	17,206
Derivative assets, at fair value	324,182	271,509
Other assets	302,870	271,575
Total Assets ⁽¹⁾	\$ 20,112,056	\$ 14,575,772
LIABILITIES AND STOCKHOLDERS' EQUITY		
Liabilities		
Repurchase agreements	\$ 9,316,351	\$ 5,008,274
Collateralized borrowings in securitization trusts, at fair value	3,037,196	2,000,110
Federal Home Loan Bank advances	4,000,000	3,785,000
Revolving credit facilities	70,000	—
Derivative liabilities, at fair value	12,501	7,285
Due to counterparties	111,884	34,294
Dividends payable	83,437	92,016
Other liabilities	79,576	72,232
Total Liabilities ⁽¹⁾	16,710,945	10,999,211
Stockholders' Equity		
Preferred stock, par value \$0.01 per share; 50,000,000 shares authorized; no shares issued and outstanding	—	—
Common stock, par value \$0.01 per share; 900,000,000 shares authorized and 347,652,326 and 353,906,807 shares issued and outstanding, respectively	3,477	3,539
Additional paid-in capital	3,659,973	3,705,519
Accumulated other comprehensive income	199,227	359,061
Cumulative earnings	2,038,033	1,684,755
Cumulative distributions to stockholders	(2,499,599)	(2,176,313)
Total Stockholders' Equity	3,401,111	3,576,561
Total Liabilities and Stockholders' Equity	\$ 20,112,056	\$ 14,575,772

(1) The consolidated balance sheets include assets of consolidated variable interest entities, or VIEs, that can only be used to settle obligations of these VIEs, and liabilities of the consolidated VIEs for which creditors do not have recourse to Two Harbors Investment Corp. At December 31, 2016 and December 31, 2015, assets of the VIEs totaled \$3,336,292 and \$3,237,918, and liabilities of the VIEs totaled \$3,058,278 and \$2,017,677, respectively. See Note 3 - *Variable Interest Entities* for additional information.

The accompanying notes are an integral part of these consolidated financial statements.

TWO HARBORS INVESTMENT CORP.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(in thousands, except share data)

	Year Ended December 31,		
	2016	2015	2014
Interest income:			
Available-for-sale securities	\$ 415,052	\$ 458,515	\$ 506,268
Trading securities	—	8,676	12,913
Residential mortgage loans held-for-sale	23,037	28,966	16,089
Residential mortgage loans held-for-investment in securitization trusts	133,993	95,740	41,220
Commercial real estate assets	59,819	9,138	—
Cash and cash equivalents	1,589	902	717
Total interest income	633,490	601,937	577,207
Interest expense:			
Repurchase agreements	97,461	73,049	76,177
Collateralized borrowings in securitization trusts	97,729	57,216	26,760
Federal Home Loan Bank advances	26,101	11,921	4,513
Revolving credit facilities	604	—	—
Total interest expense	221,895	142,186	107,450
Net interest income	411,595	459,751	469,757
Other-than-temporary impairments:			
Total other-than-temporary impairment losses	(1,822)	(535)	(392)
Other income (loss):			
(Loss) gain on investment securities	(107,374)	363,379	87,201
Gain (loss) on interest rate swap and swaption agreements	45,371	(210,621)	(345,647)
Gain (loss) on other derivative instruments	99,379	(5,049)	(17,529)
Gain on residential mortgage loans held-for-sale	16,085	14,285	17,297
Servicing income	143,616	127,412	128,160
Loss on servicing asset	(83,531)	(99,584)	(128,388)
Other (loss) income	(5,955)	(21,790)	18,539
Total other income (loss)	107,591	168,032	(240,367)
Expenses:			
Management fees	46,434	50,294	48,803
Securitization deal costs	6,152	8,971	4,638
Servicing expenses	32,724	28,101	25,925
Other operating expenses	63,483	64,162	56,231
Restructuring charges	2,990	—	—
Total expenses	151,783	151,528	135,597
Income before income taxes	365,581	475,720	93,401
Provision for (benefit from) income taxes	12,303	(16,490)	(73,738)
Net income	\$ 353,278	\$ 492,210	\$ 167,139
Basic and diluted earnings per weighted average common share	\$ 1.01	\$ 1.35	\$ 0.46
Basic and diluted weighted average number of shares of common stock outstanding	348,073,704	365,247,738	366,011,855

The accompanying notes are an integral part of these consolidated financial statements.

TWO HARBORS INVESTMENT CORP.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS), continued
(in thousands, except share data)

	Year Ended		
	December 31,		
	2016	2015	2014
Comprehensive income (loss):			
Net income	\$ 353,278	\$ 492,210	\$ 167,139
Other comprehensive (loss) income, net of tax:			
Unrealized (loss) gain on available-for-sale securities	(159,834)	(496,728)	411,054
Other comprehensive (loss) income	(159,834)	(496,728)	411,054
Comprehensive income (loss)	<u>\$ 193,444</u>	<u>\$ (4,518)</u>	<u>\$ 578,193</u>

The accompanying notes are an integral part of these consolidated financial statements.

TWO HARBORS INVESTMENT CORP.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(in thousands, except share data)

	Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Income	Cumulative Earnings	Cumulative Distributions to Stockholders	Total Stockholders' Equity
	Shares	Amount					
Balance, December 31, 2013	364,935,168	\$ 3,649	\$ 3,795,372	\$ 444,735	\$ 1,028,397	\$ (1,417,158)	\$ 3,854,995
Net income	—	—	—	—	167,139	—	167,139
Other comprehensive income before reclassifications, net of tax	—	—	—	463,593	—	—	463,593
Amounts reclassified from accumulated other comprehensive income, net of tax	—	—	—	(52,539)	—	—	(52,539)
Net other comprehensive income, net of tax	—	—	—	411,054	—	—	411,054
Issuance of common stock, net of offering costs	57,218	1	587	—	—	—	588
Common dividends declared	—	—	—	—	—	(380,816)	(380,816)
Non-cash equity award compensation	1,403,534	14	15,068	—	—	—	15,082
Balance, December 31, 2014	366,395,920	\$ 3,664	\$ 3,811,027	\$ 855,789	\$ 1,195,536	\$ (1,797,974)	\$ 4,068,042
Cumulative effect of adoption of new accounting principle	—	—	—	—	(2,991)	—	(2,991)
Adjusted balance, January 1, 2015	366,395,920	3,664	3,811,027	855,789	1,192,545	(1,797,974)	4,065,051
Net income	—	—	—	—	492,210	—	492,210
Other comprehensive loss before reclassifications, net of tax	—	—	—	(161,033)	—	—	(161,033)
Amounts reclassified from accumulated other comprehensive income, net of tax	—	—	—	(335,695)	—	—	(335,695)
Net other comprehensive loss, net of tax	—	—	—	(496,728)	—	—	(496,728)
Issuance of common stock, net of offering costs	69,826	1	538	—	—	—	539
Repurchase of common stock	(13,664,300)	(137)	(115,037)	—	—	—	(115,174)
Common dividends declared	—	—	—	—	—	(378,339)	(378,339)
Non-cash equity award compensation	1,105,361	11	8,991	—	—	—	9,002
Balance, December 31, 2015	353,906,807	\$ 3,539	\$ 3,705,519	\$ 359,061	\$ 1,684,755	\$ (2,176,313)	\$ 3,576,561
Net income	—	—	—	—	353,278	—	353,278
Other comprehensive loss before reclassifications, net of tax	—	—	—	(58,804)	—	—	(58,804)
Amounts reclassified from accumulated other comprehensive income, net of tax	—	—	—	(101,030)	—	—	(101,030)
Net other comprehensive loss, net of tax	—	—	—	(159,834)	—	—	(159,834)
Issuance of common stock, net of offering costs	60,602	1	501	—	—	—	502
Repurchase of common stock	(8,020,000)	(80)	(61,227)	—	—	—	(61,307)
Common dividends declared	—	—	—	—	—	(323,286)	(323,286)
Non-cash equity award compensation	1,704,917	17	15,180	—	—	—	15,197
Balance, December 31, 2016	347,652,326	\$ 3,477	\$ 3,659,973	\$ 199,227	\$ 2,038,033	\$ (2,499,599)	\$ 3,401,111

The accompanying notes are an integral part of these consolidated financial statements.

TWO HARBORS INVESTMENT CORP.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Year Ended December 31,		
	2016	2015	2014
Cash Flows From Operating Activities:			
Net income	\$ 353,278	\$ 492,210	\$ 167,139
Adjustments to reconcile net income to net cash provided by (used in) operating activities:			
Amortization of premiums and discounts on investment securities and commercial real estate assets, net	35,644	38,445	12,012
Other-than-temporary impairment losses	1,822	535	392
Realized and unrealized losses (gains) on investment securities, net	107,374	(363,379)	(87,201)
Gain on residential mortgage loans held-for-sale	(16,085)	(14,285)	(17,297)
Loss (gain) on residential mortgage loans held-for-investment and collateralized borrowings in securitization trusts	11,834	26,527	(16,840)
Realized gain on sales of commercial real estate assets	—	(181)	—
Loss on servicing asset	83,531	99,584	128,388
Loss on termination and option expiration of interest rate swaps and swaptions	81,985	226,143	55,389
Unrealized (gain) loss on interest rate swaps and swaptions	(148,429)	(101,158)	198,504
Unrealized gain on other derivative instruments	(37,463)	(14,196)	(8,011)
Equity based compensation	15,197	9,002	15,082
Depreciation of fixed assets	1,283	1,362	1,083
Amortization of intangible assets	—	—	533
Purchases of residential mortgage loans held-for-sale	(1,214,865)	(2,599,737)	(1,475,210)
Proceeds from sales of residential mortgage loans held-for-sale	804,265	160,559	432,749
Proceeds from repayment of residential mortgage loans held-for-sale	143,587	98,631	38,545
Net change in assets and liabilities:			
(Increase) decrease in accrued interest receivable	(12,781)	15,559	(15,226)
Decrease (increase) in deferred income taxes, net	13,766	(12,638)	(80,261)
Decrease (increase) in income taxes receivable	3,754	(5,286)	—
Increase in prepaid and fixed assets	(338)	(930)	(2,536)
(Increase) decrease in other receivables	(6,376)	8,701	(10,421)
Decrease (increase) in servicing advances	11,352	(10,009)	(20,192)
Increase (decrease) in accrued interest payable	10,782	(5,049)	3,495
(Decrease) increase in income taxes payable	(70)	(1,305)	618
(Decrease) increase in accrued expenses and other liabilities	(3,368)	14,147	11,983
Net cash provided by (used in) operating activities	\$ 239,679	\$ (1,936,748)	\$ (667,283)

The accompanying notes are an integral part of these consolidated financial statements.

TWO HARBORS INVESTMENT CORP.
CONSOLIDATED STATEMENTS OF CASH FLOWS, continued
(in thousands)

	Year Ended December 31,		
	2016	2015	2014
Cash Flows From Investing Activities:			
Purchases of available-for-sale securities	\$ (21,325,083)	\$ (1,788,541)	\$ (6,126,579)
Proceeds from sales of available-for-sale securities	14,404,458	6,985,567	3,479,329
Principal payments on available-for-sale securities	1,278,361	1,148,407	1,044,487
(Purchases) short sales of derivative instruments, net	(19,240)	4,081	(81,330)
Proceeds from sales (payments for termination) of derivative instruments, net	76,040	(90,183)	73,966
Purchases of trading securities	—	—	(2,138,647)
Proceeds from sales of trading securities	—	2,004,375	1,145,410
Proceeds from repayment of residential mortgage loans held-for-investment in securitization trusts	913,894	562,025	111,129
Originations and purchases of commercial real estate assets, net of deferred fees	(760,731)	(662,627)	—
Proceeds from sales of commercial real estate assets	—	1,979	—
Proceeds from repayment of commercial real estate assets	16,385	344	—
Purchases of mortgage servicing rights, net of purchase price adjustments	(317,709)	(123,666)	(59,568)
Proceeds from sales of mortgage servicing rights	40,137	—	—
Purchases of Federal Home Loan Bank stock	(11,206)	(56,640)	(100,000)
Purchases of equity investments	—	—	(3,000)
Increase (decrease) in due to counterparties, net	34,416	(71,493)	(205,180)
(Increase) decrease in restricted cash	(145,750)	74,209	64,876
Net cash (used in) provided by investing activities	<u>(5,816,028)</u>	<u>7,987,837</u>	<u>(2,795,107)</u>
Cash Flows From Financing Activities:			
Proceeds from repurchase agreements	112,504,120	47,385,219	213,091,865
Principal payments on repurchase agreements	(108,196,043)	(55,309,408)	(212,409,852)
Proceeds from issuance of collateralized borrowings in securitization trusts	1,877,399	1,223,302	728,519
Principal payments on collateralized borrowings in securitization trusts	(832,405)	(406,942)	(182,872)
Proceeds from Federal Home Loan Bank advances	215,000	1,490,000	4,796,411
Principal payments on Federal Home Loan Bank advances	—	(205,000)	(2,296,411)
Proceeds from revolving credit facilities	70,000	—	—
Proceeds from issuance of common stock, net of offering costs	502	539	588
Repurchase of common stock	(61,307)	(115,174)	—
Dividends paid on common stock	(331,865)	(381,586)	(285,553)
Net cash provided by (used in) financing activities	<u>5,245,401</u>	<u>(6,319,050)</u>	<u>3,442,695</u>
Net decrease in cash and cash equivalents	<u>(330,948)</u>	<u>(267,961)</u>	<u>(19,695)</u>
Cash and cash equivalents at beginning of period	737,831	1,005,792	1,025,487
Cash and cash equivalents at end of period	<u>\$ 406,883</u>	<u>\$ 737,831</u>	<u>\$ 1,005,792</u>

The accompanying notes are an integral part of these consolidated financial statements.

TWO HARBORS INVESTMENT CORP.
CONSOLIDATED STATEMENTS OF CASH FLOWS, continued
(in thousands)

	Year Ended December 31,		
	2016	2015	2014
Supplemental Disclosure of Cash Flow Information:			
Cash paid for interest	\$ 116,147	\$ 92,286	\$ 79,276
Cash (received) paid for taxes	\$ (5,146)	\$ 2,739	\$ 5,905
Noncash Activities:			
Transfers of residential mortgage loans held-for-sale to residential mortgage loans held-for-investment in securitization trusts	\$ 1,031,226	\$ 2,046,437	\$ 1,022,360
Transfers of residential mortgage loans held-for-sale to other receivables for foreclosed government-guaranteed loans	\$ 16,721	\$ 16,723	\$ —
Transfer of fair value of mortgage servicing rights to fair value of Ginnie Mae residential mortgage loans held-for-sale upon buyout	\$ 5,162	\$ 15,756	\$ 6,136
Additions to mortgage servicing rights due to sale of residential mortgage loans held-for-sale	\$ 924	\$ 1,844	\$ 288
Cumulative-effect adjustment to equity for adoption of new accounting principle	\$ —	\$ (2,991)	\$ —
Dividends declared but not paid at end of period	\$ 83,437	\$ 92,016	\$ 95,263
Reconciliation of residential mortgage loans held-for-sale:			
Residential mortgage loans held-for-sale at beginning of period	\$ 811,431	\$ 535,712	\$ 544,581
Purchases of residential mortgage loans held-for-sale	1,214,865	2,599,737	1,475,210
Transfers to residential mortgage loans held-for-investment in securitization trusts	(1,031,226)	(2,046,437)	(1,022,360)
Transfers to other receivables for foreclosed government-guaranteed loans	(16,721)	(16,723)	—
Transfer of fair value of mortgage servicing rights to fair value of Ginnie Mae residential mortgage loans held-for-sale upon buyout	(5,162)	(15,756)	(6,136)
Proceeds from sales of residential mortgage loans held-for-sale	(804,265)	(160,559)	(432,749)
Proceeds from repayment of residential mortgage loans held-for-sale	(143,587)	(98,631)	(38,545)
Realized and unrealized gains on residential mortgage loans held-for-sale	14,811	14,088	15,711
Residential mortgage loans held-for-sale at end of period	\$ 40,146	\$ 811,431	\$ 535,712

The accompanying notes are an integral part of these consolidated financial statements.

TWO HARBORS INVESTMENT CORP.

Notes to the Consolidated Financial Statements

Note 1. Organization and Operations

Two Harbors Investment Corp., or the Company, is a Maryland corporation focused on investing in, financing and managing residential mortgage-backed securities, or RMBS, mortgage servicing rights, or MSR, commercial real estate and other financial assets. The Company is externally managed and advised by PRCM Advisers LLC, or PRCM Advisers, which is a subsidiary of Pine River Capital Management L.P., or Pine River, a global multi-strategy asset management firm. The Company's common stock is listed on the NYSE under the symbol "TWO".

The Company was incorporated on May 21, 2009, and commenced operations as a publicly traded company on October 28, 2009, upon completion of a merger with Capitol Acquisition Corp., or Capitol, which became a wholly owned indirect subsidiary of the Company as a result of the merger.

The Company has elected to be treated as a real estate investment trust, or REIT, as defined under the Internal Revenue Code of 1986, as amended, or the Code, for U.S. federal income tax purposes. As long as the Company continues to comply with a number of requirements under federal tax law and maintains its qualification as a REIT, the Company generally will not be subject to U.S. federal income taxes to the extent that the Company distributes its taxable income to its stockholders on an annual basis and does not engage in prohibited transactions. However, certain activities that the Company may perform may cause it to earn income which will not be qualifying income for REIT purposes. The Company has designated certain of its subsidiaries as taxable REIT subsidiaries, or TRSs, as defined in the Code, to engage in such activities, and the Company may in the future form additional TRSs.

Note 2. Basis of Presentation and Significant Accounting Policies

Consolidation and Basis of Presentation

The accompanying consolidated financial statements include the accounts of all subsidiaries; inter-company accounts and transactions have been eliminated. Certain prior period amounts have been reclassified to conform to the current period presentation. The accounting and reporting policies of the Company conform to U.S. generally accepted accounting principles, or U.S. GAAP. The Company's Chief Investment Officer manages the investment portfolio as a whole and resources are allocated and financial performance is assessed on a consolidated basis.

All trust entities in which the Company holds investments that are considered VIEs for financial reporting purposes were reviewed for consolidation under the applicable consolidation guidance. Whenever the Company has both the power to direct the activities of a trust that most significantly impact the entities' performance, and the obligation to absorb losses or the right to receive benefits of the entities that could be significant, the Company consolidates the trust.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make a number of significant estimates. These include estimates of fair value of certain assets and liabilities, amount and timing of credit losses, prepayment rates, the period of time during which the Company anticipates an increase in the fair values of real estate securities sufficient to recover unrealized losses in those securities, and other estimates that affect the reported amounts of certain assets and liabilities as of the date of the consolidated financial statements and the reported amounts of certain revenues and expenses during the reported period. It is likely that changes in these estimates (e.g., valuation changes due to supply and demand, credit performance, prepayments, interest rates, or other reasons) will occur in the near term. The Company's estimates are inherently subjective in nature and actual results could differ from its estimates and the differences may be material.

Significant Accounting Policies

Available-for-Sale Securities, at Fair Value

The Company invests primarily in mortgage pass-through certificates, collateralized mortgage obligations and other residential mortgage-backed securities representing interests in or obligations backed by pools of mortgage loans (collectively "RMBS") issued by the Federal National Mortgage Association, or Fannie Mae, the Federal Home Loan Mortgage Corporation, or Freddie Mac, and the Government National Mortgage Association, or Ginnie Mae, or collectively, the government sponsored entities, or GSEs. The Company also invests in residential mortgage-backed securities that are not issued by the GSEs, or non-Agency RMBS, and, from time to time, U.S. Treasuries.

TWO HARBORS INVESTMENT CORP.

Notes to the Consolidated Financial Statements

Designation

The Company classifies its RMBS, excluding inverse interest-only Agency securities classified as derivatives for purposes of U.S. GAAP, as available-for-sale, or AFS, investments. Although the Company generally intends to hold most of its investment securities until maturity, it may, from time to time, sell any of its investment securities as part of its overall management of its portfolio. Accordingly, the Company classifies all of its RMBS as AFS, including its interest-only strips, which represent the Company's right to receive a specified portion of the contractual interest flows of specific Agency or non-Agency securities. All assets classified as AFS, excluding Agency interest-only mortgage-backed securities and GSE credit risk transfer securities, are reported at estimated fair value with unrealized gains and losses, excluding other than temporary impairments, included in accumulated other comprehensive income, on an after-tax basis.

On July 1, 2015, the Company elected the fair value option for Agency interest-only securities and GSE credit risk transfer securities acquired on or after such date. All Agency interest-only securities and GSE credit risk transfer securities acquired on or after July 1, 2015 are carried at estimated fair value with changes in fair value, excluding other than temporary impairments, recorded as a component of (loss) gain on investment securities in the consolidated statements of comprehensive income (loss).

Balance Sheet Presentation

Investment securities transactions are recorded on the trade date. Purchases of newly-issued securities are recorded when all significant uncertainties regarding the characteristics of the securities are removed, generally shortly before settlement date. The cost basis for realized gains and losses on sales of investment securities are determined on the first-in, first-out, or FIFO, method.

Determination of RMBS Fair Value

Fair value is determined under the guidance of Accounting Standards Codification (ASC) 820, *Fair Value Measurements and Disclosures*, or ASC 820. The Company determines the fair value of its RMBS that are issued or guaranteed as to principal and/or interest by a federally chartered corporation, such as Fannie Mae or Freddie Mac, or an agency of the U.S. Government, such as Ginnie Mae (collectively, "Agency RMBS"), based upon prices obtained from third-party pricing providers or broker quotes received using the bid price, which are both deemed indicative of market activity. The third-party pricing providers and brokers use pricing models that generally incorporate such factors as coupons, primary and secondary mortgage rates, rate reset period, issuer, prepayment speeds, credit enhancements and expected life of the security. In determining the fair value of its non-Agency RMBS, management judgment is used to arrive at fair value that considers prices obtained from third-party pricing providers, broker quotes received and other applicable market data.

If listed price data is not available or insufficient, then fair value is based upon internally developed models that are primarily based on observable market-based inputs but also include unobservable market data inputs. The Company classifies these securities as Level 3 assets. As of December 31, 2016, none of the investment securities portfolio is categorized as Level 3.

The Company's application of ASC 820 guidance is discussed in further detail in Note 14 - *Fair Value* of these notes to the consolidated financial statements.

Revenue Recognition, Premium Amortization and Discount Accretion

Interest income on securities is accrued based on the outstanding principal balance and their contractual terms. Premiums and discounts associated with Agency and non-Agency RMBS rated AA and higher at the time of purchase, are amortized into interest income over the life of such securities using the effective yield method. Adjustments to premium amortization are made for actual prepayment activity. The Company estimates prepayments for its Agency interest-only securities, which represent the Company's right to receive a specified portion of the contractual interest flows of specific Agency and CMO securities. As a result, if prepayments increase (or are expected to increase), the Company will accelerate the rate of amortization on the premiums.

Interest income on the non-Agency RMBS that were purchased at a discount to par value and were rated below AA at the time of purchase is recognized based on the security's effective interest rate. The effective interest rate on these securities is based on the projected cash flows from each security, which are estimated based on the Company's observation of current information and events and include assumptions related to interest rates, prepayment rates, and the timing and amount of credit losses. On at least a quarterly basis, the Company reviews and, if appropriate, makes adjustments to its cash flow projections based on input and analysis received from external sources, internal models, and its judgment about interest rates, prepayment rates, the timing and amount of credit losses, and other factors. Changes in cash flows from those originally projected, or from those estimated at the last evaluation, may result in a prospective change in the yield/interest income recognized on such securities. Actual maturities of the AFS securities are affected by the contractual lives of the associated mortgage collateral, periodic payments of principal, and prepayments of principal. Therefore actual maturities of AFS securities are generally shorter than stated contractual maturities. Stated contractual maturities are generally greater than ten years.

TWO HARBORS INVESTMENT CORP.

Notes to the Consolidated Financial Statements

Based on the projected cash flows from the Company's non-Agency RMBS purchased at a discount to par value, a portion of the purchase discount may be designated as credit protection against future credit losses and, therefore, not accreted into interest income. The amount designated as credit discount may be adjusted over time, based on the actual performance of the security, its underlying collateral, actual and projected cash flow from such collateral, economic conditions, and other factors. If the performance of a security with a credit discount is more favorable than forecasted, a portion of the amount designated as credit discount may be accreted into interest income prospectively. Conversely, if the performance of a security with a credit discount is less favorable than forecasted, an impairment charge and write-down of such security to a new cost basis results.

Impairment

The Company evaluates its investment securities, on a quarterly basis, to assess whether a decline in the fair value of an AFS security below the Company's amortized cost basis is an other-than-temporary impairment, or OTTI. The presence of OTTI is based upon a fair value decline below a security's amortized cost basis and a corresponding adverse change in expected cash flows due to credit related factors as well as non-credit factors, such as changes in interest rates and market spreads. Impairment is considered other-than-temporary if an entity (i) intends to sell the security, (ii) will more likely than not be required to sell the security before it recovers in value, or (iii) does not expect to recover the security's amortized cost basis, even if the entity does not intend to sell the security. Under these scenarios, the impairment is other-than-temporary and the full amount of impairment should be recognized currently in earnings and the cost basis of the investment security is adjusted. However, if an entity does not intend to sell the impaired debt security and it is more likely than not that it will not be required to sell before recovery, the OTTI is separated into (i) the estimated amount relating to credit loss, or credit component, and (ii) the amount relating to all other factors, or non-credit component. Only the estimated credit loss amount is recognized currently in earnings, with the remainder of the loss amount recognized in other comprehensive (loss) income. The difference between the new amortized cost basis and the cash flows expected to be collected is accreted as interest income in accordance with the effective interest method.

Residential Mortgage Loans Held-for-Sale, at Fair Value

Residential mortgage loans held-for-sale are reported at fair value as a result of a fair value option election. Fair value is determined under the guidance of ASC 820. The Company determines the fair value of its residential mortgage loans held-for-sale by type of loan and the determination is generally based on current secondary market pricing or cash flow models using market-based yield requirements. See Note 14 - *Fair Value* of these notes to the consolidated financial statements for details on fair value measurement. The Company classifies residential mortgage loans held-for-sale based on management's intent to sell them in the secondary whole loan market or include them in a securitization.

Interest income on residential mortgage loans held-for-sale is recognized at the loan coupon rate. Loans are considered past due when they are 30 days past their contractual due date. Interest income recognition is suspended when mortgage loans are placed on nonaccrual status. Generally, mortgage loans are placed on nonaccrual status when delinquent for more than 60 days or when determined not to be probable of full collection. Interest accrued, but not collected, at the date mortgage loans are placed on nonaccrual is reversed and subsequently recognized only to the extent it is received in cash or until it qualifies for return to accrual status. However, where there is doubt regarding the ultimate collectability of loan principal, all cash received is applied to reduce the carrying value of such loans. Mortgage loans are restored to accrual status only when contractually current or the collection of future payments is reasonably assured.

Securitizations and Variable Interest Entities

The Company retains subordinated debt and excess servicing rights purchased from securitization trusts sponsored by either third parties or the Company's subsidiaries. The securitization trusts are considered VIEs for financial reporting purposes and, thus, are reviewed for consolidation under the applicable consolidation guidance. As the Company has both the power to direct the activities of the securitization trusts that most significantly impact the entities' performance, and the obligation to absorb losses or the right to receive benefits of the entities that could be significant, the Company consolidates the trusts. The underlying loans are classified as residential mortgage loans held-for-investment in securitization trusts and the underlying debt is classified as collateralized borrowings in securitization trusts on the consolidated balance sheets. The interest income on residential mortgage loans held-for-investment and interest expense on collateralized borrowings are recorded on the consolidated statements of comprehensive income (loss). See Note 14 - *Fair Value* of these notes to the consolidated financial statements for details on fair value measurement.

TWO HARBORS INVESTMENT CORP.

Notes to the Consolidated Financial Statements

Residential Mortgage Loans Held-for-Investment in Securitization Trusts, at Fair Value

Residential mortgage loans held-for-investment in securitization trusts related to the Company's on-balance sheet securitizations are reported at fair value as a result of a fair value option election. These securitized mortgage loans are legally isolated from the Company and have been structured to be beyond the reach of creditors of the Company. Under the guidance of ASC 810, *Consolidation*, an entity is allowed to measure both the financial assets and financial liabilities of a qualifying collateralized financing entity, or CFE, it consolidates using the fair value of either the CFE's financial assets or financial liabilities, whichever is more observable. As the Company's securitization trusts are considered qualifying CFEs, the Company determines the fair value of these residential mortgage loans based on the fair value of its collateralized borrowings in securitization trusts and its retained interests from the Company's on-balance sheet securitizations (eliminated in consolidation in accordance with U.S. GAAP), as the fair value of these instruments is more observable. See Note 14 - *Fair Value* of these notes to the consolidated financial statements for details on fair value measurement.

Interest income on residential mortgage loans held-for-investment is recognized at the loan coupon rate. Loans are considered past due when they are 30 days past their contractual due date. Interest income recognition is suspended when mortgage loans are placed on nonaccrual status. Generally, mortgage loans are placed on nonaccrual status when delinquent for more than 60 days or when determined not to be probable of full collection. Interest accrued, but not collected, at the date mortgage loans are placed on nonaccrual is reversed and subsequently recognized only to the extent it is received in cash or until it qualifies for return to accrual status. However, where there is doubt regarding the ultimate collectability of loan principal, all cash received is applied to reduce the carrying value of such loans. Mortgage loans are restored to accrual status only when contractually current or the collection of future payments is reasonably assured.

Commercial Real Estate Assets

The Company originates and purchases commercial real estate debt and related instruments generally to be held as long-term investments. These assets are classified as commercial real estate assets on the consolidated balance sheets. Additionally, the Company is the sole certificate holder of a trust entity that holds a commercial real estate loan. The trust is considered a VIE for financial reporting purposes and, thus, is reviewed for consolidation under the applicable consolidation guidance. As the Company has both the power to direct the activities of the trust that most significantly impact the entity's performance, and the obligation to absorb losses or the right to receive benefits of the entity that could be significant, the Company consolidates the trust. The underlying loan is classified as commercial real estate assets on the consolidated balance sheets. The loan is legally isolated from the Company and has been structured to be beyond the reach of creditors of the Company. Interest income on commercial real estate assets is recorded on the consolidated statements of comprehensive income (loss).

Commercial real estate assets are reported at cost, net of any unamortized acquisition premiums or discounts, loan fees and origination costs as applicable, unless the assets are deemed impaired. Impairment is indicated when it is deemed probable that the Company will not be able to collect all amounts due pursuant to the contractual terms of the loan. Because the Company's commercial real estate assets are collateralized either by real property or by equity interests in the commercial real estate borrower, impairment is measured by comparing the estimated fair value of the underlying collateral to the amortized cost of the respective loan. The valuation of the underlying collateral requires significant judgment, which includes assumptions regarding capitalization rates, leasing, credit worthiness of major tenants, occupancy rates, availability of financing, exit plan, loan sponsorship, actions of other lenders, overall economic conditions, the broader commercial real estate market, local geographic sub-markets, and other factors deemed necessary. If a loan is determined to be impaired, the Company records an allowance to reduce the carrying value of the loan through a charge to provision for loan losses. Actual losses, if any, could ultimately differ from these estimates.

Interest income on commercial real estate assets is recognized at the loan coupon rate. Any premiums or discounts, loan fees and origination costs are amortized or accreted into interest income over the lives of the loans using the effective interest method. Loans are considered past due when they are 30 days past their contractual due date. Interest income recognition is suspended when loans are placed on nonaccrual status. Generally, commercial real estate loans are placed on nonaccrual status when delinquent for more than 60 days or when determined not to be probable of full collection. Interest accrued, but not collected, at the date loans are placed on nonaccrual is reversed and subsequently recognized only to the extent it is received in cash or until it qualifies for return to accrual status. However, where there is doubt regarding the ultimate collectability of loan principal, all cash received is applied to reduce the carrying value of such loans. Commercial real estate loans are restored to accrual status only when contractually current or the collection of future payments is reasonably assured.

TWO HARBORS INVESTMENT CORP.

Notes to the Consolidated Financial Statements

Mortgage Servicing Rights, at Fair Value

The Company's MSR represent the right to service mortgage loans. The Company and its subsidiaries do not originate or directly service mortgage loans, and instead contract with appropriately licensed subservicers to handle substantially all servicing functions for the loans underlying the Company's MSR. However, as an owner and manager of MSR, the Company may be obligated to fund advances of principal and interest payments due to third-party owners of the loans, but not yet received from the individual borrowers. These advances are reported as servicing advances within the other assets line item on the consolidated balance sheets.

MSR are reported at fair value on the consolidated balance sheets. Although MSR transactions are observable in the marketplace, the valuation includes unobservable market data inputs (prepayment speeds, delinquency levels and discount rates). Changes in the fair value of MSR as well as servicing fee income and servicing expenses are reported on the consolidated statements of comprehensive income (loss).

Cash and Cash Equivalents

Cash and cash equivalents include cash held in bank accounts and cash held in money market funds on an overnight basis.

Restricted Cash

Restricted cash represents the Company's cash held by counterparties as collateral against the Company's securities, derivatives and/or repurchase agreements. Also included is the cash balance held pursuant to a letter of credit on the New York office lease. Cash held by counterparties as collateral, which resides in non-interest bearing accounts, is not available to the Company for general corporate purposes, but may be applied against amounts due to securities, derivatives or repurchase counterparties or returned to the Company when the collateral requirements are exceeded or, at the maturity of the derivative or repurchase agreement.

Accrued Interest Receivable

Accrued interest receivable represents interest that is due and payable to the Company. Cash interest is generally received within 30 days of recording the receivable.

Due from/to Counterparties, net

Due from counterparties includes cash held by counterparties for payment of principal and interest as well as cash held by counterparties as collateral against the Company's derivatives and/or repurchase agreements but represents excess capacity and deemed unrestricted and a receivable from the counterparty as of the balance sheet date. Due from counterparties also includes cash receivable from counterparties for sales of MSR pending final transfer and settlement. Due to counterparties includes cash payable by the Company upon settlement of trade positions as well as cash deposited to and held by the Company as collateral against the Company's derivatives and/or repurchase agreements but represents a payable to the counterparty as of the balance sheet date. Due to counterparties also includes purchase price holdbacks on MSR acquisitions for early prepayment or default provisions, collateral exceptions and other contractual terms.

Derivative Financial Instruments, at Fair Value

In accordance with ASC 815, *Derivatives and Hedging*, as amended and interpreted, or ASC 815, all derivative financial instruments, whether designated for hedging relationships or not, are recorded on the consolidated balance sheets as assets or liabilities and carried at fair value.

At the inception of a derivative contract, the Company determines whether the instrument will be part of a qualifying hedge accounting relationship or whether the Company will account for the contract as a trading instrument. Due to the volatility of the credit markets and difficulty in effectively matching pricing or cash flows, the Company has elected to treat all current derivative contracts as trading instruments. Changes in fair value as well as the accrual and settlement of interest associated with derivatives accounted for as trading instruments are reported in the consolidated statements of comprehensive income (loss) as gain (loss) on interest rate swap and swaption agreements or gain (loss) on other derivative instruments depending on the type of derivative instrument.

The Company enters into interest rate derivative contracts for a variety of reasons, including minimizing fluctuations in earnings or market values on certain assets or liabilities that may be caused by changes in interest rates. The Company may, at times, enter into various forward contracts including short securities, Agency to-be-announced securities, or TBAs, options, futures, swaps, and caps. Due to the nature of these instruments, they may be in a receivable/asset position or a payable/liability position at the end of an accounting period. Amounts payable to and receivable from the same party under contracts may be offset as long as the following conditions are met: (a) each of the two parties owes the other determinable amounts; (b) the reporting party has the right to offset the amount owed with the amount owed by the other party; (c) the reporting party intends to offset; and (d) the right of offset is enforceable by law. If the aforementioned conditions are not met, amounts payable to and receivable from are presented by the Company on a gross basis in its consolidated balance sheets.

TWO HARBORS INVESTMENT CORP.

Notes to the Consolidated Financial Statements

The Company has provided specific disclosure regarding the location and amounts of derivative instruments in the consolidated financial statements and how derivative instruments and related hedged items are accounted for. See Note 11 - *Derivative Instruments and Hedging Activities* of these notes to the consolidated financial statements.

Property and Equipment

Property and equipment, stated at cost, net of accumulated depreciation, are reported in other assets in the Company's consolidated balance sheets. Included in property and equipment are certain furniture and fixtures, leasehold improvements, and information technology hardware and software. Depreciation is computed on the straight-line basis over the estimated useful lives of the assets, which is generally three years.

Repurchase Agreements

The Company finances the acquisition of certain of its investment securities, residential mortgage loans and commercial real estate assets through the use of repurchase agreements. These repurchase agreements are generally short-term debt, which expire within one year. As of December 31, 2016, certain of the Company's repurchase agreements had contractual terms of greater than one year, and were considered long-term debt. Borrowings under repurchase agreements generally bear interest rates of a specified margin over one-month LIBOR and are generally uncommitted. The repurchase agreements are treated as collateralized financing transactions and are carried at their contractual amounts, as specified in the respective agreements.

Collateralized Borrowings in Securitization Trusts, at Fair Value

Collateralized borrowings in securitization trusts related to the Company's on-balance sheet securitizations are reported at fair value as a result of a fair value option election. This long-term debt is nonrecourse to the Company beyond the assets held in the trusts. Fair value is determined under the guidance of ASC 820. The Company determines the fair value of its collateralized borrowings in securitization trusts based on prices obtained from third-party pricing providers, broker quotes received and other applicable market data. See Note 14 - *Fair Value* of these notes to the consolidated financial statements for details on fair value measurement.

Federal Home Loan Bank of Des Moines Advances and Stock Holdings

The Company's wholly owned subsidiary, TH Insurance Holdings Company LLC, or TH Insurance, is a member of the Federal Home Loan Bank of Des Moines, or the FHLB. As a member of the FHLB, TH Insurance has access to a variety of products and services offered by the FHLB, including secured advances.

The Company's secured advances from the FHLB may have both short-term and long-term maturities. The advances with less than five year terms generally bear interest rates of a spread over one- or three-month LIBOR and the advances with 20-year terms generally bear interest rates of or one- or three-month MOVR, or the FHLB member option variable-rate. FHLB advances are treated as secured financing transactions and are carried at their contractual amounts.

As a condition to membership in the FHLB, the Company is required to purchase and hold a certain amount of FHLB stock, which is based, in part, upon the outstanding principal balance of advances from the FHLB. FHLB stock is considered a nonmarketable, long-term investment, is carried at cost and is subject to recoverability testing under applicable accounting standards. This stock can only be redeemed or sold at its par value, and only to the FHLB. Accordingly, when evaluating FHLB stock for impairment, the Company considers the ultimate recoverability of the par value rather than recognizing temporary declines in value. At its discretion, the FHLB may declare dividends on its stock.

Revolving Credit Facilities

To finance MSR, the Company enters into revolving credit facilities collateralized by pledged MSR. Borrowings under these revolving credit facilities are generally short-term debt, which expire within one year. The Company's revolving credit facilities generally bear interest rates of a specified margin over one-month LIBOR and are uncommitted. Borrowings under revolving credit facilities are treated as collateralized financing transactions and are carried at contractual amounts, as specified in the respective agreements.

Accrued Interest Payable

Accrued interest payable represents interest that is due and payable to third parties. Interest is generally paid within 30 days to three months of recording the payable, based upon the Company's remittance requirements.

TWO HARBORS INVESTMENT CORP.

Notes to the Consolidated Financial Statements

Deferred Tax Assets and Liabilities

Income recognition for U.S. GAAP and tax differ in certain respects. These differences often reflect differing accounting treatments for tax and U.S. GAAP, such as accounting for discount and premium amortization, credit losses, asset impairments, recognition of certain operating expenses and certain valuation estimates. Some of these differences are temporary in nature and create timing mismatches between when taxable income is earned and the tax is paid versus when the earnings (losses) for U.S. GAAP purposes, or GAAP net income, are recognized and the tax provision is recorded. Some of these differences are permanent since certain income (or expense) may be recorded for tax purposes but not for U.S. GAAP purposes (or vice-versa). One such significant permanent difference is the Company's ability as a REIT to deduct dividends paid to stockholders as an expense for tax purposes, but not for U.S. GAAP purposes.

As a result of these temporary differences, the Company's taxable REIT subsidiaries, or TRSs, may recognize taxable income in periods prior or subsequent to when it recognizes income for U.S. GAAP purposes. When this occurs, the TRSs pay or defer the tax liability and establish deferred tax assets or deferred tax liabilities, respectively, for U.S. GAAP purposes.

As the income is subsequently realized in future periods under U.S. GAAP, the deferred tax asset is recognized as an expense. Alternatively, as the TRSs realize the deferred taxable income, the deferred tax liability is recognized as a reduction to taxable income. The Company's deferred tax assets and/or liabilities are generated solely by differences in GAAP net income and taxable income (loss) at our taxable subsidiaries. U.S. GAAP and tax differences in the REIT may create additional deferred tax assets and/or liabilities to the extent the Company does not distribute all of its taxable income.

Income Taxes

The Company has elected to be taxed as a REIT under the Code and the corresponding provisions of state law. To qualify as a REIT, the Company must distribute at least 90% of its annual REIT taxable income to stockholders (not including taxable income retained in its taxable subsidiaries) within the time frame set forth in the tax Code and the Company must also meet certain other requirements. In addition, because certain activities, if performed by the Company, may cause the Company to earn income which is not qualifying for the REIT gross income tests, the Company has formed TRSs, as defined in the Code, to engage in such activities. These TRSs' activities are subject to income taxes as well as any REIT taxable income not distributed to stockholders.

The Company assesses its tax positions for all open tax years and determines whether the Company has any material unrecognized liabilities in accordance with ASC 740, *Income Taxes*. The Company records these liabilities to the extent the Company deems them more likely than not to be incurred. The Company classifies interest and penalties on material uncertain tax positions as interest expense and operating expense, respectively, in its consolidated statements of comprehensive income (loss).

Earnings Per Share

Basic and diluted earnings per share are computed by dividing net income by the weighted average number of common shares and potential common shares outstanding during the period. For both basic and diluted per share calculations, potential common shares represents issued and unvested shares of restricted stock, which have full rights to the common stock dividend declarations of the Company.

Other Comprehensive (Loss) Income

Current period net unrealized gains and losses on AFS securities, excluding Agency interest-only securities and GSE credit risk transfer securities, are reported as components of accumulated other comprehensive income on the consolidated statements of stockholders' equity and in the consolidated statements of comprehensive income (loss). Net unrealized gains and losses on securities held by our taxable subsidiaries that are reported in accumulated other comprehensive income are adjusted for the effects of taxation and may create deferred tax assets or liabilities.

Equity Incentive Plan

The Company's Second Restated 2009 Equity Incentive Plan, or the Plan, was approved by its stockholders on May 14, 2015. The Plan provides incentive compensation to attract and retain qualified directors, officers, advisors, consultants and other personnel, including PRCM Advisers and its affiliates. The Plan is administered by the compensation committee of the Company's board of directors. The Plan permits the granting of restricted shares of common stock, phantom shares, dividend equivalent rights and other equity-based awards. See Note 21 - *Equity Incentive Plan* for further details regarding the Plan.

The cost of equity-based compensation awarded to employees provided by our manager is measured at fair value at each reporting date based on the price of the Company's stock as of period end in accordance with ASC 505, *Equity*, or ASC 505, and amortized over the vesting term.

TWO HARBORS INVESTMENT CORP.

Notes to the Consolidated Financial Statements

Offsetting Assets and Liabilities

Certain of the Company's repurchase agreements are governed by underlying agreements that provide for a right of setoff in the event of default of either party to the agreement. The Company also has netting arrangements in place with all derivative counterparties pursuant to standard documentation developed by the International Swap and Derivatives Association, or ISDA, or central clearing exchange agreements, in the case of centrally cleared interest rate swaps. Additionally, the Company and the counterparty or clearing agency are required to post cash collateral based upon the net underlying market value of the Company's open positions with the counterparty.

Under U.S. GAAP, if the Company has a valid right of setoff, it may offset the related asset and liability and report the net amount. The Company presents repurchase agreements subject to master netting arrangements or similar agreements on a gross basis, and derivative assets and liabilities subject to such arrangements on a net basis, based on derivative type and counterparty, in its consolidated balance sheets. Separately, the Company presents cash collateral subject to such arrangements on a net basis, based on counterparty, in its consolidated balance sheets. However, the Company does not offset financial assets and liabilities with the associated cash collateral on its consolidated balance sheets.

The following tables present information about the Company's assets and liabilities that are subject to master netting arrangements or similar agreements and can potentially be offset on the Company's consolidated balance sheets as of December 31, 2016 and December 31, 2015:

December 31, 2016						
(in thousands)	Gross Amounts of Recognized Assets (Liabilities)	Gross Amounts Offset in the Consolidated Balance Sheets	Net Amounts of Assets (Liabilities) Presented in the Consolidated Balance Sheets	Gross Amounts Not Offset with Financial Assets (Liabilities) in the Consolidated Balance Sheets ⁽¹⁾		Net Amount
				Financial Instruments	Cash Collateral (Received) Pledged	
Assets						
Derivative assets	\$ 388,522	\$ (64,340)	\$ 324,182	\$ (12,501)	\$ —	\$ 311,681
Total Assets	\$ 388,522	\$ (64,340)	\$ 324,182	\$ (12,501)	\$ —	\$ 311,681
Liabilities						
Repurchase agreements	\$ (9,316,351)	\$ —	\$ (9,316,351)	\$ 9,316,351	\$ —	\$ —
Derivative liabilities	(76,841)	64,340	(12,501)	12,501	—	—
Total Liabilities	\$ (9,393,192)	\$ 64,340	\$ (9,328,852)	\$ 9,328,852	\$ —	\$ —

TWO HARBORS INVESTMENT CORP.

Notes to the Consolidated Financial Statements

December 31, 2015

(in thousands)	Gross Amounts Not Offset with Financial Assets (Liabilities) in the Consolidated Balance Sheets ⁽¹⁾					Net Amount
	Gross Amounts of Recognized Assets (Liabilities)	Gross Amounts Offset in the Consolidated Balance Sheets	Net Amounts of Assets (Liabilities) Presented in the Consolidated Balance Sheets	Financial Instruments	Cash Collateral (Received) Pledged	
Assets						
Derivative assets	\$ 325,755	\$ (54,246)	\$ 271,509	\$ (7,285)	\$ —	\$ 264,224
Total Assets	\$ 325,755	\$ (54,246)	\$ 271,509	\$ (7,285)	\$ —	\$ 264,224
Liabilities						
Repurchase agreements	\$ (5,008,274)	\$ —	\$ (5,008,274)	\$ 5,008,274	\$ —	\$ —
Derivative liabilities	(61,531)	54,246	(7,285)	7,285	—	—
Total Liabilities	\$ (5,069,805)	\$ 54,246	\$ (5,015,559)	\$ 5,015,559	\$ —	\$ —

(1) Amounts presented are limited in total to the net amount of assets or liabilities presented in the consolidated balance sheets by instrument. Excess cash collateral or financial assets that are pledged to counterparties may exceed the financial liabilities subject to a master netting arrangement or similar agreement, or counterparties may have pledged excess cash collateral to the Company that exceed the corresponding financial assets. These excess amounts are excluded from the table above, although separately reported within restricted cash, due from counterparties, or due to counterparties in the Company's consolidated balance sheets.

Recently Issued and/or Adopted Accounting Standards

Revenue from Contracts with Customers

In May 2014, the Financial Accounting Standards Board, or FASB, issued ASU No. 2014-09, which is a comprehensive revenue recognition standard that supersedes virtually all existing revenue guidance under U.S. GAAP. The standard's core principle is that an entity will recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods and services. As a result of the issuance of ASU No. 2015-14 in August 2015 deferring the effective date of ASU No. 2014-09 by one year, the ASU is effective for annual periods, and interim periods within those annual periods, beginning on or after December 15, 2017, with early adoption prohibited. The Company has determined this ASU will not have a material impact on the Company's financial condition or results of operations.

Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern

In August 2014, the FASB issued ASU No. 2014-15, which requires management to evaluate whether there are conditions and events that raise substantial doubt about the entity's ability to continue as a going concern for both annual and interim reporting periods. The update requires certain disclosures if management concludes that substantial doubt exists and plans to alleviate that doubt. The ASU is effective for annual periods ending after December 15, 2016, and for both annual and interim periods thereafter, with early adoption permitted. Adoption of this ASU did not have any impact on the Company's financial condition, results of operations or disclosures as no going concern issues were identified.

Recognition and Measurement of Financial Assets and Financial Liabilities

In January 2016, the FASB issued ASU No. 2016-01, which changes how entities measure certain equity investments and present changes in the fair value of financial liabilities measured under the fair value option that are attributable to their own credit. The ASU requires certain recurring disclosures and is effective for annual periods, and interim periods within those annual periods, beginning on or after December 15, 2017, with early adoption permitted. The Company has determined this ASU will not have a material impact on the Company's financial condition or results of operations.

TWO HARBORS INVESTMENT CORP.

Notes to the Consolidated Financial Statements

Lease Classification and Accounting

In February 2016, the FASB issued ASU No. 2016-02, which requires lessees to recognize on their balance sheets both a lease liability for the obligation to make lease payments and a right-of-use asset for the right to use the underlying asset for the lease term. The ASU is effective for annual periods, and interim periods within those annual periods, beginning on or after December 15, 2018, with early adoption permitted. The Company has determined this ASU will not have a material impact on the Company's financial condition or results of operations.

Measurement of Credit Losses on Financial Instruments

In June 2016, the FASB issued ASU No. 2016-13, which changes the impairment model for most financial assets and certain other instruments. Allowances for credit losses on AFS debt securities will be recognized, rather than direct reductions in the amortized cost of the investments. The new model also requires the estimation of lifetime expected credit losses and corresponding recognition of allowance for losses on trade and other receivables, held-to-maturity debt securities, loans, and other instruments held at amortized cost. The ASU requires certain recurring disclosures and is effective for annual periods, and interim periods within those annual periods, beginning on or after December 15, 2019, with early adoption permitted for annual periods, and interim periods within those annual periods, beginning on or after December 15, 2018. The Company is evaluating the adoption of this ASU.

Classification of Certain Cash Receipts and Cash Payments and Restricted Cash

In August 2016, the FASB issued ASU No. 2016-15, which clarifies how entities should classify certain cash receipts and cash payments and how the predominance principle should be applied on the statement of cash flows. Additionally, in November 2016, the FASB issued ASU No. 2016-18, which requires entities to show the changes in the total of cash, cash equivalents, restricted cash and restricted cash equivalents, but no longer present transfers between cash and cash equivalents and restricted cash and cash equivalents in the statement of cash flows. Both ASUs are effective for annual periods, and interim periods within those annual periods, beginning on or after December 15, 2017, with early adoption permitted. The Company has determined these ASUs will not have an impact on the Company's financial condition or results of operations but will impact the presentation of the consolidated statements of cash flows.

Note 3. Variable Interest Entities

The Company retains subordinated debt and excess servicing rights purchased from securitization trusts sponsored by either third parties or the Company's subsidiaries. Additionally, the Company is the sole certificate holder of a trust entity that holds a commercial real estate loan. All of these trusts are considered VIEs for financial reporting purposes and, thus, were reviewed for consolidation under the applicable consolidation guidance. Because the Company has both the power to direct the activities of the trusts that most significantly impact the entities' performance, and the obligation to absorb losses or the right to receive benefits of the entities that could be significant, the Company consolidates the trusts. As the Company is required to reassess VIE consolidation guidance each quarter, new facts and circumstances may change the Company's determination. A change in the Company's determination could result in a material impact to the Company's consolidated financial statements during subsequent reporting periods.

The following table presents a summary of the assets and liabilities of all consolidated trusts as reported on the consolidated balance sheets as of December 31, 2016 and December 31, 2015:

<i>(in thousands)</i>	December 31, 2016	December 31, 2015
Residential mortgage loans held-for-investment in securitization trusts	\$ 3,271,317	\$ 3,173,727
Commercial real estate assets	45,885	45,698
Accrued interest receivable	19,090	18,493
Total Assets	\$ 3,336,292	\$ 3,237,918
Collateralized borrowings in securitization trusts	\$ 3,037,196	\$ 2,000,110
Accrued interest payable	8,708	5,943
Other liabilities	12,374	11,624
Total Liabilities	\$ 3,058,278	\$ 2,017,677

TWO HARBORS INVESTMENT CORP.
Notes to the Consolidated Financial Statements

The Company is not required to consolidate VIEs for which it has concluded it does not have both the power to direct the activities of the VIEs that most significantly impact the entities' performance, and the obligation to absorb losses or the right to receive benefits of the entities that could be significant. The Company's investments in these unconsolidated VIEs include non-Agency RMBS, which are classified within available-for-sale securities, at fair value on the consolidated balance sheets. As of both December 31, 2016 and December 31, 2015, the carrying value, which also represents the maximum exposure to loss, of all non-Agency RMBS in unconsolidated VIEs was \$1.9 billion.

Note 4. Available-for-Sale Securities, at Fair Value

The Company holds AFS investment securities which are carried at fair value on the consolidated balance sheets. AFS securities exclude the retained interests from the Company's on-balance sheet securitizations, as they are eliminated in consolidation in accordance with U.S. GAAP. The following table presents the Company's AFS investment securities by collateral type as of December 31, 2016 and December 31, 2015:

(in thousands)	December 31, 2016	December 31, 2015
Agency		
Federal Home Loan Mortgage Corporation	\$ 2,742,630	\$ 1,678,814
Federal National Mortgage Association	8,274,507	3,602,348
Government National Mortgage Association	209,337	691,728
Non-Agency	1,902,383	1,852,430
Total available-for-sale securities	<u>\$ 13,128,857</u>	<u>\$ 7,825,320</u>

At December 31, 2016 and December 31, 2015, the Company pledged AFS securities with a carrying value of \$13.1 billion and \$7.8 billion, respectively, as collateral for repurchase agreements and advances from the Federal Home Loan Bank of Des Moines, or the FHLB. See Note 15 - *Repurchase Agreements* and Note 17 - *Federal Home Loan Bank of Des Moines Advances*.

At December 31, 2016 and December 31, 2015, the Company did not have any securities purchased from and financed with the same counterparty that did not meet the conditions of ASC 860, *Transfers and Servicing*, or ASC 860, to be considered linked transactions and, therefore, classified as derivatives.

The following tables present the amortized cost and carrying value (which approximates fair value) of AFS securities by collateral type as of December 31, 2016 and December 31, 2015:

(in thousands)	December 31, 2016		
	Agency	Non-Agency	Total
Face Value	\$ 13,571,417	\$ 2,732,139	\$ 16,303,556
Unamortized premium	571,749	—	571,749
Unamortized discount			
Designated credit reserve	—	(367,437)	(367,437)
Net, unamortized	<u>(2,758,445)</u>	<u>(808,975)</u>	<u>(3,567,420)</u>
Amortized Cost	11,384,721	1,555,727	12,940,448
Gross unrealized gains	79,040	353,358	432,398
Gross unrealized losses	(237,287)	(6,702)	(243,989)
Carrying Value	<u>\$ 11,226,474</u>	<u>\$ 1,902,383</u>	<u>\$ 13,128,857</u>

TWO HARBORS INVESTMENT CORP.
Notes to the Consolidated Financial Statements

(in thousands)	December 31, 2015		
	Agency	Non-Agency	Total
Face Value	\$ 8,257,030	\$ 2,655,381	\$ 10,912,411
Unamortized premium	394,787	—	394,787
Unamortized discount			
Designated credit reserve	—	(409,077)	(409,077)
Net, unamortized	(2,721,979)	(707,021)	(3,429,000)
Amortized Cost	5,929,838	1,539,283	7,469,121
Gross unrealized gains	98,389	329,206	427,595
Gross unrealized losses	(55,337)	(16,059)	(71,396)
Carrying Value	\$ 5,972,890	\$ 1,852,430	\$ 7,825,320

The following tables present the carrying value of the Company's AFS securities by rate type as of December 31, 2016 and December 31, 2015:

(in thousands)	December 31, 2016		
	Agency	Non-Agency	Total
Adjustable Rate	\$ 30,463	\$ 1,574,850	\$ 1,605,313
Fixed Rate	11,196,011	327,533	11,523,544
Total	\$ 11,226,474	\$ 1,902,383	\$ 13,128,857

(in thousands)	December 31, 2015		
	Agency	Non-Agency	Total
Adjustable Rate	\$ 108,596	\$ 1,673,038	\$ 1,781,634
Fixed Rate	5,864,294	179,392	6,043,686
Total	\$ 5,972,890	\$ 1,852,430	\$ 7,825,320

The following table presents the Company's AFS securities according to their estimated weighted average life classifications as of December 31, 2016:

(in thousands)	December 31, 2016		
	Agency	Non-Agency	Total
≤ 1 year	\$ 1,198	\$ 20,684	\$ 21,882
> 1 and ≤ 3 years	48,595	56,498	105,093
> 3 and ≤ 5 years	614,633	207,724	822,357
> 5 and ≤ 10 years	10,532,188	946,609	11,478,797
> 10 years	29,860	670,868	700,728
Total	\$ 11,226,474	\$ 1,902,383	\$ 13,128,857

When the Company purchases a credit-sensitive AFS security at a significant discount to its face value, the Company often does not amortize into income a significant portion of this discount that the Company is entitled to earn because the Company does not expect to collect the entire discount due to the inherent credit risk of the security. The Company may also record an other-than-temporary impairment, or OTTI, for a portion of its investment in the security to the extent the Company believes that the amortized cost will exceed the present value of expected future cash flows. The amount of principal that the Company does not amortize into income is designated as a credit reserve on the security, with unamortized net discounts or premiums amortized into income over time to the extent realizable.

TWO HARBORS INVESTMENT CORP.
Notes to the Consolidated Financial Statements

The following table presents the changes for the years ended December 31, 2016 and 2015 of the unamortized net discount and designated credit reserves on non-Agency AFS securities.

(in thousands)	Year Ended December 31,					
	2016			2015		
	Designated Credit Reserve	Unamortized Net Discount	Total	Designated Credit Reserve	Unamortized Net Discount	Total
Beginning balance at January 1	\$ (409,077)	\$ (707,021)	\$ (1,116,098)	\$ (927,605)	\$ (967,368)	\$ (1,894,973)
Acquisitions	(70,108)	(189,754)	(259,862)	557	(5,124)	(4,567)
Accretion of net discount	—	69,542	69,542	—	96,061	96,061
Realized credit losses	1,969	—	1,969	18,068	—	18,068
Reclassification adjustment for other-than-temporary impairments	914	—	914	1,742	—	1,742
Transfers from (to)	74,972	(74,972)	—	154,580	(154,580)	—
Sales, calls, other	33,893	93,230	127,123	343,581	323,990	667,571
Ending balance at December 31	\$ (367,437)	\$ (808,975)	\$ (1,176,412)	\$ (409,077)	\$ (707,021)	\$ (1,116,098)

The following table presents the components comprising the carrying value of AFS securities not deemed to be other than temporarily impaired by length of time that the securities had an unrealized loss position as of December 31, 2016 and December 31, 2015. At December 31, 2016, the Company held 1,239 AFS securities, of which 252 were in an unrealized loss position for less than twelve consecutive months and 125 were in an unrealized loss position for more than twelve consecutive months. At December 31, 2015, the Company held 1,181 AFS securities, of which 121 were in an unrealized loss position for less than twelve consecutive months and 182 were in an unrealized loss position for more than twelve consecutive months. Of the \$6.4 billion and \$1.5 billion of AFS securities in an unrealized loss position for less than twelve consecutive months as of December 31, 2016 and December 31, 2015, \$6.1 billion, or 95.8%, and \$1.1 billion, or 73.6%, respectively, were Agency AFS securities, whose principal and interest are guaranteed by the GSEs.

(in thousands)	Unrealized Loss Position for					
	Less than 12 Months		12 Months or More		Total	
	Estimated Fair Value	Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses
December 31, 2016	\$ 6,416,820	\$ (204,034)	\$ 504,978	\$ (39,955)	\$ 6,921,798	\$ (243,989)
December 31, 2015	\$ 1,503,939	\$ (26,984)	\$ 1,141,839	\$ (44,412)	\$ 2,645,778	\$ (71,396)

Evaluating AFS Securities for Other-Than-Temporary Impairments

In evaluating AFS securities for OTTI, the Company determines whether there has been a significant adverse quarterly change in the cash flow expectations for a security. The Company compares the amortized cost of each security in an unrealized loss position against the present value of expected future cash flows of the security. The Company also considers whether there has been a significant adverse change in the regulatory and/or economic environment as part of this analysis. If the amortized cost of the security is greater than the present value of expected future cash flows using the original yield as the discount rate, an other-than-temporary credit impairment has occurred. If the Company does not intend to sell and will not be more likely than not required to sell the security, the credit loss is recognized in earnings and the balance of the unrealized loss is recognized in either other comprehensive (loss) income, net of tax, or (loss) gain on investment securities, depending on the accounting treatment. If the Company intends to sell the security or will be more likely than not required to sell the security, the full unrealized loss is recognized in earnings.

TWO HARBORS INVESTMENT CORP.
Notes to the Consolidated Financial Statements

The Company recorded a \$1.8 million other-than-temporary credit impairment during the year ended December 31, 2016 on four non-Agency RMBS where the future expected cash flows for each security were less than its amortized cost. As of December 31, 2016, impaired securities with a carrying value of \$111.5 million had actual weighted average cumulative losses of 4.9%, weighted average three-month prepayment speed of 5.9%, weighted average 60+ day delinquency of 23.0% of the pool balance, and weighted average FICO score of 660. At December 31, 2016, the Company did not intend to sell the securities and determined that it was not more likely than not that the Company will be required to sell the securities; therefore, only the projected credit loss was recognized in earnings. During the years ended December 31, 2015 and 2014, the Company recorded \$0.5 million and \$0.4 million in other-than-temporary credit impairments on two and three non-Agency RMBS, respectively, where the future expected cash flows for the security were less than its amortized cost.

The following table presents the changes in OTTI included in earnings for the years ended December 31, 2016, 2015 and 2014:

(in thousands)	Year Ended December 31,		
	2016	2015	2014
Cumulative credit loss at beginning of period	\$ (6,499)	\$ (8,241)	\$ (9,467)
Additions:			
Other-than-temporary impairments not previously recognized	(1,307)	(238)	(91)
Increases related to other-than-temporary impairments on securities with previously recognized other-than-temporary impairments	(515)	(297)	(301)
Reductions:			
Decreases related to other-than-temporary impairments on securities paid down	1,387	—	464
Decreases related to other-than-temporary impairments on securities sold	1,328	2,277	1,154
Cumulative credit loss at end of period	<u>\$ (5,606)</u>	<u>\$ (6,499)</u>	<u>\$ (8,241)</u>

Cumulative credit losses related to OTTI may be reduced for securities sold as well as for securities that mature, are paid down, or are prepaid such that the outstanding principal balance is reduced to zero. Additionally, increases in cash flows expected to be collected over the remaining life of the security cause a reduction in the cumulative credit loss.

Gross Realized Gains and Losses

Gains and losses from the sale of AFS securities are recorded as realized gains (losses) within (loss) gain on investment securities in the Company's consolidated statements of comprehensive income (loss). For the years ended December 31, 2016, 2015 and 2014, the Company sold AFS securities for \$14.4 billion, \$7.0 billion and \$3.5 billion with an amortized cost of \$14.5 billion, \$6.6 billion and \$3.4 billion for net realized losses of \$126.2 million and gains of \$369.4 million and \$84.4 million, respectively.

The following table presents the gross realized gains and losses on sales of AFS securities for the years ended December 31, 2016, 2015 and 2014:

(in thousands)	Year Ended December 31,		
	2016	2015	2014
Gross realized gains	\$ 97,049	\$ 388,392	\$ 162,235
Gross realized losses	(223,277)	(19,040)	(77,820)
Total realized (losses) gains on sales, net	<u>\$ (126,228)</u>	<u>\$ 369,352</u>	<u>\$ 84,415</u>

TWO HARBORS INVESTMENT CORP.**Notes to the Consolidated Financial Statements****Note 5. Residential Mortgage Loans Held-for-Sale, at Fair Value**

Residential mortgage loans held-for-sale consists of residential mortgage loans carried at fair value as a result of a fair value option election. The following table presents the carrying value of the Company's residential mortgage loans held-for-sale as of December 31, 2016 and December 31, 2015:

(in thousands)	December 31, 2016	December 31, 2015
Unpaid principal balance	\$ 49,986	\$ 812,661
Fair value adjustment	(9,840)	(1,230)
Carrying value	<u>\$ 40,146</u>	<u>\$ 811,431</u>

At December 31, 2015, the Company pledged residential mortgage loans held-for-sale with a carrying value of \$745.5 million as collateral for repurchase agreements and FHLB advances. The Company had not pledged any residential mortgage loans held-for-sale as collateral for borrowings at December 31, 2016. See Note 15 - *Repurchase Agreements* and Note 17 - *Federal Home Loan Bank of Des Moines Advances*.

Note 6. Residential Mortgage Loans Held-for-Investment in Securitization Trusts, at Fair Value

The Company retains subordinated debt and excess servicing rights purchased from securitization trusts sponsored by either third parties or the Company's subsidiaries. The underlying residential mortgage loans held by the trusts, which are consolidated on the Company's consolidated balance sheets, are classified as residential mortgage loans held-for-investment in securitization trusts and carried at fair value as a result of a fair value option election. See Note 3 - *Variable Interest Entities* for additional information regarding consolidation of the securitization trusts. The following table presents the carrying value of the Company's residential mortgage loans held-for-investment in securitization trusts as of December 31, 2016 and December 31, 2015:

(in thousands)	December 31, 2016	December 31, 2015
Unpaid principal balance	\$ 3,234,044	\$ 3,143,515
Fair value adjustment	37,273	30,212
Carrying value	<u>\$ 3,271,317</u>	<u>\$ 3,173,727</u>

Note 7. Commercial Real Estate Assets

The Company originates and purchases commercial real estate debt and related instruments generally to be held as long-term investments. These assets are classified as commercial real estate assets on the consolidated balance sheets. Additionally, the Company is the sole certificate holder of a trust entity that holds a commercial real estate loan. The underlying loan held by the trust is consolidated on the Company's consolidated balance sheet and classified as commercial real estate assets. See Note 3 - *Variable Interest Entities* for additional information regarding consolidation of the trust. Commercial real estate assets are reported at cost, net of any unamortized acquisition premiums or discounts, loan fees and origination costs as applicable, unless the assets are deemed impaired.

TWO HARBORS INVESTMENT CORP.
Notes to the Consolidated Financial Statements

The following tables summarize the Company's commercial real estate assets by asset type, property type and geographic location as of December 31, 2016 and December 31, 2015:

(dollars in thousands)	December 31, 2016			December 31, 2015		
	Mezzanine Loans	First Mortgages	Total	Mezzanine Loans	First Mortgages	Total
Unpaid principal balance	\$ 138,245	\$ 1,286,200	\$ 1,424,445	\$ 153,913	\$ 513,433	\$ 667,346
Unamortized (discount) premium	(15)	(185)	(200)	(237)	—	(237)
Unamortized net deferred origination fees	(221)	(11,481)	(11,702)	(830)	(5,326)	(6,156)
Carrying value	\$ 138,009	\$ 1,274,534	\$ 1,412,543	\$ 152,846	\$ 508,107	\$ 660,953
Unfunded commitments	\$ 1,580	\$ 166,344	\$ 167,924	\$ 1,900	\$ 50,334	\$ 52,234
Number of loans	6	30	36	6	12	18
Weighted average coupon	8.6%	5.1%	5.4%	8.1%	4.5%	5.4%
Weighted average years to maturity (1)	1.5	2.9	2.8	2.6	3.3	3.1

(1) Based on contractual maturity date. Certain loans are subject to contractual extension options which may be subject to conditions as stipulated in the loan agreement. Actual maturities may differ from contractual maturities stated herein as certain borrowers may have the right to prepay with or without paying a prepayment penalty. The Company may also extend contractual maturities in connection with loan modifications.

(in thousands)	Property Type	December 31, 2016		December 31, 2015	
		Carrying Value	% of Commercial Portfolio	Carrying Value	% of Commercial Portfolio
	Retail	\$ 237,414	16.8%	\$ 185,883	28.1%
	Hotel	90,585	6.4%	80,843	12.2%
	Industrial	105,081	7.4%	—	—%
	Multifamily	260,683	18.5%	139,011	21.1%
	Office	718,780	50.9%	255,216	38.6%
	Total	\$ 1,412,543	100.0%	\$ 660,953	100.0%

(in thousands)	Geographic Location	December 31, 2016		December 31, 2015	
		Carrying Value	% of Commercial Portfolio	Carrying Value	% of Commercial Portfolio
	West	\$ 250,044	17.7%	\$ 131,488	19.9%
	Southeast	239,194	16.9%	79,118	12.0%
	Southwest	267,944	19.0%	161,721	24.4%
	Northeast	578,762	41.0%	238,913	36.2%
	Midwest	76,599	5.4%	49,713	7.5%
	Total	\$ 1,412,543	100.0%	\$ 660,953	100.0%

TWO HARBORS INVESTMENT CORP.
Notes to the Consolidated Financial Statements

At December 31, 2016 and December 31, 2015, the Company pledged commercial real estate assets with a carrying value of \$1.4 billion and \$361.1 million, respectively, as collateral for repurchase agreements and FHLB advances. See Note 15 - *Repurchase Agreements* and Note 17 - *Federal Home Loan Bank of Des Moines Advances*.

The following table summarizes activity related to commercial real estate assets for the years ended December 31, 2016, 2015 and 2014.

(in thousands)	Year Ended December 31,		
	2016	2015	2014
Balance at beginning of period	\$ 660,953	\$ —	\$ —
Originations and purchases	773,285	669,283	—
Sales	—	(1,979)	—
Repayments	(16,385)	(344)	—
Net discount accretion (premium amortization)	263	149	—
(Increase) decrease in net deferred origination fees	(12,554)	(6,656)	—
Amortization of net deferred origination fees	6,981	319	—
Realized gains on sales	—	181	—
Allowance for loan losses	—	—	—
Balance at end of period	\$ 1,412,543	\$ 660,953	\$ —

The Company evaluates each loan for impairment at least quarterly by assessing the risk factors of each loan and assigning a risk rating based on a variety of factors. Risk factors include property type, geographic and local market dynamics, physical condition, leasing and tenant profile, projected cash flow, loan structure and exit plan, loan-to-value ratio, project sponsorship, and other factors deemed necessary. Risk ratings are defined as follows:

- 1 – Lower Risk
- 2 – Average Risk
- 3 – Acceptable Risk
- 4 – Higher Risk: A loan that has exhibited material deterioration in cash flows and/or other credit factors, which, if negative trends continue, could be indicative of future loss.
- 5 – Impaired/Loss Likely: A loan that has a significantly increased probability of default or principal loss.

The following table presents the number of loans, unpaid principal balance and carrying value (amortized cost) by risk rating for commercial real estate assets as of December 31, 2016 and December 31, 2015:

(dollars in thousands)	Risk Rating	December 31, 2016		December 31, 2015			
		Number of Loans	Unpaid Principal Balance	Carrying Value	Number of Loans	Unpaid Principal Balance	Carrying Value
	1 – 3	36	\$ 1,424,445	\$ 1,412,543	18	\$ 667,346	\$ 660,953
	4 – 5	—	—	—	—	—	—
	Total	36	\$ 1,424,445	\$ 1,412,543	18	\$ 667,346	\$ 660,953

The Company has not recorded any allowances for losses as no loans are past-due and it is not deemed probable that the Company will not be able to collect all amounts due pursuant to the contractual terms of the loans.

TWO HARBORS INVESTMENT CORP.

Notes to the Consolidated Financial Statements

Note 8. Servicing Activities

Mortgage Servicing Rights, at Fair Value

One of the Company's wholly owned subsidiaries has approvals from Fannie Mae, Freddie Mac, and Ginnie Mae to own and manage MSR, which represent the right to control the servicing of mortgage loans. The Company and its subsidiaries do not originate or directly service mortgage loans, and instead contract with appropriately licensed subservicers to handle substantially all servicing functions for the loans underlying the Company's MSR.

The following table summarizes activity related to MSR for the years ended December 31, 2016, 2015 and 2014.

(in thousands)	Year Ended December 31,		
	2016	2015	2014
Balance at beginning of period	\$ 493,688	\$ 452,006	\$ 514,402
Additions from purchases of mortgage servicing rights	312,580	124,261	67,533
Additions from sales of residential mortgage loans	924	1,844	288
Subtractions from sales of mortgage servicing rights	(61,511)	—	—
Changes in fair value due to:			
Changes in valuation inputs or assumptions used in the valuation model	16,572	(51,634)	(73,573)
Other changes in fair value ⁽¹⁾	(78,729)	(47,950)	(54,815)
Other changes ⁽²⁾	10,291	15,161	(1,829)
Balance at end of period	\$ 693,815	\$ 493,688	\$ 452,006

(1) Other changes in fair value primarily represents changes due to the realization of expected cash flows.

(2) Other changes includes purchase price adjustments, contractual prepayment protection, and changes due to the Company's purchase of the underlying collateral.

At December 31, 2016, the Company pledged MSR with a carrying value of \$180.9 million as collateral for revolving credit facilities. See Note 18 - *Revolving Credit Facilities*. The Company did not have any revolving credit facilities in place, and, thus, had not pledged any MSR as collateral, at December 31, 2015.

As of December 31, 2016 and December 31, 2015, the key economic assumptions and sensitivity of the fair value of MSR to immediate 10% and 20% adverse changes in these assumptions were as follows:

(dollars in thousands)	December 31, 2016	December 31, 2015
Weighted average prepayment speed:	9.2%	11.8%
Impact on fair value of 10% adverse change	\$ (25,012)	\$ (20,093)
Impact on fair value of 20% adverse change	\$ (48,602)	\$ (38,656)
Weighted average delinquency:	1.9%	4.0%
Impact on fair value of 10% adverse change	\$ (1,908)	\$ (3,826)
Impact on fair value of 20% adverse change	\$ (3,816)	\$ (6,640)
Weighted average discount rate:	9.4%	10.1%
Impact on fair value of 10% adverse change	\$ (23,590)	\$ (16,316)
Impact on fair value of 20% adverse change	\$ (45,861)	\$ (31,522)

TWO HARBORS INVESTMENT CORP.

Notes to the Consolidated Financial Statements

These assumptions and sensitivities are hypothetical and should be considered with caution. Changes in fair value based on 10% and 20% variations in assumptions generally cannot be extrapolated because the relationship of the change in assumptions to the change in fair value may not be linear. Also, the effect of a variation in a particular assumption on the fair value of MSR is calculated without changing any other assumptions. In reality, changes in one factor may result in changes in another (e.g., increased market interest rates may result in lower prepayments and increased credit losses) that could magnify or counteract the sensitivities. Further, these sensitivities show only the change in the asset balances and do not show any expected change in the fair value of the instruments used to manage the interest rates and prepayment risks associated with these assets.

Risk Mitigation Activities

The primary risk associated with the Company's MSR is interest rate risk and the resulting impact on prepayments. A significant decline in interest rates could lead to higher-than-expected prepayments that could reduce the value of the MSR. The Company economically hedges the impact of these risks with AFS securities and derivative financial instruments. Refer to Note 11 - *Derivative Instruments and Hedging Activities* for additional information regarding the derivative financial instruments used to economically hedge MSR.

Mortgage Servicing Income

The following table presents the components of servicing income recorded on the Company's consolidated statements of comprehensive income (loss) for the years ended December 31, 2016, 2015 and 2014:

(in thousands)	Year Ended December 31,		
	2016	2015	2014
Servicing fee income	\$ 138,430	\$ 123,834	\$ 125,061
Ancillary fee income	1,668	2,144	2,210
Float income	3,518	1,434	889
Total	\$ 143,616	\$ 127,412	\$ 128,160

Mortgage Servicing Advances

In connection with the servicing of loans, the Company's subservicers make certain payments for property taxes and insurance premiums, default and property maintenance payments, as well as advances of principal and interest payments before collecting them from individual borrowers. Servicing advances, including contractual interest, are priority cash flows in the event of a loan principal reduction or foreclosure and ultimate liquidation of the real estate-owned property, thus making their collection reasonably assured. These servicing advances, which are funded by the Company, totaled \$26.1 million and \$37.5 million and were included in other assets on the consolidated balance sheets as of December 31, 2016 and December 31, 2015, respectively.

Serviced Mortgage Assets

The Company's total serviced mortgage assets consist of loans owned and classified as residential mortgage loans held-for-sale, loans held in consolidated VIEs classified as residential mortgage loans held-for-investment in securitization trusts, and loans underlying MSR. The following table presents the number of loans and unpaid principal balance of the mortgage assets for which the Company manages the servicing as of December 31, 2016 and December 31, 2015:

(dollars in thousands)	December 31, 2016		December 31, 2015	
	Number of Loans	Unpaid Principal Balance	Number of Loans	Unpaid Principal Balance
Residential mortgage loans held-for-sale	333	\$ 49,986	1,415	\$ 812,661
Residential mortgage loans held-for-investment in securitization trusts	4,604	3,234,044	4,358	3,143,515
Mortgage servicing rights	280,185	62,827,975	241,199	48,540,005
Total serviced mortgage assets	285,122	\$ 66,112,005	246,972	\$ 52,496,181

TWO HARBORS INVESTMENT CORP.
Notes to the Consolidated Financial Statements
Note 9. Restricted Cash

The Company is required to maintain certain cash balances with counterparties for securities and derivatives trading activity and collateral for the Company's repurchase agreements and FHLB advances in restricted accounts. The Company has also placed cash in a restricted account pursuant to a letter of credit on an office space lease.

The following table presents the Company's restricted cash balances as of December 31, 2016 and December 31, 2015:

(in thousands)	December 31, 2016	December 31, 2015
Restricted cash balances held by trading counterparties:		
For securities and loan trading activity	\$ 26,310	\$ 12,550
For derivatives trading activity	218,896	130,355
As restricted collateral for repurchase agreements and Federal Home Loan Bank advances	162,759	119,310
Total restricted cash balances held by trading counterparties	407,965	262,215
Restricted cash balance pursuant to letter of credit on office lease	347	347
Total	\$ 408,312	\$ 262,562

Note 10. Accrued Interest Receivable

The following table presents the Company's accrued interest receivable by collateral type as of December 31, 2016 and December 31, 2015:

(in thousands)	December 31, 2016	December 31, 2015
Available-for-sale securities:		
Agency		
Federal Home Loan Mortgage Corporation	\$ 8,914	\$ 6,235
Federal National Mortgage Association	25,273	12,407
Government National Mortgage Association	3,068	4,910
Non-Agency	2,705	2,339
Total available-for-sale securities	39,960	25,891
Residential mortgage loans held-for-sale	164	4,173
Residential mortgage loans held-for-investment in securitization trusts	18,928	18,339
Commercial real estate assets	3,699	1,567
Total	\$ 62,751	\$ 49,970

Note 11. Derivative Instruments and Hedging Activities

The Company enters into a variety of derivative and non-derivative instruments in connection with its risk management activities. The Company's primary objective for executing these derivative and non-derivative instruments is to mitigate the Company's economic exposure to future events that are outside its control. The Company's derivative financial instruments are utilized principally to manage market risk and cash flow volatility associated with interest rate risk (including associated prepayment risk) related to certain assets and liabilities. As part of its risk management activities, the Company may, at times, enter into various forward contracts, including short securities, Agency to-be-announced securities, or TBAs, options, futures, swaps, caps, credit default swaps and total return swaps. In executing on the Company's current risk management strategy, the Company has entered into interest rate swap and swaption agreements, TBAs, short U.S. Treasuries, put and call options for TBAs and U.S. Treasuries, constant maturity swaps, credit default swaps and total return swaps (based on the Markit IOS Index). The Company has also entered into a number of non-derivative instruments to manage interest rate risk, principally Agency interest-only securities.

TWO HARBORS INVESTMENT CORP.
Notes to the Consolidated Financial Statements

The following summarizes the Company's significant asset and liability classes, the risk exposure for these classes, and the Company's risk management activities used to mitigate certain of these risks. The discussion includes both derivative and non-derivative instruments used as part of these risk management activities. Any of the Company's derivative and non-derivative instruments may be entered into in conjunction with one another in order to mitigate risks associated with the Company's investment portfolio. As a result, the following discussions of each type of instrument should be read as a collective representation of the Company's risk mitigation efforts and should not be considered independent of one another. While the Company uses derivative and non-derivative instruments to achieve the Company's risk management activities, it is possible that these instruments will not effectively mitigate all or a substantial portion of the Company's market rate risk. In addition, the Company might elect, at times, not to enter into certain hedging arrangements in order to maintain compliance with REIT requirements.

Balance Sheet Presentation

In accordance with ASC 815, *Derivatives and Hedging*, or ASC 815, the Company records derivative financial instruments on its consolidated balance sheets as assets or liabilities at fair value. Changes in fair value are accounted for depending on the use of the derivative instruments and whether they qualify for hedge accounting treatment. Due to the volatility of the credit markets and difficulty in effectively matching pricing or cash flows, the Company has elected to treat all current derivative contracts as trading instruments.

The following tables present the gross fair value and notional amounts of the Company's derivative financial instruments treated as trading instruments as of December 31, 2016 and December 31, 2015.

	December 31, 2016			
	Derivative Assets		Derivative Liabilities	
	Fair Value	Notional	Fair Value	Notional
Trading instruments				
Inverse interest-only securities	\$ 127,843	\$ 740,844	\$ —	\$ —
Interest rate swap agreements	109,531	18,471,063	(495)	1,900,000
Credit default swaps	—	—	—	—
Swaptions, net	39,881	825,000	(1,645)	600,000
TBAs	4,294	536,000	(10,344)	953,000
Put and call options for TBAs, net	42,633	1,136,000	—	—
Markit IOS total return swaps	—	—	(17)	90,593
Forward purchase commitments	—	—	—	—
Total	\$ 324,182	\$ 21,708,907	\$ (12,501)	\$ 3,543,593

	December 31, 2015			
	Derivative Assets		Derivative Liabilities	
	Fair Value	Notional	Fair Value	Notional
Trading instruments				
Inverse interest-only securities	\$ 159,582	\$ 932,037	\$ —	\$ —
Interest rate swap agreements	91,757	14,268,806	—	—
Credit default swaps	—	—	(703)	125,000
Swaptions, net	17,374	4,700,000	(4,831)	500,000
TBAs	1,074	847,000	(1,324)	550,000
Markit IOS total return swaps	1,645	889,418	—	—
Forward purchase commitments	77	98,736	(427)	187,384
Total	\$ 271,509	\$ 21,735,997	\$ (7,285)	\$ 1,362,384

Comprehensive Income (Loss) Statement Presentation

The Company has not applied hedge accounting to its current derivative portfolio held to mitigate the interest rate risk and credit risk associated with its portfolio. As a result, the Company is subject to volatility in its earnings due to movement in the unrealized gains and losses associated with its interest rate swaps and its other derivative instruments.

TWO HARBORS INVESTMENT CORP.
Notes to the Consolidated Financial Statements

The following table summarizes the location and amount of gains and losses on derivative instruments reported in the consolidated statements of comprehensive income (loss):

Trading Instruments	Location of Gain (Loss) Recognized in Income on Derivatives	Amount of Gain (Loss) Recognized in Income on Derivatives		
		Year Ended December 31,		
		2016	2015	2014
(in thousands)				
Interest rate risk management				
TBAs ⁽¹⁾	Gain (loss) on other derivative instruments	\$ 51,816	\$ (39,748)	\$ (69,921)
Short U.S. Treasuries ⁽¹⁾	Gain (loss) on other derivative instruments	—	125	(8)
Put and call options for TBAs ⁽¹⁾	Gain (loss) on other derivative instruments	64,920	6,846	(14,070)
Put and call options for U.S. Treasuries ⁽¹⁾	Gain (loss) on other derivative instruments	—	(837)	—
Constant maturity swaps ⁽¹⁾	Gain (loss) on other derivative instruments	—	6,164	6,340
Interest rate swap agreements - Receivers ⁽¹⁾	Gain (loss) on interest rate swap and swaption agreements	37,272	52,785	201,536
Interest rate swap agreements - Payers ⁽¹⁾	Gain (loss) on interest rate swap and swaption agreements	(19,986)	(69,495)	(114,121)
Swaptions ⁽¹⁾	Gain (loss) on interest rate swap and swaption agreements	11,209	(63,797)	(242,795)
Markit IOS total return swaps ⁽¹⁾	Gain (loss) on other derivative instruments	(36,898)	(13,371)	8,061
Interest rate swap agreements - Payers ⁽²⁾	Gain (loss) on interest rate swap and swaption agreements	16,876	(130,114)	(190,267)
Credit risk management				
Credit default swaps - Receive protection ⁽³⁾	Gain (loss) on other derivative instruments	962	(294)	1,742
Non-risk management				
TBAs	Gain (loss) on other derivative instruments	—	—	(4,701)
Inverse interest-only securities	Gain (loss) on other derivative instruments	18,579	36,066	55,028
Forward purchase commitments	Gain on residential mortgage loans held-for-sale	2,418	(1,668)	4,729
Total		\$ 147,168	\$ (217,338)	\$ (358,447)

(1) Includes derivative instruments held to mitigate interest rate risk associated with the Company's investment portfolio.

(2) Includes derivative instruments held to mitigate interest rate risk associated with the Company's repurchase agreements and FHLB advances.

(3) Includes derivative instruments held to mitigate credit risk associated with the Company's non-Agency RMBS and residential mortgage loans held-for-sale.

For the years ended December 31, 2016, 2015 and 2014, the Company recognized \$21.1 million, \$85.6 million and \$91.8 million, respectively, of expenses for the accrual and/or settlement of the net interest expense associated with its interest rate swaps. The expenses result from paying either a fixed interest rate or LIBOR interest on an average \$15.5 billion, \$16.1 billion, and \$23.3 billion notional, respectively, and receiving either LIBOR interest or a fixed interest rate.

TWO HARBORS INVESTMENT CORP.

Notes to the Consolidated Financial Statements

The following tables present information with respect to the volume of activity in the Company's derivative instruments during the years ended December 31, 2016 and 2015:

Year Ended December 31, 2016						
(in thousands)	Beginning of Period Notional Amount	Additions	Settlement, Termination, Expiration or Exercise	End of Period Notional Amount	Average Notional Amount	Realized Gain (Loss), net ⁽¹⁾
Inverse interest-only securities	\$ 932,037	\$ —	\$ (191,193)	\$ 740,844	\$ 836,707	\$ —
Interest rate swap agreements	14,268,806	25,103,456	(19,001,199)	20,371,063	15,506,763	16,032
Credit default swaps	125,000	10,000	(135,000)	—	71,257	1,022
Swaptions, net	5,200,000	1,668,000	(6,643,000)	225,000	2,449,268	(98,016)
TBAs, net	297,000	(10,173,000)	8,387,000	(1,489,000)	(531,866)	57,616
Put and call options for TBAs, net	—	11,260,000	(12,396,000)	(1,136,000)	2,569,117	22,288
Markit IOS total return swaps	889,418	99,911	(898,736)	90,593	471,028	(13,374)
Forward purchase commitments	286,120	1,548,027	(1,834,147)	—	269,562	2,068
Total	<u>\$ 21,998,381</u>	<u>\$ 29,516,394</u>	<u>\$ (32,712,275)</u>	<u>\$ 18,802,500</u>	<u>\$ 21,641,836</u>	<u>\$ (12,364)</u>

Year Ended December 31, 2015						
(in thousands)	Beginning of Period Notional Amount	Additions	Settlement, Termination, Expiration or Exercise	End of Period Notional Amount	Average Notional Amount	Realized Gain (Loss), net ⁽¹⁾
Inverse interest-only securities	\$ 1,168,226	\$ 12,563	\$ (248,752)	\$ 932,037	\$ 1,050,906	\$ 64
Interest rate swap agreements	18,584,000	26,868,227	(31,183,421)	14,268,806	16,091,714	(126,870)
Credit default swaps	125,000	—	—	125,000	125,000	—
Swaptions, net	12,410,000	8,550,000	(15,760,000)	5,200,000	9,780,027	(99,273)
TBAs, net	(1,325,000)	(7,266,000)	8,888,000	297,000	(773,381)	(46,835)
Short U.S. Treasuries	—	(50,000)	50,000	—	—	125
Put and call options for TBAs, net	2,000,000	1,250,000	(3,250,000)	—	(120,548)	6,331
Put and call options for U.S. Treasuries, net	—	500,000	(500,000)	—	685	(837)
Constant maturity swaps	14,000,000	6,000,000	(20,000,000)	—	2,257,534	7,694
Markit IOS total return swaps	598,459	1,626,514	(1,335,555)	889,418	950,206	(11,296)
Forward purchase commitments	554,838	3,512,843	(3,781,561)	286,120	563,108	(21)
Total	<u>\$ 48,115,523</u>	<u>\$ 41,004,147</u>	<u>\$ (67,121,289)</u>	<u>\$ 21,998,381</u>	<u>\$ 29,925,251</u>	<u>\$ (270,918)</u>

(1) Excludes net interest paid or received in full settlement of the net interest spread liability.

Cash flow activity related to derivative instruments is reflected within the operating activities and investing activities sections of the consolidated statements of cash flows. Derivative fair value adjustments are reflected within the unrealized (gain) loss on interest rate swaps and swaptions, unrealized gain on other derivative instruments, and gain on residential mortgage loans held-for-sale line items within the operating activities section of the consolidated statements of cash flows. Realized gains and losses on interest rate swap and swaption agreements are reflected within the loss on termination and option expiration of interest rate swaps and swaptions line item within the operating activities section of the consolidated statements of cash flows. The remaining cash flow activity related to derivative instruments is reflected within the (purchases) short sales of other derivative instruments, proceeds from sales (payments for termination) of other derivative instruments, net and increase (decrease) in due to counterparties, net line items within the investing activities section of the consolidated statements of cash flows.

TWO HARBORS INVESTMENT CORP.

Notes to the Consolidated Financial Statements

Interest Rate Sensitive Assets/Liabilities

The Company's RMBS investment securities and MSR are generally subject to change in value when mortgage rates decline or increase, depending on the type of investment. Rising mortgage rates generally result in a slowing of refinancing activity, which slows prepayments and results in a decline in the value of the Company's fixed-rate Agency pools and an increase in the value of the Company's MSR. To mitigate the impact of this risk, the Company maintains a portfolio of fixed-rate interest-only securities, which increase in value when interest rates increase, as well as TBA positions, short U.S. Treasuries, put and call options for TBAs and U.S. Treasuries, constant maturity swaps, interest rate swap and swaption agreements and Markit IOS total return swaps to further mitigate its exposure to higher interest rates, decreased prepayment speeds and widening mortgage spreads.

As of December 31, 2016 and December 31, 2015, the Company had outstanding fair value of \$71.1 million and \$42.9 million, respectively, of interest-only securities in place to economically hedge its investment securities. These interest-only securities are included in AFS securities, at fair value, in the consolidated balance sheets.

The Company is exposed to interest rate risk on residential mortgage loans from the time it commits to purchase a mortgage loan until it acquires the loan from the originator and subsequently sells the loan to a third party. Changes in interest rates impact the market price for the mortgage loans. For example, as market interest rates decline, the value of residential mortgage loans held-for-sale increases, and vice versa. To mitigate the impact of this risk, the Company may enter into derivative contracts to hedge the interest rate risk related to its commitments to purchase residential mortgage loans and residential mortgage loans held-for-sale, such as interest rate swaps, swaptions, TBA positions, short U.S. Treasuries, put and call options for TBAs and U.S. Treasuries and constant maturity swaps.

TBAs. At times, the Company may use TBAs for risk management purposes or as a means of deploying capital until targeted investments are available and to take advantage of temporary displacements in the marketplace. Additionally, the Company may use TBAs independently, or in conjunction with other derivative and non-derivative instruments, in order to mitigate risks associated with the Company's investment portfolio. TBAs are forward contracts for the purchase (long notional positions) or sale (short notional positions) of Agency RMBS. The issuer, coupon and stated maturity of the Agency RMBS are predetermined as well as the trade price, face amount and future settle date (published each month by the Securities Industry and Financial Markets Association). However, the specific Agency RMBS to be delivered upon settlement is not known at the time of the TBA transaction. As a result, and because physical delivery of the Agency RMBS upon settlement cannot be assured, the Company accounts for TBAs as derivative instruments.

As of December 31, 2016, \$1.5 billion of the Company's long notional TBA positions and \$3.0 billion of the Company's short notional TBA positions were held in order to economically hedge portfolio risk. As of December 31, 2015, \$847.0 million of the Company's long notional TBA positions and \$550.0 million of the Company's short notional TBA positions were held in order to economically hedge portfolio risk. The Company discloses these positions on a gross basis according to the unrealized gain or loss position of each TBA contract regardless of long or short notional position. The following tables present the notional amount, cost basis, market value and carrying value (which approximates fair value) of the Company's TBA positions as of December 31, 2016 and December 31, 2015:

As of December 31, 2016					
(in thousands)	Notional Amount ⁽¹⁾	Cost Basis ⁽²⁾	Market Value ⁽³⁾	Net Carrying Value ⁽⁴⁾	
				Derivative Assets	Derivative Liabilities
Purchase contracts	\$ 1,500,000	\$ 1,576,270	\$ 1,576,875	\$ 605	\$ —
Sale contracts	(2,989,000)	(3,028,470)	(3,035,125)	3,689	(10,344)
TBAs, net	\$ (1,489,000)	\$ (1,452,200)	\$ (1,458,250)	\$ 4,294	\$ (10,344)

TWO HARBORS INVESTMENT CORP.
Notes to the Consolidated Financial Statements

As of December 31, 2015

(in thousands)	Notional Amount ⁽¹⁾	Cost Basis ⁽²⁾	Market Value ⁽³⁾	Net Carrying Value ⁽⁴⁾	
				Derivative Assets	Derivative Liabilities
Purchase contracts	\$ 847,000	\$ 858,572	\$ 859,646	\$ 1,074	\$ —
Sale contracts	(550,000)	(568,813)	(570,137)	—	(1,324)
TBAs, net	<u>\$ 297,000</u>	<u>\$ 289,759</u>	<u>\$ 289,509</u>	<u>\$ 1,074</u>	<u>\$ (1,324)</u>

(1) Notional amount represents the face amount of the underlying Agency RMBS.

(2) Cost basis represents the forward price to be paid (received) for the underlying Agency RMBS.

(3) Market value represents the current market value of the TBA (or of the underlying Agency RMBS) as of period-end.

(4) Net carrying value represents the difference between the market value of the TBA as of period-end and its cost basis, and is reported in derivative assets / (liabilities), at fair value, in the consolidated balance sheets.

Put and Call Options for TBAs. The Company may use put and call options for TBAs independently, or in conjunction with other derivative and non-derivative instruments, in order to mitigate risks associated with the Company's investment portfolio. As of December 31, 2016, the Company had purchased put options for TBAs with a notional amount of \$2.5 billion and short sold call options for TBAs with a notional amount of \$3.6 billion. The last of the options expires in February 2017. The put and call options had a net fair market value of \$42.6 million included in derivative assets, at fair value, on the consolidated balance sheet as of December 31, 2016. The Company did not hold any put and call options for TBAs as of December 31, 2015.

Interest Rate Swap Agreements. The Company may use interest rate swaps independently, or in conjunction with other derivative and non-derivative instruments, in order to mitigate risks associated with the Company's investment portfolio. As of December 31, 2016 and December 31, 2015, the Company held the following interest rate swaps in order to mitigate mortgage interest rate exposure (or duration) risk associated with the Company's investment portfolio whereby the Company receives interest at a three-month LIBOR rate:

(notional in thousands)

December 31, 2016					
Swaps Maturities	Notional Amounts	Weighted Average Fixed Pay Rate	Weighted Average Receive Rate	Weighted Average Maturity (Years)	
2018	\$ 4,040,000	1.307%	0.973%	1.58	
2020	310,000	1.545%	0.881%	3.59	
2021 and Thereafter	900,000	2.378%	0.997%	4.24	
Total	<u>\$ 5,250,000</u>	1.504%	0.972%	2.16	

(notional in thousands)

December 31, 2015					
Swaps Maturities	Notional Amounts	Weighted Average Fixed Pay Rate	Weighted Average Receive Rate	Weighted Average Maturity (Years)	
2018	\$ 2,040,000	1.563%	0.487%	2.94	
2020 and Thereafter	1,210,000	2.164%	0.531%	5.08	
Total	<u>\$ 3,250,000</u>	1.787%	0.503%	3.74	

TWO HARBORS INVESTMENT CORP.

Notes to the Consolidated Financial Statements

Additionally, as of December 31, 2016 and December 31, 2015, the Company held the following interest rate swaps in order to mitigate mortgage interest rate exposure (or duration) risk associated with the Company's investment portfolio whereby the Company pays interest at a three-month LIBOR rate:

(notional in thousands)

December 31, 2016					
Swaps Maturities	Notional Amounts	Weighted Average Pay Rate	Weighted Average Fixed Receive Rate	Weighted Average Maturity (Years)	
2018	\$ 575,000	0.911%	1.440%	1.89	
2019	500,000	0.882%	1.042%	2.06	
2020	510,000	0.881%	1.580%	3.59	
2021 and Thereafter	3,479,000	0.963%	2.137%	5.52	
Total	<u>\$ 5,064,000</u>	0.941%	1.894%	4.57	

(notional in thousands)

December 31, 2015					
Swaps Maturities	Notional Amounts	Weighted Average Pay Rate	Weighted Average Fixed Receive Rate	Weighted Average Maturity (Years)	
2018	\$ 575,000	0.329%	1.440%	2.89	
2020 and Thereafter	2,589,000	0.453%	2.301%	7.00	
Total	<u>\$ 3,164,000</u>	0.431%	2.145%	6.26	

The Company monitors its borrowings under repurchase agreements and FHLB advances, which are generally floating rate debt, in relation to the rate profile of its investment securities. When it is cost effective to do so, the Company may enter into interest rate swap arrangements to align the interest rate composition of its borrowings under repurchase agreements and FHLB advances with that of its investment securities and debt portfolios. This particularly applies to borrowing agreements with maturities or interest rate resets of less than six months. Typically, the interest receivable terms (*i.e.*, LIBOR) of the interest rate swaps match the terms of the underlying debt, resulting in an effective conversion of the rate of the related repurchase agreement or FHLB advance from floating to fixed.

As of December 31, 2016 and December 31, 2015, the Company had the following outstanding interest rate swaps that were utilized as economic hedges of interest rate exposure (or duration) associated with the Company's short-term repurchase agreements and FHLB advances:

(notional in thousands)

December 31, 2016					
Swaps Maturities	Notional Amount ⁽¹⁾	Weighted Average Fixed Pay Rate ⁽²⁾	Weighted Average Receive Rate ⁽²⁾	Weighted Average Maturity (Years) ⁽²⁾	
2017	\$ 2,375,000	0.765%	0.934%	0.59	
2018	1,300,000	1.002%	0.860%	1.60	
2019	350,000	1.283%	0.895%	2.44	
2020	1,150,000	1.463%	0.930%	3.78	
2021 and Thereafter	4,882,063	1.897%	0.946%	6.59	
Total	<u>\$ 10,057,063</u>	1.405%	0.927%	3.85	

TWO HARBORS INVESTMENT CORP.

Notes to the Consolidated Financial Statements

(notional in thousands)

December 31, 2015					
Swaps Maturities	Notional Amount ⁽¹⁾	Weighted Average Fixed Pay Rate ⁽²⁾	Weighted Average Receive Rate ⁽²⁾	Weighted Average Maturity (Years) ⁽²⁾	
2016	\$ 1,700,000	0.462%	0.481%	0.73	
2017	2,375,000	0.765%	0.510%	1.59	
2018	800,000	0.944%	0.384%	2.14	
2019	350,000	1.283%	0.340%	3.44	
2020 and Thereafter	2,629,806	1.821%	0.371%	8.04	
Total	\$ 7,854,806	1.094%	0.437%	3.71	

(1) Notional amount includes \$777.1 million in forward starting interest rate swaps as of December 31, 2016. The Company did not have any forward starting interest rate swaps as of December 31, 2015.

(2) Weighted averages exclude forward starting interest rate swaps. As of December 31, 2016, the weighted average fixed pay rate on interest rate swaps starting in 2017 was 2.0%. The Company did not have any forward starting interest rate swaps as of December 31, 2015.

Interest Rate Swaptions. The Company may use interest rate swaptions (agreements to enter into interest rate swaps in the future for which the Company would either pay or receive a fixed rate) independently, or in conjunction with other derivative and non-derivative instruments, in order to mitigate risks associated with the Company's investment portfolio. As of December 31, 2016 and December 31, 2015, the Company had the following outstanding interest rate swaptions that were utilized as macro-economic hedges:

December 31, 2016								
(notional and dollars in thousands)								
Swaption	Expiration	Option			Underlying Swap			Average Term (Years)
		Cost	Fair Value	Average Months to Expiration	Notional Amount	Average Pay Rate	Average Receive Rate	
Purchase contracts:								
Payer	< 6 Months	\$ 29,360	\$ 42,149	1.22	\$ 4,500,000	2.16%	3M Libor	4.8
Payer	≥ 6 Months	13,655	792	6.70	300,000	3.50%	3M Libor	10.0
Total Payer		\$ 43,015	\$ 42,941	1.23	\$ 4,800,000	2.24%	3M Libor	5.1
Sale contracts:								
Payer	< 6 Months	\$ (51,355)	\$ (1,414)	5.81	\$ (500,000)	3.40%	3M Libor	10.0
Payer	≥ 6 Months	(29,893)	(938)	6.77	(300,000)	3.50%	3M Libor	10.0
Total Payer		\$ (81,248)	\$ (2,352)	6.05	\$ (800,000)	3.44%	3M Libor	10.0
Receiver	< 6 Months	\$ —	\$ (2,353)	2.30	\$ (3,775,000)	3M Libor	1.19%	4.9
Total Receiver		\$ —	\$ (2,353)	2.30	\$ (3,775,000)	3M Libor	1.19%	4.9

TWO HARBORS INVESTMENT CORP.
Notes to the Consolidated Financial Statements

December 31, 2015								
(notional and dollars in thousands)								
Swaption	Option				Underlying Swap			
	Expiration	Cost	Fair Value	Average Months to Expiration	Notional Amount	Average Fixed Pay Rate	Average Receive Rate	Average Term (Years)
Purchase contracts:								
Payer	< 6 Months	\$ 375	\$ 174	0.75	\$ 2,000,000	2.23%	3M Libor	6.3
Payer	≥ 6 Months	126,273	19,150	39.17	4,500,000	3.69%	3M Libor	5.8
Total Payer		<u>\$ 126,648</u>	<u>\$ 19,324</u>	<u>38.51</u>	<u>\$ 6,500,000</u>	<u>3.24%</u>	<u>3M Libor</u>	<u>5.9</u>
Sale contracts:								
Payer	≥ 6 Months	\$ (81,248)	\$ (6,738)	18.01	\$ (800,000)	3.44%	3M Libor	10.0
Total Payer		<u>\$ (81,248)</u>	<u>\$ (6,738)</u>	<u>18.01</u>	<u>\$ (800,000)</u>	<u>3.44%</u>	<u>3M Libor</u>	<u>10.0</u>
Receiver	< 6 Months	\$ (100)	\$ (43)	0.73	\$ (500,000)	3M Libor	1.75%	10.0
Total Receiver		<u>\$ (100)</u>	<u>\$ (43)</u>	<u>0.73</u>	<u>\$ (500,000)</u>	<u>3M Libor</u>	<u>1.75%</u>	<u>10.0</u>

Markit IOS Total Return Swaps. The Company may use total return swaps (agreements whereby the Company receives or makes payments based on the total return of an underlying instrument or index, such as the Markit IOS Index, in exchange for fixed or floating rate interest payments) independently, or in conjunction with other derivative and non-derivative instruments, in order to mitigate risks associated with the Company's investment portfolio. The Company enters into total return swaps to help mitigate the potential impact of larger increases or decreases in interest rates on the performance of our investment portfolio (referred to as "convexity risk"). Total return swaps based on the Markit IOS Index are intended to synthetically replicate the performance of interest-only securities. The Company had the following total return swap agreements in place at December 31, 2016 and December 31, 2015:

December 31, 2016				
(notional and dollars in thousands)				
Maturity Date	Current Notional Amount	Fair Value	Upfront Payable	Unrealized Gain (Loss)
January 12, 2043	\$ (45,083)	\$ (5)	\$ (320)	\$ (325)
January 12, 2044	(45,510)	(12)	(366)	(378)
Total	<u>\$ (90,593)</u>	<u>\$ (17)</u>	<u>\$ (686)</u>	<u>\$ (703)</u>

December 31, 2015				
(notional and dollars in thousands)				
Maturity Date	Current Notional Amount	Fair Value	Upfront Payable	Unrealized Gain (Loss)
January 12, 2043	\$ (369,639)	\$ 456	\$ (866)	\$ (410)
January 12, 2044	(325,003)	350	(1,679)	(1,329)
January 12, 2045	(194,776)	839	1,162	2,001
Total	<u>\$ (889,418)</u>	<u>\$ 1,645</u>	<u>\$ (1,383)</u>	<u>\$ 262</u>

Credit Risk

The Company's exposure to credit losses on its Agency RMBS portfolio is limited due to implicit or explicit backing from the GSEs. The payment of principal and interest on the Freddie Mac and Fannie Mae mortgage-backed securities are guaranteed by those respective agencies, and the payment of principal and interest on the Ginnie Mae mortgage-backed securities are backed by the full faith and credit of the U.S. Government.

TWO HARBORS INVESTMENT CORP.

Notes to the Consolidated Financial Statements

Credit Default Swaps. For non-Agency investment securities, residential mortgage loans and commercial real estate assets, the Company may enter into credit default swaps to hedge credit risk. In future periods, the Company could enhance its credit risk protection, enter into further paired derivative positions, including both long and short credit default swaps, and/or seek opportunistic trades in the event of a market disruption (see discussion under “*Non-Risk Management Activities*” below). The Company also has processes and controls in place to monitor, analyze, manage and mitigate its credit risk with respect to non-Agency RMBS, residential mortgage loans and commercial real estate assets.

As of December 31, 2015 and during the year ended December 31, 2016, the Company held credit default swaps through which the Company received credit protection for a fixed premium. The maximum payouts for these credit default swaps are limited to the current notional amounts of each swap contract. Maximum payouts for credit default swaps do not represent the expected future cash requirements, as the Company’s credit default swaps are typically liquidated or expire and are not exercised by the holder of the credit default swaps.

The following table presents credit default swaps held as of December 31, 2015 through which the Company received credit protection:

(notional and dollars in thousands)

December 31, 2015						
Protection	Maturity Date	Average Implied Credit Spread	Current Notional Amount	Fair Value	Upfront (Payable) Receivable	Unrealized Gain (Loss)
Receive	June 20, 2016	105.50	\$ (100,000)	\$ (502)	\$ (260)	\$ (762)
	December 20, 2016	496.00	(25,000)	(201)	(4,062)	(4,263)
	Total	183.60	\$ (125,000)	\$ (703)	\$ (4,322)	\$ (5,025)

The Company did not hold any credit default swaps as of December 31, 2016.

Derivative financial instruments contain an element of credit risk if counterparties are unable to meet the terms of the agreements. Credit risk associated with derivative financial instruments is measured as the net replacement cost should the counterparties that owe the Company under such contracts completely fail to perform under the terms of these contracts, assuming there are no recoveries of underlying collateral, as measured by the market value of the derivative financial instruments. As of December 31, 2016, the fair value of derivative financial instruments as an asset and liability position was \$324.2 million and \$12.5 million, respectively.

The Company attempts to mitigate its credit risk exposure on derivative financial instruments by limiting its counterparties to banks and financial institutions that meet established credit guidelines. The Company also seeks to spread its credit risk exposure across multiple counterparties in order to reduce its exposure to any single counterparty. Additionally, the Company reduces credit risk on the majority of its derivative instruments by entering into agreements that permit the closeout and netting of transactions with the same counterparty or clearing agency, in the case of centrally cleared interest rate swaps, upon the occurrence of certain events. To further mitigate the risk of counterparty default, the Company maintains collateral agreements with certain of its counterparties and clearing agencies, which require both parties to maintain cash deposits in the event the fair values of the derivative financial instruments exceed established thresholds. As of December 31, 2016, the Company had received cash deposits from counterparties of \$69.4 million and placed cash deposits of \$223.3 million in accounts maintained by counterparties, of which the amounts are netted on a counterparty basis and classified within restricted cash, due from counterparties, or due to counterparties on the Company’s consolidated balance sheets.

Non-Risk Management Activities

The Company has entered into certain financial instruments that are considered derivative contracts under ASC 815 that are not for purposes of hedging. These contracts are currently limited to forward purchase commitments and inverse interest-only RMBS.

TWO HARBORS INVESTMENT CORP.

Notes to the Consolidated Financial Statements

Commitments to Purchase Residential Mortgage Loans Held-for-Sale. Prior to a mortgage loan purchase, the Company may enter into forward purchase commitments with counterparties whereby the Company commits to purchasing the loans at a particular interest rate, provided the borrower elects to close the loan. These commitments to purchase mortgage loans have been defined as derivatives and are, therefore, recorded on the Company's consolidated balance sheets as assets or liabilities and measured at fair value. Subsequent changes in fair value are recorded on the Company's consolidated balance sheets as adjustments to the carrying value of these assets or liabilities with a corresponding adjustment recognized in current period earnings. As of December 31, 2015, the Company had outstanding commitments to purchase \$286.1 million of mortgage loans, subject to fallout if the loans did not close, with a fair value asset of \$77,227 and a fair value liability of \$427,468. The Company did not have any residential mortgage loan purchase commitments outstanding at December 31, 2016.

Inverse Interest-Only Securities. As of December 31, 2016 and December 31, 2015, inverse interest-only securities with a carrying value of \$127.8 million and \$159.6 million, including accrued interest receivable of \$1.2 million and \$1.7 million, respectively, are accounted for as derivative financial instruments in the consolidated financial statements. The following table presents the amortized cost and carrying value (which approximates fair value) of inverse interest-only securities as of December 31, 2016 and December 31, 2015:

(in thousands)	December 31, 2016	December 31, 2015
Face Value	\$ 740,844	\$ 932,037
Unamortized premium	—	—
Unamortized discount		
Designated credit reserve	—	—
Net, unamortized	(631,082)	(792,178)
Amortized Cost	109,762	139,859
Gross unrealized gains	18,389	19,655
Gross unrealized losses	(1,552)	(1,608)
Carrying Value	\$ 126,599	\$ 157,906

Note 12. Other Assets

Other assets as of December 31, 2016 and December 31, 2015 are summarized in the following table:

(in thousands)	December 31, 2016	December 31, 2015
Property and equipment at cost	\$ 6,481	\$ 5,997
Accumulated depreciation ⁽¹⁾	(4,566)	(3,303)
Net property and equipment	1,915	2,694
Prepaid expenses	1,406	1,572
Income taxes receivable	1,532	5,286
Deferred tax assets, net	57,361	44,318
Servicing advances	26,147	37,499
Federal Home Loan Bank stock	167,856	156,650
Equity investments	3,000	3,000
Other receivables	43,653	20,556
Total other assets	\$ 302,870	\$ 271,575

(1) Depreciation expense for the years ended December 31, 2016 and 2015 was \$1.3 million and \$1.4 million, respectively.

TWO HARBORS INVESTMENT CORP.

Notes to the Consolidated Financial Statements

Note 13. Other Liabilities

Other liabilities as of December 31, 2016 and December 31, 2015 are summarized in the following table:

(in thousands)	December 31, 2016	December 31, 2015
Accrued expenses	\$ 28,944	\$ 37,052
Accrued interest payable	29,505	18,723
Income taxes payable	—	70
Other	21,127	16,387
Total other liabilities	\$ 79,576	\$ 72,232

Note 14. Fair Value

Fair Value Measurements

ASC 820 defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. ASC 820 clarifies that fair value should be based on the assumptions market participants would use when pricing an asset or liability and establishes a fair value hierarchy that prioritizes the information used to develop those assumptions. The fair value hierarchy gives the highest priority to quoted prices available in active markets (*i.e.*, observable inputs) and the lowest priority to data lacking transparency (*i.e.*, unobservable inputs). Additionally, ASC 820 requires an entity to consider all aspects of nonperformance risk, including the entity's own credit standing, when measuring fair value of a liability.

ASC 820 establishes a three-level hierarchy to be used when measuring and disclosing fair value. An instrument's categorization within the fair value hierarchy is based on the lowest level of significant input to its valuation. Following is a description of the three levels:

- Level 1** Inputs are quoted prices in active markets for identical assets or liabilities as of the measurement date under current market conditions. Additionally, the entity must have the ability to access the active market and the quoted prices cannot be adjusted by the entity.
- Level 2** Inputs include quoted prices in active markets for similar assets or liabilities; quoted prices in inactive markets for identical or similar assets or liabilities; or inputs that are observable or can be corroborated by observable market data by correlation or other means for substantially the full-term of the assets or liabilities.
- Level 3** Unobservable inputs are supported by little or no market activity. The unobservable inputs represent the assumptions that market participants would use to price the assets and liabilities, including risk. Generally, Level 3 assets and liabilities are valued using pricing models, discounted cash flow methodologies, or similar techniques that require significant judgment or estimation.

Following are descriptions of the valuation methodologies used to measure material assets and liabilities at fair value and details of the valuation models, key inputs to those models and significant assumptions utilized.

Available-for-sale securities. The Company holds a portfolio of AFS securities that are carried at fair value in the consolidated balance sheets and primarily comprised of Agency and non-Agency RMBS. The Company determines the fair value of its Agency RMBS based upon prices obtained from third-party pricing providers or broker quotes received using bid price, which are deemed indicative of market activity. The third-party pricing providers and brokers use pricing models that generally incorporate such factors as coupons, primary and secondary mortgage rates, rate reset period, issuer, prepayment speeds, credit enhancements and expected life of the security. In determining the fair value of its non-Agency RMBS, management judgment may be used to arrive at fair value that considers prices obtained from third-party pricing providers, broker quotes received and other applicable market data. If observable market prices are not available or insufficient to determine fair value due principally to illiquidity in the marketplace, then fair value is based upon internally developed models that are primarily based on observable market-based inputs but also include unobservable market data inputs (including prepayment speeds, delinquency levels, and credit losses). The Company classified 100% of its RMBS AFS securities reported at fair value as Level 2 at December 31, 2016. AFS securities account for 75.2% of all assets reported at fair value at December 31, 2016.

TWO HARBORS INVESTMENT CORP.

Notes to the Consolidated Financial Statements

Residential mortgage loans held-for-sale. The Company holds residential mortgage loans held-for-sale that are carried at fair value in the consolidated balance sheets as a result of a fair value option election. The Company determines fair value of its residential mortgage loans based on prices obtained from third-party pricing providers and other applicable market data. If observable market prices are not available or insufficient to determine fair value due principally to illiquidity in the marketplace, then fair value is based upon cash flow models that are primarily based on observable market-based inputs but also include unobservable market data inputs (including prepayment speeds, delinquency levels and credit losses). The Company classified 2.3% and 97.7% of its residential mortgage loans held-for-sale as Level 2 and Level 3 fair value assets, respectively, at December 31, 2016.

Residential mortgage loans held-for-investment in securitization trusts. The Company recognizes on its consolidated balance sheets residential mortgage loans held-for-investment in securitization trusts that are carried at fair value as a result of a fair value option election. An entity is allowed to measure both the financial assets and financial liabilities of a qualifying CFE it consolidates using the fair value of either the CFE's financial assets or financial liabilities, whichever is more observable. As the Company's securitization trusts are considered qualifying CFEs, the Company determines the fair value of these residential mortgage loans based on the fair value of its collateralized borrowings in securitization trusts and its retained interests from the Company's on-balance sheet securitizations (eliminated in consolidation in accordance with U.S. GAAP), as the fair value of these instruments is more observable. The Company classified 100% of its residential mortgage loans held-for-investment in securitization trusts as Level 2 fair value assets at December 31, 2016.

Mortgage servicing rights. The Company holds a portfolio of MSR that are carried at fair value on the consolidated balance sheets. The Company determines fair value of its MSR based on prices obtained from third-party pricing providers. Although MSR transactions are observable in the marketplace, the valuation is based upon cash flow models that include unobservable market data inputs (including prepayment speeds, delinquency levels and discount rates). As a result, the Company classified 100% of its MSR as Level 3 fair value assets at December 31, 2016.

Derivative instruments. The Company may enter into a variety of derivative financial instruments as part of its hedging strategies. The Company principally executes over-the-counter, or OTC, derivative contracts, such as interest rate swaps, swaptions, put and call options for TBAs and U.S. Treasuries, credit default swaps, constant maturity swaps and Markit IOS total return swaps. The Company utilizes third-party pricing providers to value its financial derivative instruments. The Company classified 100% of the interest rate swaps, swaptions, put and call options for TBAs and U.S. Treasuries, credit default swaps, constant maturity swaps and total returns swaps reported at fair value as Level 2 at December 31, 2016.

The Company may also enter into certain other derivative financial instruments, such as TBAs, short U.S. Treasuries and inverse interest-only securities. These instruments are similar in form to the Company's AFS securities and the Company utilizes a pricing service to value TBAs and broker quotes to value short U.S. Treasuries and inverse interest-only securities. The Company classified 100% of its inverse interest-only securities at fair value as Level 2 at December 31, 2016. The Company reported 100% of its TBAs as Level 1 as of December 31, 2016. The Company did not hold any short U.S. Treasuries at December 31, 2016.

The Company may also enter into forward purchase commitments on residential mortgage loans whereby the Company commits to purchasing the loans at a particular interest rate. The fair value of these derivatives is determined based on prices currently offered in the marketplace for new commitments. Fallout assumptions if the borrower elects not to close the loan are applied to the pricing. The Company did not have any residential mortgage loan purchase commitments outstanding at December 31, 2016.

The Company's risk management committee governs trading activity relating to derivative instruments. The Company's policy is to minimize credit exposure related to financial derivatives used for hedging by limiting the hedge counterparties to major banks, financial institutions, exchanges, and private investors who meet established capital and credit guidelines as well as by limiting the amount of exposure to any individual counterparty.

The Company has netting arrangements in place with all derivative counterparties pursuant to standard documentation developed by ISDA, or central clearing exchange agreements, in the case of centrally cleared interest rate swaps. Additionally, both the Company and the counterparty or clearing agency are required to post cash collateral based upon the net underlying market value of the Company's open positions with the counterparty. Posting of cash collateral typically occurs daily, subject to certain dollar thresholds. Due to the existence of netting arrangements, as well as frequent cash collateral posting at low posting thresholds, credit exposure to the Company and/or to the counterparty or clearing agency is considered materially mitigated. Based on the Company's assessment, there is no requirement for any additional adjustment to derivative valuations specifically for credit.

TWO HARBORS INVESTMENT CORP.
Notes to the Consolidated Financial Statements

Collateralized borrowings in securitization trusts. The Company recognizes on its consolidated balance sheets collateralized borrowings that are carried at fair value as a result of a fair value option election. In determining the fair value of its collateralized borrowings, management judgment may be used to arrive at fair value that considers prices obtained from third-party pricing providers, broker quotes received and other applicable market data. If observable market prices are not available or insufficient to determine fair value due principally to illiquidity in the marketplace, then fair value is based upon internally developed models that are primarily based on observable market-based inputs but also include unobservable market data inputs (including prepayment speeds, delinquency levels, and credit losses). The Company classified 100% of its collateralized borrowings in securitization trusts as Level 2 fair value liabilities at December 31, 2016.

The following tables display the Company's assets and liabilities measured at fair value on a recurring basis. The Company often economically hedges the fair value change of its assets or liabilities with derivatives and other financial instruments. The tables below display the hedges separately from the hedged items, and therefore do not directly display the impact of the Company's risk management activities.

(in thousands)	Recurring Fair Value Measurements			
	At December 31, 2016			
	Level 1	Level 2	Level 3	Total
Assets				
Available-for-sale securities	\$ —	\$ 13,128,857	\$ —	\$ 13,128,857
Residential mortgage loans held-for-sale	—	925	39,221	40,146
Residential mortgage loans held-for-investment in securitization trusts	—	3,271,317	—	3,271,317
Mortgage servicing rights	—	—	693,815	693,815
Derivative assets	4,294	319,888	—	324,182
Total assets	\$ 4,294	\$ 16,720,987	\$ 733,036	\$ 17,458,317
Liabilities				
Collateralized borrowings in securitization trusts	\$ —	\$ 3,037,196	\$ —	\$ 3,037,196
Derivative liabilities	10,344	2,157	—	12,501
Total liabilities	\$ 10,344	\$ 3,039,353	\$ —	\$ 3,049,697

(in thousands)	Recurring Fair Value Measurements			
	At December 31, 2015			
	Level 1	Level 2	Level 3	Total
Assets				
Available-for-sale securities	\$ —	\$ 7,825,320	\$ —	\$ 7,825,320
Residential mortgage loans held-for-sale	—	764,319	47,112	811,431
Residential mortgage loans held-for-investment in securitization trusts	—	3,173,727	—	3,173,727
Mortgage servicing rights	—	—	493,688	493,688
Derivative assets	1,074	270,435	—	271,509
Total assets	\$ 1,074	\$ 12,033,801	\$ 540,800	\$ 12,575,675
Liabilities				
Collateralized borrowings in securitization trusts	\$ —	\$ 2,000,110	\$ —	\$ 2,000,110
Derivative liabilities	1,324	5,961	—	7,285
Total liabilities	\$ 1,324	\$ 2,006,071	\$ —	\$ 2,007,395

The Company may be required to measure certain assets or liabilities at fair value from time to time. These periodic fair value measures typically result from application of certain impairment measures under U.S. GAAP. These items would constitute nonrecurring fair value measures under ASC 820. As of December 31, 2016, the Company did not have any assets or liabilities measured at fair value on a nonrecurring basis in the periods presented.

TWO HARBORS INVESTMENT CORP.

Notes to the Consolidated Financial Statements

The valuation of Level 3 instruments requires significant judgment by the third-party pricing providers and/or management. The third-party pricing providers and/or management rely on inputs such as market price quotations from market makers (either market or indicative levels), original transaction price, recent transactions in the same or similar instruments, and changes in financial ratios or cash flows to determine fair value. Level 3 instruments may also be discounted to reflect illiquidity and/or non-transferability, with the amount of such discount estimated by the third-party pricing provider in the absence of market information. Assumptions used by the third-party pricing provider due to lack of observable inputs may significantly impact the resulting fair value and therefore the Company's consolidated financial statements. The Company's valuation committee reviews all valuations that are based on pricing information received from a third-party pricing provider. As part of this review, prices are compared against other pricing or input data points in the marketplace, along with internal valuation expertise, to ensure the pricing is reasonable. In addition, the Company performs back-testing of pricing information to validate price information and identify any pricing trends of a third-party price provider.

In determining fair value, third-party pricing providers use various valuation approaches, including market and income approaches. Inputs that are used in determining fair value of an instrument may include pricing information, credit data, volatility statistics, and other factors. In addition, inputs can be either observable or unobservable.

The availability of observable inputs can vary by instrument and is affected by a wide variety of factors, including the type of instrument, whether the instrument is new and not yet established in the marketplace and other characteristics particular to the instrument. The third-party pricing provider uses prices and inputs that are current as of the measurement date, including during periods of market dislocations. In periods of market dislocation, the availability of prices and inputs may be reduced for many instruments. This condition could cause an instrument to be reclassified to or from various levels within the fair value hierarchy.

Securities for which market quotations are readily available are valued at the bid price (in the case of long positions) or the ask price (in the case of short positions) at the close of trading on the date as of which value is determined. Exchange-traded securities for which no bid or ask price is available are valued at the last traded price. OTC derivative contracts, including interest rate swaps and swaption agreements, put and call options for TBAs and U.S. Treasuries, constant maturity swaps, credit default swaps and Markit IOS total return swaps, are valued by the Company using observable inputs, specifically quotations received from third-party pricing providers, and are therefore classified within Level 2.

TWO HARBORS INVESTMENT CORP.
Notes to the Consolidated Financial Statements

The following table presents the reconciliation for all of the Company's Level 3 assets measured at fair value on a recurring basis:

	Level 3 Recurring Fair Value Measurements			
	Year Ended			
	December 31,			
	2016		2015	
(in thousands)	Residential Mortgage Loans Held-For-Sale	Mortgage Servicing Rights	Residential Mortgage Loans Held-For-Sale	Mortgage Servicing Rights
Beginning of period level 3 fair value	\$ 47,112	\$ 493,688	\$ 35,553	\$ 452,006
Gains (losses) included in net income:				
Realized gains (losses)	4,451	(100,103)	25,330	(47,950)
Unrealized (losses) gains	(135) ⁽¹⁾	16,572 ⁽³⁾	445 ⁽¹⁾	(51,634) ⁽³⁾
Total gains (losses) included in net income	4,316	(83,531)	25,775	(99,584)
Purchases	183,074	313,504	231,782	126,105
Sales	(98,338)	(40,137)	(163,449)	—
Settlements	(96,943)	10,291	(82,549)	15,161
Gross transfers into level 3	—	—	—	—
Gross transfers out of level 3	—	—	—	—
End of period level 3 fair value	\$ 39,221	\$ 693,815	\$ 47,112	\$ 493,688
Change in unrealized gains or losses for the period included in earnings for assets held at the end of the reporting period	\$ 168 ⁽²⁾	\$ 13,906 ⁽⁴⁾	\$ 566 ⁽²⁾	\$ (51,634) ⁽⁴⁾

(1) The change in unrealized gains or losses on residential mortgage loans held-for-sale was recorded in gain on residential mortgage loans held-for-sale on the consolidated statements of comprehensive income (loss).

(2) The change in unrealized gains or losses on residential mortgage loans held-for-sale that were held at the end of the reporting period was recorded in gain on residential mortgage loans held-for-sale on the consolidated statements of comprehensive income (loss).

(3) The change in unrealized gains or losses on MSR was recorded in loss on servicing asset on the consolidated statements of comprehensive income (loss).

(4) The change in unrealized gains or losses on MSR that were held at the end of the reporting period was recorded in loss on servicing asset on the consolidated statements of comprehensive income (loss).

The Company did not incur transfers between Level 1, Level 2 or Level 3 during the years ended December 31, 2016 or 2015. Transfers between Levels are deemed to take place on the first day of the reporting period in which the transfer has taken place.

The Company used a third-party pricing provider in the fair value measurement of its Level 3 residential mortgage loans held-for-sale. The significant unobservable inputs used by the third-party pricing provider included expected default, severity and discount rate. Significant increases (decreases) in any of the inputs in isolation may result in significantly lower (higher) fair value measurement.

TWO HARBORS INVESTMENT CORP.
Notes to the Consolidated Financial Statements

The Company also used a third-party pricing provider in the fair value measurement of its Level 3 MSR. The table below presents information about the significant unobservable inputs used by the third-party pricing provider in the fair value measurement of the Company's MSR classified as Level 3 fair value assets at December 31, 2016 and December 31, 2015:

As of December 31, 2016					
Valuation Technique	Unobservable Input ⁽¹⁾	Range			Weighted Average
Discounted cash flow	Constant prepayment speed	8.0	-	10.3 %	9.2%
	Delinquency	1.8	-	2.1 %	1.9%
	Discount rate	8.4	-	10.2 %	9.4%
As of December 31, 2015					
Valuation Technique	Unobservable Input ⁽¹⁾	Range			Weighted Average
Discounted cash flow	Constant prepayment speed	9.6	-	13.5 %	11.8%
	Delinquency	3.7	-	4.2 %	4.0%
	Discount rate	8.7	-	11.2 %	10.1%

(1) Significant increases (decreases) in any of the inputs in isolation may result in significantly lower (higher) fair value measurement. A change in the assumption used for discount rates may be accompanied by a directionally similar change in the assumption used for the probability of delinquency and a directionally opposite change in the assumption used for prepayment rates.

Fair Value Option for Financial Assets and Financial Liabilities

On July 1, 2015, the Company elected the fair value option for Agency interest-only securities and GSE credit risk transfer securities acquired on or after such date. The fair value option was elected to simplify the reporting of changes in fair value. Agency interest-only securities and GSE credit risk transfer securities are carried within AFS securities on the consolidated balance sheets. The Company's policy is to separately record interest income, net of premium amortization or including discount accretion, on these fair value elected securities. Fair value adjustments are reported in (loss) gain on investment securities on the consolidated statements of comprehensive income (loss).

The Company elected the fair value option for the residential mortgage loans it has acquired. The fair value option was elected to mitigate earnings volatility by better matching the accounting for the assets with the related hedges. The mortgage loans are carried within residential mortgage loans held-for-sale on the consolidated balance sheets. The Company's policy is to separately record interest income on these fair value elected loans. Upfront fees and costs related to the fair value elected loans are not deferred or capitalized. Fair value adjustments are reported in gain on residential mortgage loans held-for-sale on the consolidated statements of comprehensive income (loss). The fair value option is irrevocable once the loan is acquired.

The Company also elected the fair value option for both the residential mortgage loans held-for-investment in securitization trusts and the collateralized borrowings in securitization trusts carried on the consolidated balance sheets. The fair value option was elected to better reflect the economics of the Company's retained interests. The Company's policy is to separately record interest income on the fair value elected loans and interest expense on the fair value elected borrowings. Upfront fees and costs are not deferred or capitalized. Fair value adjustments are reported in other (loss) income on the consolidated statements of comprehensive income (loss).

TWO HARBORS INVESTMENT CORP.
Notes to the Consolidated Financial Statements

The following tables summarize the fair value option elections and information regarding the line items and amounts recognized in the consolidated statements of comprehensive income (loss) for each fair value option-elected item.

		Year Ended December 31, 2016					
(in thousands)	Interest income (expense)	(Loss) gain on investment securities	Gain on residential mortgage loans held-for-sale	Other (loss) income	Total included in net income	Change in fair value due to credit risk	
Assets							
Available-for-sale securities	\$ (281)	\$ 1,905	\$ —	\$ —	\$ 1,624	N/A	
Residential mortgage loans held-for-sale	23,037 ⁽¹⁾	—	15,735	—	38,772	\$ 228 ⁽²⁾	
Residential mortgage loans held-for-investment in securitization trusts	133,993 ⁽¹⁾	—	—	(19,741)	114,252	— ⁽³⁾	
Liabilities							
Collateralized borrowings in securitization trusts	(97,729)	—	—	7,907	(89,822)	— ⁽³⁾	
Total	<u>\$ 59,020</u>	<u>\$ 1,905</u>	<u>\$ 15,735</u>	<u>\$ (11,834)</u>	<u>\$ 64,826</u>	<u>\$ 228</u>	
		Year Ended December 31, 2015					
(in thousands)	Interest income (expense)	(Loss) gain on investment securities	Gain on residential mortgage loans held-for-sale	Other (loss) income	Total included in net income	Change in fair value due to credit risk	
Assets							
Available-for-sale securities	\$ 124	\$ (68)	\$ —	\$ —	\$ 56	N/A	
Residential mortgage loans held-for-sale	28,966 ⁽¹⁾	—	15,932	—	44,898	\$ (6,365) ⁽²⁾	
Residential mortgage loans held-for-investment in securitization trusts	95,740 ⁽¹⁾	—	—	(52,440)	43,300	— ⁽³⁾	
Liabilities							
Collateralized borrowings in securitization trusts	(57,216)	—	—	25,914	(31,302)	— ⁽³⁾	
Total	<u>\$ 67,614</u>	<u>\$ (68)</u>	<u>\$ 15,932</u>	<u>\$ (26,526)</u>	<u>\$ 56,952</u>	<u>\$ (6,365)</u>	

TWO HARBORS INVESTMENT CORP.
Notes to the Consolidated Financial Statements

(in thousands)	Year Ended December 31, 2014					
	Interest income (expense)	(Loss) gain on investment securities	Gain on residential mortgage loans held-for-sale	Other (loss) income	Total included in net income	Change in fair value due to credit risk
Assets						
Residential mortgage loans held-for-sale	\$ 16,089 ⁽¹⁾	\$ —	\$ 12,568	\$ —	\$ 28,657	\$ 1,295 ⁽²⁾
Residential mortgage loans held-for-investment in securitization trusts	41,220 ⁽¹⁾	—	—	41,125	82,345	— ⁽³⁾
Liabilities						
Collateralized borrowings in securitization trusts	(26,760)	—	—	(24,285)	(51,045)	— ⁽³⁾
Total	\$ 30,549	\$ —	\$ 12,568	\$ 16,840	\$ 59,957	\$ 1,295

- (1) Interest income on residential mortgage loans held-for-sale and residential mortgage loans held-for-investment in securitization trusts is measured by multiplying the unpaid principal balance on the loans by the coupon rate and the number of days of interest due.
- (2) The change in fair value due to credit risk on residential mortgage loans held-for-sale was quantified by holding yield constant in the cash flow model in order to isolate credit risk component.
- (3) The change in fair value on residential mortgage loans held-for-investment in securitization trusts and collateralized borrowings in securitization trusts was due entirely to changes in market interest rates.

The table below provides the fair value and the unpaid principal balance for the Company's fair value option-elected loans and collateralized borrowings.

(in thousands)	December 31, 2016		December 31, 2015	
	Unpaid Principal Balance	Fair Value ⁽¹⁾	Unpaid Principal Balance	Fair Value ⁽¹⁾
Residential mortgage loans held-for-sale				
Total loans	\$ 49,986	\$ 40,146	\$ 812,661	\$ 811,431
Nonaccrual loans	\$ 25,445	\$ 21,162	\$ 30,438	\$ 25,771
Loans 90+ days past due	\$ 21,759	\$ 18,203	\$ 26,702	\$ 22,470
Residential mortgage loans held-for-investment in securitization trusts				
Total loans	\$ 3,234,044	\$ 3,271,317	\$ 3,143,515	\$ 3,173,727
Nonaccrual loans	\$ 2,373	\$ 2,408	\$ 860	\$ 868
Loans 90+ days past due	\$ 1,401	\$ 1,419	\$ 860	\$ 868
Collateralized borrowings in securitization trusts				
Total borrowings	\$ 3,015,162	\$ 3,037,196	\$ 1,987,628	\$ 2,000,110

- (1) Excludes accrued interest receivable.

Fair Value of Financial Instruments

In accordance with ASC 820, the Company is required to disclose the fair value of financial instruments, both assets and liabilities recognized and not recognized in the consolidated balance sheets, for which fair value can be estimated.

TWO HARBORS INVESTMENT CORP.

Notes to the Consolidated Financial Statements

The following describes the Company's methods for estimating the fair value for financial instruments. Descriptions are not provided for those items that have zero balances as of the current balance sheet date.

- AFS securities, residential mortgage loans held-for-sale, residential mortgage loans held-for-investment in securitization trusts, MSR, derivative assets and liabilities, and collateralized borrowings in securitization trusts are recurring fair value measurements; carrying value equals fair value. See discussion of valuation methods and assumptions within the *Fair Value Measurements* section of this Note 14.
- Commercial real estate assets are carried at cost, net of any unamortized acquisition premiums or discounts, loan fees and origination costs as applicable, unless deemed impaired. The Company estimates the fair value of its commercial real estate assets by assessing any changes in market interest rates, shifts in credit profiles and actual operating results for mezzanine commercial real estate loans and commercial real estate first mortgages, taking into consideration such factors as underlying property type, property competitive position within its market, market and submarket fundamentals, tenant mix, nature of business plan, sponsorship, extent of leverage and other loan terms. The Company categorizes the fair value measurement of these assets as Level 3.
- Cash and cash equivalents and restricted cash have a carrying value which approximates fair value because of the short maturities of these instruments. The Company categorizes the fair value measurement of these assets as Level 1.
- As a condition to membership in the FHLB, the Company is required to purchase and hold a certain amount of FHLB stock, which is considered a non-marketable, long-term investment, and is carried at cost. Because this stock can only be redeemed or sold at its par value, and only to the FHLB, carrying value, or cost, approximates fair value. The Company categorizes the fair value measurement of these assets as Level 3.
- Equity investments include cost method investments for which fair value is not estimated. Carrying value, or cost, approximates fair value. The Company categorizes the fair value measurement of these assets as Level 3.
- The carrying value of repurchase agreements, FHLB advances and revolving credit facilities that mature in less than one year generally approximates fair value due to the short maturities. As of December 31, 2016, the Company held \$185.6 million of repurchase agreements and \$3.3 billion of FHLB advances that are considered long-term. The Company's long-term repurchase agreements and FHLB advances have floating rates based on an index plus a spread and, for members of the FHLB, the credit spread is typically consistent with those demanded in the market. Accordingly, the interest rates on these borrowings are at market and thus carrying value approximates fair value. The Company categorizes the fair value measurement of these liabilities as Level 2.

TWO HARBORS INVESTMENT CORP.
Notes to the Consolidated Financial Statements

The following table presents the carrying values and estimated fair values of assets and liabilities that are required to be recorded or disclosed at fair value at December 31, 2016 and December 31, 2015.

(in thousands)	December 31, 2016		December 31, 2015	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Assets				
Available-for-sale securities	\$ 13,128,857	\$ 13,128,857	\$ 7,825,320	\$ 7,825,320
Residential mortgage loans held-for-sale	\$ 40,146	\$ 40,146	\$ 811,431	\$ 811,431
Residential mortgage loans held-for-investment in securitization trusts	\$ 3,271,317	\$ 3,271,317	\$ 3,173,727	\$ 3,173,727
Commercial real estate assets	\$ 1,412,543	\$ 1,411,733	\$ 660,953	\$ 660,953
Mortgage servicing rights	\$ 693,815	\$ 693,815	\$ 493,688	\$ 493,688
Cash and cash equivalents	\$ 406,883	\$ 406,883	\$ 737,831	\$ 737,831
Restricted cash	\$ 408,312	\$ 408,312	\$ 262,562	\$ 262,562
Derivative assets	\$ 324,182	\$ 324,182	\$ 271,509	\$ 271,509
Federal Home Loan Bank stock	\$ 167,856	\$ 167,856	\$ 156,650	\$ 156,650
Equity investments	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000
Liabilities				
Repurchase agreements	\$ 9,316,351	\$ 9,316,351	\$ 5,008,274	\$ 5,008,274
Collateralized borrowings in securitization trusts	\$ 3,037,196	\$ 3,037,196	\$ 2,000,110	\$ 2,000,110
Federal Home Loan Bank advances	\$ 4,000,000	\$ 4,000,000	\$ 3,785,000	\$ 3,785,000
Revolving credit facilities	\$ 70,000	\$ 70,000	\$ —	\$ —
Derivative liabilities	\$ 12,501	\$ 12,501	\$ 7,285	\$ 7,285

Note 15. Repurchase Agreements

As of December 31, 2016 and December 31, 2015, the Company had outstanding \$9.3 billion and \$5.0 billion, respectively, of repurchase agreements. Excluding the effect of the Company's interest rate swaps, the repurchase agreements had a weighted average borrowing rate of 1.31% and 1.10% and weighted average remaining maturities of 77 and 35 days as of December 31, 2016 and December 31, 2015, respectively.

At December 31, 2016 and December 31, 2015, the repurchase agreement balances were as follows:

(in thousands)	December 31, 2016	December 31, 2015
Short-term	\$ 9,130,717	\$ 5,008,274
Long-term	185,634	—
Total	\$ 9,316,351	\$ 5,008,274

TWO HARBORS INVESTMENT CORP.

Notes to the Consolidated Financial Statements

At December 31, 2016 and December 31, 2015, the repurchase agreements had the following characteristics and remaining maturities:

December 31, 2016						
Collateral Type						
(in thousands)	Agency RMBS	Non-Agency RMBS (1)	Agency Derivatives	Residential Mortgage Loans Held-for-Sale	Commercial Real Estate Assets	Total Amount Outstanding
Within 30 days	\$ 2,511,773	\$ 688,667	\$ 30,672	\$ —	\$ 21,933	\$ 3,253,045
30 to 59 days	1,786,664	334,590	68,257	—	28,991	2,218,502
60 to 89 days	1,035,806	89,281	3,307	—	—	1,128,394
90 to 119 days	1,192,127	251,929	—	—	—	1,444,056
120 to 364 days	810,552	69,678	—	—	206,490	1,086,720
One year and over	—	—	—	—	185,634	185,634
Total	\$ 7,336,922	\$ 1,434,145	\$ 102,236	\$ —	\$ 443,048	\$ 9,316,351
Weighted average borrowing rate	0.94%	2.60%	1.69%	—%	3.16%	1.31%

December 31, 2015						
Collateral Type						
(in thousands)	Agency RMBS	Non-Agency RMBS (1)	Agency Derivatives	Residential Mortgage Loans Held-for-Sale	Commercial Real Estate Assets	Total Amount Outstanding
Within 30 days	\$ 1,719,292	\$ 852,436	\$ 58,286	\$ —	\$ 59,349	\$ 2,689,363
30 to 59 days	1,407,353	271,819	60,065	—	—	1,739,237
60 to 89 days	143,051	15,691	2,707	—	—	161,449
90 to 119 days	68,014	106,007	1,465	—	—	175,486
120 to 364 days	—	234,229	—	8,510	—	242,739
Total	\$ 3,337,710	\$ 1,480,182	\$ 122,523	\$ 8,510	\$ 59,349	\$ 5,008,274
Weighted average borrowing rate	0.65%	2.03%	1.18%	2.87%	2.62%	1.10%

(1) Includes repurchase agreements collateralized by retained interests from the Company's on-balance sheet securitizations, which are eliminated in consolidation in accordance with U.S. GAAP.

TWO HARBORS INVESTMENT CORP.

Notes to the Consolidated Financial Statements

The following table summarizes assets at carrying values that are pledged or restricted as collateral for the future payment obligations of repurchase agreements:

(in thousands)	December 31, 2016	December 31, 2015
Available-for-sale securities, at fair value	\$ 9,540,849	\$ 5,354,104
Residential mortgage loans held-for-sale, at fair value	—	9,543
Commercial real estate assets	648,885	108,958
Net economic interests in consolidated securitization trusts ⁽¹⁾	211,095	274,949
Cash and cash equivalents	15,000	15,000
Restricted cash	162,759	119,310
Due from counterparties	48,939	10,211
Derivative assets, at fair value	126,341	157,879
Total	\$ 10,753,868	\$ 6,049,954

(1) Includes the retained interests from the Company's on-balance sheet securitizations, which are eliminated in consolidation in accordance with U.S. GAAP.

Although the transactions under repurchase agreements represent committed borrowings until maturity, the respective lender retains the right to mark the underlying collateral to fair value. A reduction in the value of pledged assets would require the Company to provide additional collateral or fund margin calls.

The following table summarizes certain characteristics of the Company's repurchase agreements and counterparty concentration at December 31, 2016 and December 31, 2015:

(dollars in thousands)	December 31, 2016				December 31, 2015			
	Amount Outstanding	Net Counterparty Exposure ⁽¹⁾	Percent of Equity	Weighted Average Days to Maturity	Amount Outstanding	Net Counterparty Exposure ⁽¹⁾	Percent of Equity	Weighted Average Days to Maturity
Royal Bank of Canada	\$ 980,738	\$ 247,486	7%	76.1	\$ 799,527	\$ 217,677	6%	31.5
All other counterparties ⁽²⁾	8,335,613	1,187,915	35%	77.6	4,208,747	818,108	23%	36.2
Total	\$ 9,316,351	\$ 1,435,401			\$ 5,008,274	\$ 1,035,785		

(1) Represents the net carrying value of the securities, residential mortgage loans held-for-sale and commercial real estate assets sold under agreements to repurchase, including accrued interest plus any cash or assets on deposit to secure the repurchase obligation, less the amount of the repurchase liability, including accrued interest. Payables due to broker counterparties for unsettled securities purchases are not included in the amounts presented above. However, at both December 31, 2016 and December 31, 2015, the Company did not have any such payables.

(2) Represents amounts outstanding with 22 and 20 counterparties at December 31, 2016 and December 31, 2015, respectively.

The Company does not anticipate any defaults by its repurchase agreement counterparties. There can be no assurance, however, that any such default or defaults will not occur.

Note 16. Collateralized Borrowings in Securitization Trusts, at Fair Value

The Company retains subordinated debt and excess servicing rights purchased from securitization trusts sponsored by either third parties or the Company's subsidiaries. The debt associated with the underlying residential mortgage loans held by the trusts, which are consolidated on the Company's consolidated balance sheets, is classified as collateralized borrowings in securitization trusts and carried at fair value as a result of a fair value option election. See Note 3 - *Variable Interest Entities* for additional information regarding consolidation of the securitization trusts. As of December 31, 2016 and December 31, 2015, collateralized borrowings in securitization trusts had a carrying value of \$3.0 billion and \$2.0 billion with a weighted average interest rate of 3.4% and 3.6%, respectively. The stated maturity dates for all collateralized borrowings were more than five years from both December 31, 2016 and December 31, 2015.

TWO HARBORS INVESTMENT CORP.

Notes to the Consolidated Financial Statements

Note 17. Federal Home Loan Bank of Des Moines Advances

The Company's wholly owned subsidiary, TH Insurance, is a member of the FHLB. As a member of the FHLB, TH Insurance has access to a variety of products and services offered by the FHLB, including secured advances. As of December 31, 2016 and December 31, 2015, TH Insurance had \$4.0 billion and \$3.8 billion in outstanding secured advances with a weighted average borrowing rate of 0.85% and 0.58%, respectively, and had no additional uncommitted capacity to borrow as of December 31, 2016. As of December 31, 2015, TH Insurance had an additional \$215.0 million of available uncommitted capacity for borrowings. To the extent TH Insurance has uncommitted capacity, it may be adjusted at the sole discretion of the FHLB.

The ability to borrow from the FHLB is subject to the Company's continued creditworthiness, pledging of sufficient eligible collateral to secure advances, and compliance with certain agreements with the FHLB. Each advance requires approval by the FHLB and is secured by collateral in accordance with the FHLB's credit and collateral guidelines, as may be revised from time to time by the FHLB. Eligible collateral may include conventional 1-4 family residential mortgage loans, commercial real estate loans, Agency RMBS and certain non-Agency RMBS with a rating of A and above.

On January 11, 2016, the Federal Housing Finance Agency, or FHFA, released a final rule regarding membership in the Federal Home Loan Bank system. Among other effects, the final rule excludes captive insurers from membership eligibility, including the Company's subsidiary member, TH Insurance. Since TH Insurance was admitted as a member in 2013, it is eligible for a membership grace period that shall run through February 19, 2021, during which new advances or renewals that mature beyond the grace period will be prohibited; however, any existing advances that mature beyond this grace period will be permitted to remain in place subject to their terms insofar as the Company maintains good standing with the FHLB. If any new advances or renewals occur, TH Insurance's outstanding advances will be limited to 40% of its total assets.

At December 31, 2016 and December 31, 2015, FHLB advances had the following remaining maturities:

(in thousands)	December 31, 2016	December 31, 2015
≤ 1 year	\$ 651,238	\$ —
> 1 and ≤ 3 years	815,024	651,238
> 3 and ≤ 5 years	—	815,024
> 5 and ≤ 10 years	—	—
> 10 years	2,533,738	2,318,738
Total	<u>\$ 4,000,000</u>	<u>\$ 3,785,000</u>

The following table summarizes assets at carrying values that are pledged or restricted as collateral for the future payment obligations of FHLB advances:

(in thousands)	December 31, 2016	December 31, 2015
Available-for-sale securities, at fair value	\$ 3,576,481	\$ 2,412,970
Residential mortgage loans held-for-sale, at fair value	—	735,911
Commercial real estate assets	708,989	252,172
Net economic interests in consolidated securitization trusts ⁽¹⁾	2,015	863,363
Total	<u>\$ 4,287,485</u>	<u>\$ 4,264,416</u>

(1) Includes the retained interests from the Company's on-balance sheet securitizations, which are eliminated in consolidation in accordance with U.S. GAAP.

TWO HARBORS INVESTMENT CORP.

Notes to the Consolidated Financial Statements

The FHLB retains the right to mark the underlying collateral for FHLB advances to fair value. A reduction in the value of pledged assets would require the Company to provide additional collateral. In addition, as a condition to membership in the FHLB, the Company is required to purchase and hold a certain amount of FHLB stock, which is based, in part, upon the outstanding principal balance of advances from the FHLB. At December 31, 2016 and December 31, 2015, the Company had stock in the FHLB totaling \$167.9 million and \$156.7 million, respectively, which is included in other assets on the consolidated balance sheets. FHLB stock is considered a non-marketable, long-term investment, is carried at cost and is subject to recoverability testing under applicable accounting standards. This stock can only be redeemed or sold at its par value, and only to the FHLB. Accordingly, when evaluating FHLB stock for impairment, the Company considers the ultimate recoverability of the par value rather than recognizing temporary declines in value. As of December 31, 2016 and December 31, 2015, the Company had not recognized an impairment charge related to its FHLB stock.

Note 18. Revolving Credit Facilities

To finance MSR, the Company enters into revolving credit facilities collateralized by the value of the MSR pledged. As of December 31, 2016, the Company had outstanding short-term borrowings under revolving credit facilities of \$70.0 million with a weighted average borrowing rate of 4.53% and weighted average remaining maturities of 306 days. The Company did not have any revolving credit facilities in place at December 31, 2015.

Although the transactions under revolving credit facilities represent committed borrowings from the time of funding until maturity, the respective lender retains the right to mark the underlying collateral to fair value. A reduction in the value of pledged assets below a designated threshold would require the Company to provide additional collateral or pay down the facility. As of December 31, 2016, MSR with a carrying value of \$180.9 million was pledged as collateral for the Company's future payment obligations under its revolving credit facilities. The Company does not anticipate any defaults by its revolving credit facility counterparties, although there can be no assurance that any such default or defaults will not occur.

Note 19. Commitments and Contingencies

The following represent the material commitments and contingencies of the Company as of December 31, 2016:

Management agreement. The Company pays PRCM Advisers a management fee equal to 1.5% per annum, calculated and payable quarterly in arrears, of the Company's stockholders' equity. For purposes of calculating the management fee, the Company's stockholders' equity means the sum of the net proceeds from all issuances of the Company's equity securities since inception (allocated on a pro rata daily basis for such issuances during the fiscal quarter of any such issuance), plus the Company's retained earnings at the end of the most recently completed calendar quarter (without taking into account any non-cash equity compensation expense incurred in current or prior periods), less any amount that the Company pays for repurchases of the Company's common stock since inception, and excluding any unrealized gains, losses or other items that do not affect realized net income (regardless of whether such items are included in other comprehensive income or loss, or in net income). This amount will be adjusted to exclude one-time events pursuant to changes in U.S. GAAP, and certain non-cash items after discussions between PRCM Advisers and the Company's independent directors and approval by a majority of the Company's independent directors. To the extent asset impairment reduces the Company's retained earnings at the end of any completed calendar quarter; it will reduce the management fee for such quarter. The Company's stockholders' equity for the purposes of calculating the management fee could be greater than the amount of stockholders' equity shown on the consolidated financial statements. The current term of the management agreement expires on October 28, 2017, and automatically renews for successive one-year terms annually until terminated in accordance with the terms of the agreement.

The Company reimburses PRCM Advisers for (i) the Company's allocable share of the compensation paid by PRCM Advisers to its personnel serving as the Company's principal financial officer and general counsel and personnel employed by PRCM Advisers as in-house legal, tax, accounting, consulting, auditing, administrative, information technology, valuation, computer programming and development and back-office resources to the Company, and (ii) any amounts for personnel of PRCM Adviser's affiliates arising under a shared facilities and services agreement.

Upon termination of the management agreement by the Company without cause or by PRCM Advisers due to the Company's material breach of the management agreement, the Company is required to pay a termination fee equal to three times the sum of the average annual base management fee earned by PRCM Advisers during the 24-month period immediately preceding the date of termination, calculated as of the end of the most recently completed fiscal quarter prior to the date of termination.

Employment contracts. The Company does not directly employ any personnel. Instead, the Company relies on the resources of PRCM Advisers to conduct the Company's operations. Expense reimbursements to PRCM Advisers are made in cash on a quarterly basis following the end of each quarter.

TWO HARBORS INVESTMENT CORP.**Notes to the Consolidated Financial Statements**

Operating leases. As of December 31, 2016, the Company was obligated under non-cancelable operating leases for office space. Future minimum rental payments, including escalation clauses, under leases with terms of one year or more at December 31, 2016 were as follows:

(in thousands)	
Year	Minimum Payment
2017	\$ 2,808
2018	2,412
2019	2,483
2020	2,424
2021	2,438
Thereafter	828
Total	\$ 13,393

Expenses under the lease agreements were \$3.2 million, \$2.6 million and \$2.0 million for the years ended December 31, 2016, 2015 and 2014, respectively.

Legal and regulatory. From time to time, the Company may be subject to liability under laws and government regulations and various claims and legal actions arising in the ordinary course of business. Liabilities are established for legal claims when payments associated with the claims become probable and the costs can be reasonably estimated. The actual costs of resolving legal claims may be substantially higher or lower than the amounts established for those claims. Based on information currently available, management is not aware of any legal or regulatory claims that would have a material effect on the Company's consolidated financial statements and therefore no accrual is required as of December 31, 2016.

Commitments to purchase residential mortgage loans. During the years ended December 31, 2016, 2015 and 2014, the Company entered into forward purchase commitments with counterparties whereby the Company committed to purchasing residential mortgage loans at a particular interest rate, provided the borrower elects to close the loan. All of these commitments were accounted for as derivatives. See Note 11 - *Derivative Instruments and Hedging Activities* for additional information.

Unfunded commitments on commercial real estate loans. Certain of the Company's commercial real estate loan agreements contain provisions for future fundings to borrowers, generally to finance lease-related or capital expenditures. As of December 31, 2016 and December 31, 2015, the Company had unfunded commitments of \$167.9 million and \$52.2 million on commercial real estate loans held-for-investment with expirations dates within the next two years.

Representation and warranty obligations. The Company has exposure to representation and warranty obligations from its prior mortgage loan sales and securitization activities. The Company may also have exposure to representation and warranty obligations in its capacity as owner of MSR; however, some of the MSR the Company owns were purchased on a bifurcated basis, meaning the representation and warranty obligations remain with the seller. The specific representations and warranties, or R&W, vary among different transactions and investors, but typically relate to, among other things, the ownership of the loan, the validity of the lien securing the loan, the loan's compliance with the criteria for inclusion in the transaction, including compliance with underwriting standards or loan criteria established by the investor, the ability to deliver required documentation and compliance with applicable laws. In general, the representations and warranties may be enforced at any time unless a sunset provision is in place.

The reserve for R&W obligations reflect management's best estimate of probable lifetime loss. The methodology used to estimate the reserve considers a variety of assumptions including borrower performance (both actual and estimated future defaults), historical loan defect experience, historical and estimated future loss experience, which includes projections of future home price changes as well as other qualitative factors including investor behavior.

In accordance with the purchase and sale agreement with our MSR and conduit counterparties, we have contractually mirrored our R&W obligations to the GSEs and private investors. As a result, we possess the ability to seek indemnification from our counterparties in the event of a realized loss from the fulfillment of our R&W obligation. At December 31, 2016 and December 31, 2015, the reserve (liability) for representation and warranty obligations was \$4.0 million and \$2.8 million, respectively.

TWO HARBORS INVESTMENT CORP.**Notes to the Consolidated Financial Statements****Note 20. Stockholders' Equity****Common Stock**

As of December 31, 2016, the Company had 347,652,326 shares of common stock outstanding. The following table presents a reconciliation of the common shares outstanding from December 31, 2013 through December 31, 2016:

	Number of common shares
Common shares outstanding, December 31, 2013	364,935,168
Issuance of common stock	57,218
Issuance of restricted stock ⁽¹⁾	1,403,534
Common shares outstanding, December 31, 2014	366,395,920
Issuance of common stock	69,826
Issuance of restricted stock ⁽¹⁾	1,105,361
Repurchase of common stock	(13,664,300)
Common shares outstanding, December 31, 2015	353,906,807
Issuance of common stock	60,602
Issuance of restricted stock ⁽¹⁾	1,704,917
Repurchase of common stock	(8,020,000)
Common shares outstanding, December 31, 2016	347,652,326

(1) Represents shares of restricted stock granted under the Second Restated 2009 Equity Incentive Plan, of which 2,639,424 restricted shares remained subject to vesting requirements at December 31, 2016.

Distributions to Stockholders

The following table presents cash dividends declared by the Company on its common stock during the years ended December 31, 2016, 2015 and 2014:

Declaration Date	Record Date	Payment Date	Cash Dividend Per Share
December 15, 2016	December 30, 2016	January 27, 2017	\$ 0.24
September 15, 2016	September 30, 2016	October 20, 2016	\$ 0.23
June 16, 2016	June 30, 2016	July 20, 2016	\$ 0.23
March 15, 2016	March 31, 2016	April 21, 2016	\$ 0.23
December 16, 2015	December 30, 2015	January 20, 2016	\$ 0.26
September 16, 2015	September 30, 2015	October 22, 2015	\$ 0.26
June 17, 2015	June 30, 2015	July 21, 2015	\$ 0.26
March 18, 2015	March 31, 2015	April 21, 2015	\$ 0.26
December 16, 2014	December 30, 2014	January 20, 2015	\$ 0.26
September 16, 2014	September 30, 2014	October 21, 2014	\$ 0.26
June 17, 2014	July 2, 2014	July 22, 2014	\$ 0.26
March 17, 2014	March 31, 2014	April 21, 2014	\$ 0.26

TWO HARBORS INVESTMENT CORP.
Notes to the Consolidated Financial Statements

Accumulated Other Comprehensive Income

Accumulated other comprehensive income at December 31, 2016 and December 31, 2015 was as follows:

(in thousands)	December 31, 2016	December 31, 2015
Available-for-sale securities		
Unrealized gains	\$ 393,555	\$ 405,177
Unrealized losses	(194,328)	(46,116)
Accumulated other comprehensive income	\$ 199,227	\$ 359,061

Reclassifications out of Accumulated Other Comprehensive Income

The following table summarizes reclassifications out of accumulated other comprehensive income for the years ended December 31, 2016, 2015 and 2014:

(in thousands)	Affected Line Item in the Condensed Consolidated Statements of Comprehensive Income (Loss)	Amount Reclassified out of Accumulated Other Comprehensive Income		
		Year Ended December 31,		
		2016	2015	2014
Other-than-temporary impairments on AFS securities	Total other-than-temporary impairment losses	\$ 1,822	\$ 535	\$ 392
Realized gains on sales of certain AFS securities, net of tax	(Loss) gain on investment securities	(102,852)	(336,230)	(52,931)
Total		\$ (101,030)	\$ (335,695)	\$ (52,539)

Dividend Reinvestment and Direct Stock Purchase Plan

The Company sponsors a dividend reinvestment and direct stock purchase plan through which stockholders may purchase additional shares of the Company's common stock by reinvesting some or all of the cash dividends received on shares of the Company's common stock. Stockholders may also make optional cash purchases of shares of the Company's common stock subject to certain limitations detailed in the plan prospectus. An aggregate of 7.5 million shares of the Company's common stock were originally reserved for issuance under the plan. As of December 31, 2016, 343,894 shares have been issued under the plan for total proceeds of approximately \$3.5 million, of which 60,602, 69,826 and 57,218 shares were issued for total proceeds of \$0.5 million, \$0.7 million and \$0.6 million during the years ended December 31, 2016, 2015 and 2014, respectively.

Share Repurchase Program

The Company's share repurchase program in effect as of December 31, 2015 allowed for the repurchase of up to an aggregate of 25,000,000 shares of the Company's common stock. During the year ended December 31, 2016, the Company's board of directors approved an increase of 50,000,000 shares, for up to a total of 75,000,000 shares authorized for repurchase by the Company under the program. Shares may be repurchased from time to time through privately negotiated transactions or open market transactions, pursuant to a trading plan in accordance with Rules 10b5-1 and 10b-18 under the Securities Exchange Act of 1934, as amended, or the Exchange Act, or by any combination of such methods. The manner, price, number and timing of share repurchases are subject to a variety of factors, including market conditions and applicable SEC rules. The share repurchase program does not require the purchase of any minimum number of shares, and, subject to SEC rules, purchases may be commenced or suspended at any time without prior notice. The share repurchase program does not have an expiration date. As of December 31, 2016, a total of 24,135,000 shares had been repurchased by the Company under the program for an aggregate cost of \$200.4 million; of these, 8,020,000 and 13,664,300 shares were repurchased for a total cost of \$61.3 million and \$115.2 million during the years ended December 31, 2016 and 2015, respectively. No shares were repurchased during the year ended December 31, 2014.

TWO HARBORS INVESTMENT CORP.

Notes to the Consolidated Financial Statements

At-the-Market Offering

On May 25, 2012, the Company entered into an equity distribution agreement under which the Company may sell up to an aggregate of 20,000,000 shares of its common stock from time to time in any method permitted by law deemed to be an “at the market” offering as defined in Rule 415 under the Securities Act of 1933, as amended, or the Securities Act. On May 22, 2015, the Company entered into an amendment to the equity distribution agreement providing that any subsequent offers or sales of the Company’s common stock under the equity distribution agreement shall be made pursuant to a new prospectus supplement, which was filed on the same date. As of December 31, 2016, 7,585,869 shares of common stock have been sold under the equity distribution agreement for total accumulated net proceeds of approximately \$77.6 million; however, no shares were sold during the years ended December 31, 2016, 2015 and 2014.

Note 21. Equity Incentive Plan

The Company’s Plan was adopted in 2009 and amended in May 2013 and May 2015. The Company adopted the Plan to provide incentive compensation to attract and retain qualified directors, officers, advisors, consultants and other personnel, including PRCM Advisers and affiliates and employees of PRCM Advisers and its affiliates, and any joint venture affiliates of the Company.

On May 14, 2015, the Company’s stockholders approved the Company’s Second Restated 2009 Equity Incentive Plan, which replaced the previous Restated 2009 Equity Incentive Plan, both of which are referred to collectively as the Plan. This stockholder approval effectuated, among other changes, an increase in the number of shares of common stock available for issuance under the Plan by 10,000,000 shares, to a total of 13,000,000 shares.

The Plan is administered by the compensation committee of the Company’s board of directors. The compensation committee has the full authority to administer and interpret the Plan, to authorize the granting of awards, to determine the eligibility of directors, officers, advisors, consultants and other personnel, including PRCM Advisers and affiliates and personnel of PRCM Advisers and its affiliates, and any joint venture affiliates of the Company, to receive an award, to determine the number of shares of common stock to be covered by each award (subject to the individual participant limitations provided in the Plan), to determine the terms, provisions and conditions of each award (which may not be inconsistent with the terms of the Plan), to prescribe the form of instruments evidencing awards and to take any other actions and make all other determinations that it deems necessary or appropriate in connection with the Plan or the administration or interpretation thereof. In connection with this authority, the compensation committee may, among other things, establish performance goals that must be met in order for awards to be granted or to vest, or for the restrictions on any such awards to lapse.

The Company’s Plan provides for grants of restricted common stock, phantom shares, dividend equivalent rights and other equity-based awards, subject to a ceiling of 13,000,000 shares available for issuance under the Plan. The Plan allows for the Company’s board of directors to expand the types of awards available under the Plan to include long-term incentive plan units in the future. If an award granted under the Plan expires or terminates, the shares subject to any portion of the award that expires or terminates without having been exercised or paid, as the case may be, will again become available for the issuance of additional awards. Unless earlier terminated by the Company’s board of directors, no new award may be granted under the Plan after the tenth anniversary of the date that such Plan was initially approved by the Company’s board of directors. No award may be granted under the Plan to any person who, assuming payment of all awards held by such person, would own or be deemed to own more than 9.8% of the outstanding shares of the Company’s common stock.

During the years ended December 31, 2016, 2015 and 2014, the Company granted 81,739, 61,952 and 54,799 shares of common stock, respectively, to its independent directors pursuant to the Plan. The estimated fair value of these awards was \$8.43, \$10.18 and \$10.31 per share on grant date, based on the closing price of the Company’s common stock on the NYSE on such date. The grants vested immediately.

Additionally, during the years ended December 31, 2016, 2015 and 2014, the Company granted 1,937,522, 1,115,574 and 1,374,989 shares of restricted common stock, respectively, to key employees of PRCM Advisers pursuant to the terms of the Plan and the associated award agreements. The estimated fair value of these awards was \$7.52, \$10.49 and \$9.90 per share on grant date, based on the closing market price of the Company’s common stock on the NYSE on such date. However, as the cost of these awards is measured at fair value at each reporting date based on the price of the Company’s stock as of period end in accordance with ASC 505, *Equity*, or ASC 505, the fair value of these awards as of December 31, 2016 was \$8.72 per share based on the closing market price of the Company’s common stock on the NYSE on such date. The shares underlying the grants vest in three equal annual installments commencing on the first anniversary of the grant date, as long as such grantee complies with the terms and conditions of his or her applicable restricted stock award agreement. During the year ended December 31, 2016, in connection with the restructuring described in Note 22 - *Restructuring Charges*, certain agreements were forfeited and re-granted with accelerated vesting terms, in accordance with ASC 718, *Compensation - Stock Compensation*.

TWO HARBORS INVESTMENT CORP.

Notes to the Consolidated Financial Statements

The following table summarizes the activity related to restricted common stock for the years ended December 31, 2016 and 2015:

	Year Ended December 31,			
	2016		2015	
	Shares	Weighted Average Grant Date Fair Market Value	Shares	Weighted Average Grant Date Fair Market Value
Outstanding at Beginning of Period	2,290,609	\$ 10.36	2,002,406	\$ 10.32
Granted	2,019,261	7.56	1,177,526	10.47
Vested	(1,369,229)	(10.05)	(828,164)	(10.42)
Forfeited	(301,217)	(8.50)	(61,159)	(10.17)
Outstanding at End of Period	<u>2,639,424</u>	<u>\$ 8.59</u>	<u>2,290,609</u>	<u>\$ 10.36</u>

For the years ended December 31, 2016, 2015 and 2014, the Company recognized compensation costs and restructuring charges related to restricted common stock of \$15.2 million, \$9.0 million and \$11.7 million, respectively.

Note 22. Restructuring Charges

On July 28, 2016, the Company announced that its board of directors had approved a plan to discontinue the Company's mortgage loan conduit and securitization business. In connection with the closure, the Company incurred the following charges, which are included within restructuring charges on the Company's consolidated statements of comprehensive income (loss), for the year ended December 31, 2016:

(in thousands)	Year Ended December 31, 2016
Termination benefits	\$ 2,398
Contract terminations	217
Other associated costs	375
Total	<u>\$ 2,990</u>

The mortgage loan conduit and securitization business wind down process was completed at the end of 2016. The Company does not expect to incur additional restructuring costs in 2017.

Note 23. Income Taxes

For the years ended December 31, 2016, 2015 and 2014, the Company qualified to be taxed as a REIT under the Code for U.S. federal income tax purposes. As long as the Company qualifies as a REIT, the Company generally will not be subject to U.S. federal income taxes on its taxable income to the extent it annually distributes its net taxable income to stockholders, and does not engage in prohibited transactions. The Company intends to distribute 100% of its REIT taxable income and comply with all requirements to continue to qualify as a REIT. The majority of states also recognize the Company's REIT status. The Company's TRSs file separate tax returns and are fully taxed as standalone U.S. C-corporations. The tables below reflect the net taxes accrued at the TRS level and the tax attributes included in the consolidated financial statements. It is assumed that the Company will retain its REIT status and will incur no REIT level taxation as it intends to comply with the REIT regulations and annual distribution requirements.

Certain activities the Company performs may produce income that will not be qualifying income for REIT purposes. These activities include the designated portion of MSR treated as normal mortgage servicing, certain derivative financial instruments and other risk-management instruments. The Company has designated its TRSs to engage in these activities. The Company also purchases and sells mortgage loans through the secondary whole loan market and/or securitization market and has designated its TRSs to engage in these activities.

TWO HARBORS INVESTMENT CORP.
Notes to the Consolidated Financial Statements

The following table summarizes the tax (benefit) provision recorded at the taxable subsidiary level for the years ended December 31, 2016, 2015 and 2014:

(in thousands)	Year Ended December 31,		
	2016	2015	2014
Current tax (benefit) provision:			
Federal	\$ (1,630)	\$ (4,027)	\$ 6,507
State	167	175	16
Total current tax (benefit) provision	(1,463)	(3,852)	6,523
Deferred tax provision (benefit)	13,766	(12,638)	(80,261)
Total provision for (benefit from) income taxes	\$ 12,303	\$ (16,490)	\$ (73,738)

The Company's taxable income before dividend distributions differs from its pre-tax net income for U.S. GAAP purposes primarily due to unrealized gains and losses, the recognition of credit losses for U.S. GAAP purposes but not tax purposes, differences in timing of income recognition due to market discount, and original issue discount and the calculations surrounding each. These book to tax differences in the REIT are not reflected in the consolidated financial statements as the Company intends to retain its REIT status.

The following is a reconciliation of the statutory federal and state rates to the effective rates, for the years ended December 31, 2016, 2015 and 2014:

(dollars in thousands)	Year Ended December 31,					
	2016		2015		2014	
	Amount	Percent	Amount	Percent	Amount	Percent
Computed income tax expense at federal rate	\$ 127,953	35 %	\$ 166,502	35 %	\$ 32,691	35 %
State taxes, net of federal benefit, if applicable	108	— %	114	— %	10	— %
Permanent differences in taxable income from GAAP net income	392	— %	4,203	1 %	1,636	2 %
Dividends paid deduction	(116,150)	(32)%	(187,309)	(39)%	(108,075)	(116)%
Provision for (benefit from) income taxes/ Effective Tax Rate⁽¹⁾	\$ 12,303	3 %	\$ (16,490)	(3)%	\$ (73,738)	(79)%

(1) The provision for (benefit from) income taxes is recorded at the taxable subsidiary level.

The Company's permanent differences in taxable income from GAAP net income in the years ended December 31, 2016 and 2015 were primarily due to net losses incurred by consolidated securitization trusts that are not subject to federal taxes and a recurring difference in compensation expense related to restricted stock dividends. The Company's permanent differences in taxable income from GAAP net income in the year ended December 31, 2014 were due primarily to the statutory federal rate change from 34% to 35% and corresponding adjustment to the measurement of beginning deferred tax assets and liabilities.

TWO HARBORS INVESTMENT CORP.

Notes to the Consolidated Financial Statements

The Company's consolidated balance sheets, as of December 31, 2016 and December 31, 2015 contain the following current and deferred tax liabilities and assets, which are included in other assets, and are recorded at the taxable subsidiary level:

(in thousands)	December 31, 2016	December 31, 2015
Income taxes receivable		
Federal income taxes receivable	\$ 1,532	\$ 5,216
State and local income taxes receivable	—	—
Income taxes receivable, net	1,532	5,216
Deferred tax assets (liabilities)		
Deferred tax asset	111,636	69,441
Deferred tax liability	(54,275)	(25,123)
Total net deferred tax assets	57,361	44,318
Total tax assets, net	\$ 58,893	\$ 49,534

Deferred Tax Assets and Liabilities

Deferred income taxes reflect the net tax effect of temporary differences between the carrying amount of assets and liabilities for financial reporting and tax purposes at the TRS level. Components of the Company's deferred tax assets as of December 31, 2016 and December 31, 2015 were as follows:

(in thousands)	December 31, 2016	December 31, 2015
Available-for-sale securities	\$ 17,942	\$ (8,673)
Mortgage servicing rights	(9,492)	6,363
Derivative assets and liabilities	(42,666)	(4,492)
Other assets	24	3
Other liabilities	2,713	978
Intangibles	235	256
Alternative minimum tax credit	1,904	420
Net operating loss carryforward	42,039	8,177
Capital loss carryforward	44,662	41,286
Total net deferred tax assets	\$ 57,361	\$ 44,318

At both December 31, 2016 and December 31, 2015, the Company had not recorded a valuation allowance for any portion of its deferred tax assets as it did not believe, at a more likely than not level, that any portion of its deferred tax assets would not be realized. Of the TRS net operating loss carryforward of \$42.0 million, \$1.3 million is scheduled to expire December 31, 2033, \$2.5 million is scheduled to expire December 31, 2034, \$4.3 million is scheduled to expire December 31, 2035 and \$33.9 million is scheduled to expire December 31, 2036. Of the TRS net capital loss carryforward of \$44.7 million, \$0.1 million is scheduled to expire December 31, 2017, \$20.1 million is scheduled to expire December 31, 2019, \$21.1 million is scheduled to expire December 31, 2020 and \$3.4 million is scheduled to expire December 31, 2021.

Based on the Company's evaluation, it has been concluded that there are no significant uncertain tax positions requiring recognition in the Company's consolidated financial statements of a contingent tax liability for uncertain tax positions. Additionally, there were no amounts accrued for penalties or interest as of or during the periods presented in these consolidated financial statements.

TWO HARBORS INVESTMENT CORP.

Notes to the Consolidated Financial Statements

Note 24. Earnings Per Share

The following table presents a reconciliation of the earnings and shares used in calculating basic and diluted earnings per share for the years ended December 31, 2016, 2015 and 2014:

(in thousands, except share data)	Year Ended December 31,		
	2016	2015	2014
Numerator:			
Net income	\$ 353,278	\$ 492,210	\$ 167,139
Denominator:			
Weighted average common shares outstanding	345,046,993	363,055,228	364,181,059
Weighted average restricted stock shares	3,026,711	2,192,510	1,830,796
Basic and diluted weighted average shares outstanding	<u>348,073,704</u>	<u>365,247,738</u>	<u>366,011,855</u>
Basic and Diluted Earnings Per Share	\$ 1.01	\$ 1.35	\$ 0.46

Note 25. Related Party Transactions

The following summary provides disclosure of the material transactions with affiliates of the Company.

In accordance with its Management Agreement with PRCM Advisers, the Company incurred \$46.4 million, \$50.3 million and \$48.8 million as a management fee to PRCM Advisers for the years ended December 31, 2016, 2015 and 2014, respectively, which represents approximately 1.5% of stockholders' equity on an annualized basis as defined by the Management Agreement. For purposes of calculating the management fee, stockholders' equity is adjusted to exclude any common stock repurchases as well as any unrealized gains, losses or other items that do not affect realized net income, among other adjustments, in accordance with the Management Agreement. In addition, the Company reimbursed PRCM Advisers for direct and allocated costs incurred by PRCM Advisers on behalf of the Company. These direct and allocated costs totaled approximately \$25.8 million, \$22.9 million and \$15.5 million for the years ended December 31, 2016, 2015 and 2014, respectively.

The Company has direct relationships with the majority of its third-party vendors. The Company will continue to have certain costs allocated to it by PRCM Advisers for compensation, data services, technology and certain office lease payments, but most direct expenses with third-party vendors are paid directly by the Company.

The Company recognized \$15.2 million, \$9.0 million and \$11.7 million of compensation expense and restructuring charges during the years ended December 31, 2016, 2015 and 2014, respectively, related to restricted common stock issued to employees of PRCM Advisers and the Company's independent directors pursuant to the Plan. See Note 21 - *Equity Incentive Plan* for additional information.

Note 26. Subsequent Events

On January 19, 2017, the Company closed an underwritten public offering of \$287.5 million aggregate principal amount of convertible senior notes, which included \$37.5 million aggregate principal amount sold by the Company to the underwriter of the offering pursuant to an over-allotment option. The notes are unsecured, pay interest semiannually at a rate of 6.25% per annum and are convertible at the option of the holder into shares of the Company's common stock. The notes will mature in January 2022, unless earlier converted or repurchased in accordance with their terms. The Company does not have the right to redeem the notes prior to maturity, but may be required to repurchase the notes from holders under certain circumstances. The notes have an initial conversion rate of 100 shares of common stock per \$1,000 principal amount of the notes (equivalent to an initial conversion price of \$10.00 per share), subject to adjustment. The net proceeds from the offering were approximately \$282 million after deducting underwriting discounts and estimated offering expenses payable by the Company.

Events subsequent to December 31, 2016, were evaluated through the date these financial statements were issued and no additional events were identified requiring further disclosure in these consolidated financial statements.

TWO HARBORS INVESTMENT CORP.**Notes to the Consolidated Financial Statements****Note 27. Quarterly Financial Data - Unaudited**

(in thousands, except share data)	2016 Quarter Ended			
	March 31	June 30	September 30	December 31
Total interest income	\$ 130,763	\$ 154,776	\$ 168,862	\$ 179,089
Total interest expense	41,360	53,969	60,350	66,216
Net interest income	89,403	100,807	108,512	112,873
Other-than-temporary impairment losses	(717)	(90)	(1,015)	—
Total other (loss) income	(133,672)	(94,974)	31,971	304,266
Total expenses	38,493	37,486	38,509	37,295
Provision for (benefit from) income taxes	5,451	(14,762)	(16,827)	38,441
Net (loss) income	\$ (88,930)	\$ (16,981)	\$ 117,786	\$ 341,403
Basic and diluted (loss) earnings per weighted average common share	\$ (0.25)	\$ (0.05)	\$ 0.34	\$ 0.98
Basic and diluted weighted average number of shares of common stock	349,436,015	347,597,955	347,627,226	347,643,257
	2015 Quarter Ended			
	March 31	June 30	September 30	December 31
(in thousands, except share data)				
Total interest income	\$ 162,969	\$ 152,529	\$ 152,834	\$ 133,605
Total interest expense	33,503	35,029	37,079	36,574
Net interest income	129,466	117,500	115,755	97,031
Other-than-temporary impairment losses	(127)	(170)	(238)	—
Total other (loss) income	(7,100)	134,110	(119,286)	160,308
Total expenses	38,103	36,896	38,677	37,852
(Benefit from) provision for income taxes	(10,657)	(6,957)	(7,656)	8,780
Net income (loss)	\$ 94,793	\$ 221,501	\$ (34,790)	\$ 210,707
Basic and diluted earnings (loss) per weighted average common share	\$ 0.26	\$ 0.60	\$ (0.09)	\$ 0.59
Basic and diluted weighted average number of shares of common stock	366,507,657	367,074,131	367,365,973	360,090,432

TWO HARBORS INVESTMENT CORP.
SCHEDULE IV - MORTGAGE LOANS ON REAL ESTATE
As of December 31, 2016
(dollars in thousands)

Asset Type/ Description	Number of Loans	Interest Rate	Final Maturity Date ⁽¹⁾	Periodic Payment Terms ⁽²⁾	Prior Liens ⁽³⁾	Face Amount	Carrying Amount	Principal Amount Subject to Delinquent Principal or Interest
Residential mortgage loans held-for-sale								
Prime nonconforming residential mortgage loans:								
Fixed rate	2	3.875% - 4.25%	8/2045 - 6/2046	P&I	\$ —	\$ 978	\$ 925	\$ 481
Credit sensitive residential mortgage loans:								
Fixed rate	71	1% - 12.2%	5/2017 - 5/2056	P&I	—	12,494	6,691	2,420
Adjustable rate	23	2.875% - 10.65%	7/2019 - 10/2051	P&I	—	5,346	3,798	751
Ginnie Mae buyout residential mortgage loans:								
Fixed rate	234	2% - 12%	11/2014 - 7/2056	P&I	—	30,856	28,434	18,006
Adjustable rate	3	2.375% - 4%	6/2035 - 9/2041	P&I	—	312	298	101
Total residential mortgage loans held-for-sale					\$ —	\$ 49,986	\$ 40,146	\$ 21,759
Residential mortgage loans held-for-investment in securitization trusts								
Prime nonconforming residential mortgage loans:								
<u>Fixed rate</u>								
Original loan balance \$0 - \$999,999	4,074	3.375% - 5.125%	11/2044 - 7/2046	P&I	\$ —	\$ 2,612,321	\$ 2,642,617	\$ 1,401
Original loan balance \$1,000,000 - \$1,999,999	514	3.5% - 5%	12/2042 - 7/2046	P&I	—	589,291	595,884	—
Original loan balance \$2,000,000 - \$2,999,999	16	3.625% - 4.25%	10/2042 - 6/2046	P&I	—	32,432	32,816	—
Total residential mortgage loans held-for-investment in securitization trusts					\$ —	\$ 3,234,044	\$ 3,271,317	\$ 1,401
Commercial real estate loans held-for-investment								
Asset Type/ Location		Interest Rate	Final Maturity Date ⁽¹⁾	Periodic Payment Terms ⁽²⁾	Prior Liens ⁽³⁾	Face Amount	Carrying Amount	Principal Amount Subject to Delinquent Principal or Interest
Retail-Mixed Use/ Southwest		L+4.20%	12/2019	P&I	\$ —	\$ 120,000	\$ 119,734	\$ —
Retail/ West		L+3.42%	10/2018	IO	—	105,000	104,967	—
Office/ Diversified US		L+4.45%	8/2020	P&I	—	93,138	91,727	—
Industrial/ Northeast		L+4.75%	4/2019	IO	—	82,000	81,250	—
Office-Mixed Use/ Northeast		L+4.20%	12/2018	IO	—	77,134	76,923	—
Office/ Northeast		L+4.37%	10/2020	P&I	—	72,966	72,043	—
Office/ Southeast		L+4.11%	1/2021	P&I	—	62,275	60,373	—
Retail/ West		L+4.49%	7/2020	P&I	—	50,300	49,837	—
Office/ Diversified US		L+7.25%	9/2018	P&I	708,000	48,252	48,252	—
Hotel/ Diversified US		L+6.75%	1/2017	IO	285,000	45,900	45,885	—

TWO HARBORS INVESTMENT CORP.
SCHEDULE IV - MORTGAGE LOANS ON REAL ESTATE, continued
As of December 31, 2016
(dollars in thousands)

Asset Type/ Location	Interest Rate	Final Maturity Date ⁽¹⁾	Periodic Payment Terms ⁽²⁾	Prior Liens ⁽³⁾	Face Amount	Carrying Amount	Principal Amount Subject to Delinquent Principal or Interest
Commercial real estate loans held-for-investment, continued							
Multifamily/ Southwest	L+4.05%	1/2019	P&I	—	43,500	43,462	—
Office/ Northeast	L+4.40%	5/2019	IO	—	43,500	42,937	—
Office/ Northeast	L+4.65%	1/2020	IO	—	43,215	43,181	—
Office/ Southwest	L+4.30%	3/2019	IO	—	41,821	41,457	—
Office/ Northeast	L+4.95%	9/2020	P&I	—	39,550	38,885	—
Office/ Northeast	L+4.55%	12/2019	P&I	—	38,000	37,778	—
Office/ Northeast	L+4.60%	11/2018	IO	—	37,000	36,539	—
Office/ West	L+4.60%	11/2019	IO	—	36,010	35,414	—
Multifamily/ Northeast	L+4.27%	12/2019	IO	—	34,000	33,321	—
Office/ Northeast	5.11%	3/2026	P&I	—	33,800	33,615	—
Multifamily/ Midwest	L+4.80%	2/2019	P&I	—	30,941	30,651	—
Industrial/ Northeast	L+4.70%	9/2020	P&I	—	24,000	23,831	—
Multifamily/ Northeast	L+3.60%	11/2019	P&I	—	23,500	23,515	—
Office/ West	L+4.55%	10/2019	IO	—	23,083	22,781	—
Hotel/ Midwest	L+4.99%	11/2018	IO	—	21,157	21,049	—
Multifamily/ Southeast	L+4.57%	8/2019	P&I	—	20,488	20,214	—
Multifamily/ Southeast	L+5.25%	8/2018	P&I	—	19,288	19,287	—
Multifamily/ Southeast	L+4.05%	9/2018	P&I	—	18,700	18,669	—
Hotel/ Southeast	L+8.75%	8/2017	IO	98,500	17,000	17,027	—
Multifamily/ Northeast	L+4.85%	11/2019	IO	—	16,527	16,216	—
Multifamily/ Northeast	L+4.62%	6/2019	IO	—	13,400	13,216	—
Multifamily/ Southeast	L+4.03%	10/2018	P&I	—	11,000	11,001	—
Office/ West	L+5.90%	1/2020	IO	—	10,907	10,660	—
Office/ Northeast	L+12.25%	7/2018	IO	45,100	10,257	10,279	—
Office/ Southeast	L+9.50%	8/2020	IO	45,303	9,900	9,942	—
Hotel/ Northeast	13%	11/2025	P&I	59,000	6,936	6,625	—
Total commercial real estate loans held-for-investment				\$ 1,240,903	\$ 1,424,445	\$ 1,412,543	\$ —
Total mortgage loans on real estate				\$ 1,240,903	\$ 4,708,475	\$ 4,724,006	\$ 23,160

- (1) Based on contractual maturity date. Certain commercial real estate loans are subject to contractual extension options which may be subject to conditions as stipulated in the loan agreement. Actual maturities may differ from contractual maturities stated herein as certain borrowers may have the right to prepay with or without paying a prepayment penalty. The Company may also extend contractual maturities in connection with loan modifications.
- (2) Principal and interest (“P&I”); Interest-only (“IO”). Certain commercial real estate loans labeled as P&I are non-amortizing until a specific date when they begin amortizing P&I, as stated in the loan agreements.
- (3) Represents third-party priority liens. Third party portions of pari-passu participations are not considered prior liens.

TWO HARBORS INVESTMENT CORP.

NOTE TO SCHEDULE IV - RECONCILIATION OF MORTGAGE LOANS ON REAL ESTATE
(dollars in thousands)

(in thousands)	Year Ended December 31,		
	2016	2015	2014
Balance at beginning of period	\$ 4,646,111	\$ 2,280,458	\$ 1,336,971
Additions during period:			
Originations and purchases	1,988,150	3,269,020	1,475,210
Net discount accretion (premium amortization)	263	149	—
Amortization of net deferred origination fees	6,981	319	—
Deductions during period:			
Collections of principal	(1,080,632)	(661,000)	(149,674)
Cost of mortgages sold	(799,563)	(147,713)	(425,505)
(Increase) decrease in net deferred origination fees	(12,554)	(6,656)	—
Cumulative-effect adjustment to equity for adoption of new accounting principle	—	(2,991)	—
Change in realized and unrealized (losses) gains	(2,868)	(53,689)	49,719
Other ⁽¹⁾	(21,882)	(31,786)	(6,263)
Balance at end of period	\$ 4,724,006	\$ 4,646,111	\$ 2,280,458

(1) Includes transfer of mortgage servicing rights fair value on buyout of Ginnie Mae residential mortgage loans and transfers to other receivables for foreclosed government-guaranteed loans.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosures

None.

Item 9A. Controls and Procedures

A review and evaluation was performed by our management, including our Chief Executive Officer, or CEO, and Chief Financial Officer, or CFO, of the effectiveness of our disclosure controls and procedures (as such term is defined in Rule 13a-15(e) and 15d-15(e) under the Exchange Act) as of the end of the period covered by this Annual Report on Form 10-K. Based on that review and evaluation, the CEO and CFO have concluded that our current disclosure controls and procedures, as designed and implemented, were effective. Although our CEO and CFO have determined our disclosure controls and procedures were effective at the end of the period covered by this Annual Report on Form 10-K, a control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that it will detect or uncover failures within the Company to disclose material information otherwise required to be set forth in the reports we submit under the Exchange Act.

There was no change in our internal control over financial reporting that occurred during the quarter ended December 31, 2016 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Management's Report On Internal Control Over Financial Reporting

Management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting for the Company. Internal control over financial reporting is defined in Rules 13a-15(f) and 15d-15(f) promulgated under the Exchange Act as a process designed by, or under the supervision of, the Company's principal executive and principal financial officers and effected by the Company's Board, management and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. GAAP and includes those policies and procedures that:

- pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the Company;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. GAAP, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risks that controls may become inadequate because of changes in conditions or that the degree of compliance with the policies or procedures may deteriorate.

The Company's management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2016. In making this assessment the Company's management used criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control-Integrated Framework (2013 framework).

Based on its assessment, the Company's management believes that, as of December 31, 2016, the Company's internal control over financial reporting was effective based on those criteria.

The Company's independent auditors, Ernst & Young LLP, have issued an attestation report on the effectiveness of the Company's internal control over financial reporting. This report appears on page [169](#) of this annual report on Form 10-K.

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders
of Two Harbors Investment Corp.

We have audited Two Harbors Investment Corp.'s (the Company's) internal control over financial reporting as of December 31, 2016, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). The Company's management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report On Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of the Company as of December 31, 2016 and December 31, 2015, and the related consolidated statements of comprehensive income (loss), stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2016 and the financial statement schedule listed in the Index at Item 15(a)(2) of the Company and our report dated February 28, 2017 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP
Minneapolis, Minnesota
February 28, 2017

Item 9B. Other Information

None.

PART III**Items 10, 11, 12 and 13.**

The information required by Items 10, 11, 12 and 13 of Part III of this Annual Report is incorporated by reference to information to be set forth in the Company's definitive Proxy Statement for its 2017 Annual Meeting of Stockholders, which will be filed with the SEC, pursuant to Regulation 14A, not later than 120 days after December 31, 2016.

Item 14. Principal Accounting Fees and Services

We retained Ernst & Young LLP, or EY, to audit our consolidated financial statements for the years ended December 31, 2016 and 2015. We also retained EY, as well as other accounting and consulting firms, to provide various other services in during the years ended December 31, 2016 and 2015.

The table below presents the aggregate fees billed to us for professional services performed by EY for the years ended December 31, 2016 and 2015:

	Year Ended December 31,	
	2016	2015
Audit fees ⁽¹⁾	\$ 1,269,500	\$ 1,177,210
Audit-related fees ⁽²⁾	302,825	518,400
Tax fees ⁽³⁾	147,828	218,350
Total principal accountant fees	<u>\$ 1,720,153</u>	<u>\$ 1,913,960</u>

(1) Audit fees pertain to the audit of our annual Consolidated Financial Statements, including review of the interim financial statements contained in our Quarterly Reports on Form 10-Q, comfort letters to underwriters in connection with our registration statements and common stock offerings, attest services, consents to the incorporation of the EY audit report in publicly filed documents and assistance with and review of documents filed with the SEC.

(2) Audit-related fees pertain to assurance and related services that are traditionally performed by the principal accountant, including accounting consultations and audits in connection with proposed or consummated acquisitions, internal control reviews and consultation concerning financial accounting and reporting standard.

(3) Tax fees pertain to services performed for tax compliance, including REIT compliance, tax planning and tax advice, including preparation of tax returns and claims for refund and tax-payment planning services. Tax planning and advice also includes assistance with tax audits and appeals, and tax advice related to specific transactions.

The services performed by EY in 2016 were pre-approved by our Audit Committee in accordance with the pre-approval policy set forth in our Audit Committee Charter. This policy requires that all engagement fees and the terms and scope of all auditing and non-auditing services be reviewed and approved by the Audit Committee in advance of their formal initiation.

PART IV

Item 15. Exhibits, Financial Statement Schedules

(a) The following documents are filed as part of this Annual Report on Form 10-K:

(1) Consolidated Financial Statements:

The consolidated financial statements of the Company, together with the independent registered public accounting firm's report thereon, are set forth in Part II, Item 8 on pages [102](#) through [110](#) of this Annual Report on Form 10-K and are incorporated herein by reference.

(2) Schedules to Consolidated Financial Statements:

Schedule IV - Mortgage Loans on Real Estate is set forth in Part II, Item 8 on pages [164](#) through [166](#) of this Annual Report on Form 10-K.

All other consolidated financial statement schedules not included have been omitted because they are either inapplicable or the information required is provided in the Company's Consolidated Financial Statements and Notes thereto, included in Part II, Item 8, of this Annual Report on Form 10-K.

(3) Exhibits:

The exhibits listed on the accompanying Exhibits Index are filed or incorporated by reference as part of this Annual Report on Form 10-K.

<u>Exhibit Number</u>	<u>Exhibit Index</u>
1.1	Equity Distribution Agreement among Two Harbors Investment Corp., JMP Securities LLC and Keefe, Bruyette & Woods, Inc. dated May 25, 2012 (incorporated by reference to Exhibit 1.1 to the Registrant's Current Report on Form 8-K filed with the SEC on May 25, 2012).
1.2	Amendment No. 1, dated as of May 22, 2015, by and among Two Harbors Investment Corp., JMP Securities LLC and Keefe, Bruyette & Woods, Inc. to the Equity Distribution Agreement dated May 25, 2012 (incorporated by reference to Exhibit 1.1 to the Registrant's Current Report on Form 8-K filed with the SEC on May 22, 2015).
2.1	Agreement and Plan of Merger, dated as of June 11, 2009, by and among Capitol Acquisition Corp., Two Harbors Investment Corp., Two Harbors Merger Corp. and Pine River Capital Management L.P. (incorporated by reference to Annex A filed with Pre Effective Amendment No. 4 to the Registrant's Registration Statement on Form S-4 (File No. 333-160199) filed with the Securities and Exchange Commission, or SEC, on October 8, 2009, or Amendment No. 4).
2.2	Amendment No. 1 to Agreement and Plan of Merger, dated as of August 17, 2009, by and among Capitol Acquisition Corp., Two Harbors Investment Corp., Two Harbors Merger Corp. and Pine River Capital Management L.P. (incorporated by reference to Annex A-2 filed with Amendment No. 4).
2.3	Amendment No. 2 to Agreement and Plan of Merger, dated as of September 20, 2009, by and among Capitol Acquisition Corp., Two Harbors Investment Corp., Two Harbors Merger Corp. and Pine River Capital Management L.P. (incorporated by reference to Annex A-3 filed with Amendment No. 4).
3.1	Articles of Amendment and Restatement of Two Harbors Investment Corp. (incorporated by reference to Exhibit 99.1 to Annex B filed with Amendment No. 4).
3.2	Articles of Amendment to the Articles of Amendment and Restatement of Two Harbors Investment Corp. (incorporated by reference to Exhibit 99.1 to the Registrant's Current Report on Form 8-K filed with the SEC on December 19, 2012).
3.3	Amended and Restated Bylaws of Two Harbors Investment Corp. (incorporated by reference to Exhibit 3.3 to the Registrant's Current Report on Form 8-K filed with the SEC on November 13, 2015).
4.1	Specimen Common Stock Certificate of Two Harbors Investment Corp. (incorporated by reference to Exhibit 4.2 to Amendment No. 4).
4.2	Indenture, dated as of January 19, 2017, between Two Harbors Investment Corp. and The Bank of New York Mellon Trust Company, N.A. (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K file with the SEC on January 19, 2017).
4.3	Supplemental Indenture, dated as of January 19, 2017, between Two Harbors Investment Corp. and The Bank of New York Mellon Trust Company, N.A. (incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K file with the SEC on January 19, 2017).
10.1	Management Agreement (incorporated by reference to Exhibit 10.1 to the Registrant's Form 10-K for the year ended December 31, 2009, filed with the SEC on March 4, 2010).
10.2	Amendment to Management Agreement (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed with the SEC on December 19, 2012).
10.3	Second Amendment to Management Agreement (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed with the SEC on November 7, 2014).
10.4	Shared Facilities and Services Agreement (incorporated by reference to Exhibit 10.4 to the Registrant's Form 10-K for the year ended December 31, 2009, filed with the SEC on March 4, 2010).
10.5*	Second Restated 2009 Equity Incentive Plan (incorporated by reference to Appendix A to the Registrant's Definitive Proxy Statement filed with the SEC on March 26, 2015).
10.6*	Form of Restricted Stock Agreement under the Second Restated 2009 Equity Incentive Plan (incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q filed with the SEC on August 5, 2015).
10.7*	Form of Phantom Share Award (incorporated by reference to Exhibit 10.10.2 to Amendment No. 4).
10.8	Form of Indemnification Agreement (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed with the SEC on November 19, 2009).

<u>Exhibit Number</u>	<u>Exhibit Index</u>
21.1	Subsidiaries of registrant. (filed herewith)
23.1	Consent of Independent Registered Public Accounting Firm of Ernst & Young LLP. (filed herewith)
24.1	Powers of Attorney (included on signature page).
31.1	Certification of the Chief Executive Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. (filed herewith)
31.2	Certification of the Chief Financial Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. (filed herewith)
32.1	Certification of the Chief Executive Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. (filed herewith)
32.2	Certification of the Chief Financial Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. (filed herewith)
101	Financial statements from the Annual Report on Form 10-K of Two Harbors Investment Corp. for the year ended December 31, 2016, formatted in XBRL: (i) the Consolidated Balance Sheets, (ii) the Consolidated Statements of Comprehensive Income (Loss), (iii) the Consolidated Statements of Stockholders' Equity, (iv) the Consolidated Statements of Cash Flows, and (v) the Notes to the Consolidated Financial Statements. (filed herewith)

* Management or compensatory agreement

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Dated: February 28, 2017

TWO HARBORS INVESTMENT CORP.
By: /s/ Thomas E. Siering
Thomas E. Siering
Chief Executive Officer, President and
Director (principal executive officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Each of the undersigned hereby appoints Thomas E. Siering and Brad Farrell, and each of them (with full power to act alone), as attorneys and agents for the undersigned, with full power of substitution, for and in the name, place and stead of the undersigned, to sign and file with the Securities and Exchange Commission under the Securities Act of 1934, any and all amendments and exhibits to this annual report on Form 10-K and any and all applications, instruments, and other documents to be filed with the Securities and Exchange Commission pertaining to this annual report on Form 10-K or any amendments thereto, with full power and authority to do and perform any and all acts and things whatsoever requisite and necessary or desirable.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Thomas E. Siering</u> Thomas E. Siering	Chief Executive Officer, President and Director (principal executive officer)	February 28, 2017
<u>/s/ Brad Farrell</u> Brad Farrell	Chief Financial Officer and Treasurer (principal financial officer)	February 28, 2017
<u>/s/ Mary Risky</u> Mary Risky	Chief Accounting Officer (principal accounting officer)	February 28, 2017
<u>/s/ Brian C. Taylor</u> Brian C. Taylor	Chairman of the Board of Directors	February 28, 2017
<u>/s/ Stephen G. Kasnet</u> Stephen G. Kasnet	Director	February 28, 2017
<u>/s/ E. Spencer Abraham</u> E. Spencer Abraham	Director	February 28, 2017
<u>/s/ James J. Bender</u> James J. Bender	Director	February 28, 2017
<u>/s/ Lisa A. Pollina</u> Lisa A. Pollina	Director	February 28, 2017
<u>/s/ William Roth</u> William Roth	Chief Investment Officer and Director	February 28, 2017
<u>/s/ W. Reid Sanders</u> W. Reid Sanders	Director	February 28, 2017
<u>/s/ Hope B. Woodhouse</u> Hope B. Woodhouse	Director	February 28, 2017

TWO HARBORS INVESTMENT CORP.

Subsidiaries of Registrant

The following entities comprise the direct or indirect wholly owned subsidiaries of Two Harbors Investment Corp. as of the date of this filing:

Name	State of Organization	% of Securities Owned
Agate Bay Residential Mortgage Securities LLC	Delaware	100%
Capitol Acquisition Corp.	Delaware	100%
Matrix Financial Services Corporation	Arizona	100%
North Shore Assets LLC	Delaware	100%
North Shore Mortgage Opportunity LLC	Delaware	100%
TH Asset Holdings LLC	Delaware	100%
TH Asset Investment Corp.	Delaware	100%
TH Commercial Holdings LLC	Delaware	100%
TH Commercial Investment Corp.	Delaware	100%
TH Commercial JPM LLC	Delaware	100%
TH Commercial Mortgage LLC	Delaware	100%
TH Commercial MS I, LLC	Delaware	100%
TH Commercial MS II, LLC	Delaware	100%
TH Commercial UBS LLC	Delaware	100%
TH Insurance Holdings Company LLC	Missouri	100%
TH TRS Corp.	Delaware	100%
THCM Asset Holdings LLC	Delaware	100%
Two Harbors Asset I, LLC	Delaware	100%
Two Harbors Asset II, LLC	Delaware	100%
Two Harbors Operating Company LLC	Delaware	100%

Consent of Independent Registered Public Accounting Firm

We consent to incorporation by reference in the following Registration Statements:

- Registration Statements (Form S-8 No. 333-204220 and 333-188875) pertaining to Two Harbors Investment Corp.'s Equity Incentive Plan,
- Registration Statement (Form S-3 No. 333-215177) pertaining to the Two Harbors Investment Corp. Dividend Reinvestment and Direct Stock Purchase Plan, and
- Registration Statement (Form S-3 No. 333-204216) pertaining to Two Harbors Investment Corp.'s registration of common stock, preferred stock, debt securities, and depositary shares,

of our reports dated February 28, 2017, with respect to the consolidated financial statements and schedule of Two Harbors Investment Corp., and the effectiveness of internal control over financial reporting of Two Harbors Investment Corp., included in this Annual Report on Form 10-K for the year ended December 31, 2016.

/s/ Ernst & Young LLP
Minneapolis, Minnesota
February 28, 2017

**CHIEF EXECUTIVE OFFICER CERTIFICATION PURSUANT TO SECTION 302 OF
THE SARBANES-OXLEY ACT OF 2002**

I, Thomas E. Siering, certify that:

1. I have reviewed this Annual Report on Form 10-K of Two Harbors Investment Corp.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 28, 2017

/s/ Thomas E. Siering

Thomas E. Siering

Chief Executive Officer and President

**CHIEF FINANCIAL OFFICER CERTIFICATION PURSUANT TO SECTION 302 OF
THE SARBANES-OXLEY ACT OF 2002**

I, Brad Farrell, certify that:

1. I have reviewed this Annual Report on Form 10-K of Two Harbors Investment Corp.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 28, 2017

/s/ Brad Farrell

Brad Farrell

Chief Financial Officer and Treasurer

CERTIFICATION

Pursuant to 18 U.S.C. §1350, the undersigned officer of Two Harbors Investment Corp. (the "Registrant") hereby certifies that the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2016 (the "Annual Report") fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934 and that the information contained in the Annual Report fairly presents, in all material respects, the financial condition and results of operations of the Registrant.

Date: February 28, 2017

/s/ Thomas E. Siering

Thomas E. Siering

Chief Executive Officer and President

The foregoing certification is being furnished solely pursuant to 18 U.S.C. §1350 and is not being filed as part of the Annual Report or as a separate disclosure document.

CERTIFICATION

Pursuant to 18 U.S.C. §1350, the undersigned officer of Two Harbors Investment Corp. (the "Registrant") hereby certifies that the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2016 (the "Annual Report") fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934 and that the information contained in the Annual Report fairly presents, in all material respects, the financial condition and results of operations of the Registrant.

Date: February 28, 2017

/s/ Brad Farrell

Brad Farrell

Chief Financial Officer and Treasurer

The foregoing certification is being furnished solely pursuant to 18 U.S.C. §1350 and is not being filed as part of the Annual Report or as a separate disclosure document.