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

FORM 10-Q

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the Quarterly Period Ended: September 30, 2017

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)

**590 Madison Avenue, 36th Floor
New York, New York**

(Address of Principal Executive Offices)

27-0312904

(I.R.S. Employer
Identification No.)

10022

(Zip Code)

(612) 629-2500

(Registrant's Telephone Number, Including Area Code)

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

Large accelerated filer

Accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company)

Smaller reporting company

Emerging growth company

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

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

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

As of November 7, 2017 there were 174,489,081 shares of outstanding common stock, par value \$.01 per share, issued and outstanding.

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PART I. FINANCIAL INFORMATION
Item 1. Financial Statements TWO HARBORS INVESTMENT CORP.
CONDENSED CONSOLIDATED BALANCE SHEETS (unaudited)
(in thousands, except share data)

ASSETS	September 30, 2017	December 31, 2016
Available-for-sale securities, at fair value	\$ 20,199,094	\$ 13,128,857
Commercial real estate assets	2,171,344	1,412,543
Mortgage servicing rights, at fair value	930,613	693,815
Residential mortgage loans held-for-investment in securitization trusts, at fair value	3,031,191	3,271,317
Residential mortgage loans held-for-sale, at fair value	31,197	40,146
Cash and cash equivalents	539,367	406,883
Restricted cash	343,813	408,312
Accrued interest receivable	85,445	62,751
Due from counterparties	26,445	60,380
Derivative assets, at fair value	238,305	324,182
Other assets	206,960	302,870
Total Assets ⁽¹⁾	\$ 27,803,774	\$ 20,112,056
LIABILITIES AND EQUITY		
Liabilities		
Repurchase agreements	\$ 18,297,392	\$ 9,316,351
Collateralized borrowings in securitization trusts, at fair value	2,785,413	3,037,196
Federal Home Loan Bank advances	1,998,762	4,000,000
Revolving credit facilities	40,000	70,000
Convertible senior notes	282,543	—
Derivative liabilities, at fair value	11,312	12,501
Due to counterparties	45,297	111,884
Dividends payable	102,799	83,437
Other liabilities	108,875	79,576
Total Liabilities ⁽¹⁾	23,672,393	16,710,945
Stockholders' Equity		
Preferred stock, par value \$0.01 per share; 50,000,000 shares authorized:		
8.125% Series A cumulative redeemable: 5,750,000 and 0 shares issued and outstanding, respectively (\$143,750 liquidation preference)	138,872	—
7.625% Series B cumulative redeemable: 11,500,000 and 0 shares issued and outstanding, respectively (\$287,500 liquidation preference)	278,094	—
Common stock, par value \$0.01 per share; 450,000,000 shares authorized and 174,489,356 and 173,826,163 shares issued and outstanding, respectively	3,490	3,477
Additional paid-in capital	3,658,835	3,659,973
Accumulated other comprehensive income	423,042	199,227
Cumulative earnings	2,220,700	2,038,033
Cumulative distributions to stockholders	(2,781,469)	(2,499,599)
Total Stockholders' Equity	3,941,564	3,401,111
Noncontrolling interest	189,817	—
Total Equity	4,131,381	3,401,111
Total Liabilities and Equity	\$ 27,803,774	\$ 20,112,056

(1) The condensed 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 September 30, 2017 and December 31, 2016, assets of the VIEs totaled \$3,094,462 and \$3,336,292, and liabilities of the VIEs totaled \$2,804,685 and \$3,058,278, respectively. See Note 3 - *Variable Interest Entities* for additional information.

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

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

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2017	2016	2017	2016
Interest income:				
Available-for-sale securities	\$ 164,169	\$ 111,393	\$ 449,908	\$ 292,333
Commercial real estate assets	30,595	15,907	80,005	40,279
Residential mortgage loans held-for-investment in securitization trusts	29,865	33,495	92,319	100,765
Residential mortgage loans held-for-sale	479	7,627	1,380	19,789
Cash and cash equivalents	1,408	440	3,087	1,235
Total interest income	226,516	168,862	626,699	454,401
Interest expense:				
Repurchase agreements	71,754	27,056	158,065	65,782
Collateralized borrowings in securitization trusts	23,970	26,422	74,199	70,965
Federal Home Loan Bank advances	10,317	6,744	30,554	18,804
Revolving credit facilities	701	128	1,727	128
Convertible senior notes	4,745	—	13,157	—
Total interest expense	111,487	60,350	277,702	155,679
Net interest income	115,029	108,512	348,997	298,722
Other-than-temporary impairments:				
Total other-than-temporary impairment losses	—	(1,015)	(429)	(1,822)
Other income (loss):				
Gain (loss) on investment securities	5,618	28,290	(15,485)	66,095
(Loss) gain on interest rate swap and swaption agreements	(207)	5,584	(66,990)	(132,608)
Loss on other derivative instruments	(18,924)	(12,028)	(66,328)	(44,064)
Servicing income	57,387	38,708	148,468	108,657
Loss on servicing asset	(29,245)	(33,451)	(90,440)	(211,426)
Gain (loss) on residential mortgage loans held-for-sale	355	(889)	2,149	17,648
Other income (loss)	8,076	5,757	18,904	(977)
Total other income (loss)	23,060	31,971	(69,722)	(196,675)
Expenses:				
Management fees	13,276	11,387	36,518	35,268
Servicing expenses	8,893	9,073	26,116	24,510
Securitization deal costs	—	2,080	—	6,241
Other operating expenses	16,526	14,780	51,934	47,280
Restructuring charges	—	1,189	—	1,189
Total expenses	38,695	38,509	114,568	114,488
Income (loss) before income taxes	99,394	100,959	164,278	(14,263)
Benefit from income taxes	(5,344)	(16,827)	(21,103)	(26,138)
Net income	104,738	117,786	185,381	11,875
Net income attributable to noncontrolling interest	2,674	—	2,714	—
Net income attributable to Two Harbors Investment Corp.	102,064	117,786	182,667	11,875
Dividends on preferred stock	8,888	—	13,173	—
Net income attributable to common stockholders	\$ 93,176	\$ 117,786	\$ 169,494	\$ 11,875

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

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

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2017	2016	2017	2016
Basic earnings per weighted average common share	\$ 0.53	\$ 0.68	\$ 0.97	\$ 0.07
Diluted earnings per weighted average common share	\$ 0.52	\$ 0.68	\$ 0.97	\$ 0.07
Dividends declared per common share	\$ 0.52	\$ 0.46	\$ 1.54	\$ 1.38
Weighted average number of shares of common stock:				
Basic	174,488,296	173,813,613	174,415,232	174,109,117
Diluted	188,907,356	173,813,613	174,415,232	174,109,117
Comprehensive income:				
Net income	\$ 104,738	\$ 117,786	\$ 185,381	\$ 11,875
Other comprehensive income, net of tax:				
Unrealized gain on available-for-sale securities	68,433	18,746	223,823	179,382
Other comprehensive income	68,433	18,746	223,823	179,382
Comprehensive income	173,171	136,532	409,204	191,257
Comprehensive income attributable to noncontrolling interest	2,682	—	2,724	—
Comprehensive income attributable to Two Harbors Investment Corp.	170,489	136,532	406,480	191,257
Dividends on preferred stock	8,888	—	13,173	—
Comprehensive income attributable to common stockholders	\$ 161,601	\$ 136,532	\$ 393,307	\$ 191,257

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

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

	Series A Preferred Stock		Series B Preferred Stock		Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Income	Cumulative Earnings	Cumulative Distributions to Stockholders	Total Stockholders' Equity	Non-controlling Interest	Total Equity
	Shares	Par Value	Shares	Par Value	Shares	Par Value							
Balance, December 31, 2015	—	\$ —	—	\$ —	176,953,404	\$ 3,539	\$ 3,705,519	\$ 359,061	\$ 1,684,755	\$ (2,176,313)	\$ 3,576,561	\$ —	\$ 3,576,561
Net income	—	—	—	—	—	—	—	—	11,875	—	11,875	—	11,875
Other comprehensive income before reclassifications, net of tax expense of \$0.2 million	—	—	—	—	—	—	—	232,212	—	—	232,212	—	232,212
Amounts reclassified from accumulated other comprehensive income, net of tax benefit of \$6.4 million	—	—	—	—	—	—	—	(52,830)	—	—	(52,830)	—	(52,830)
Other comprehensive income, net of tax benefit of \$6.2 million	—	—	—	—	—	—	—	179,382	—	—	179,382	—	179,382
Issuance of common stock, net of offering costs	—	—	—	—	21,882	—	356	—	—	—	356	—	356
Repurchase of common stock	—	—	—	—	(4,010,000)	(80)	(61,227)	—	—	—	(61,307)	—	(61,307)
Common dividends declared	—	—	—	—	—	—	—	—	—	(239,849)	(239,849)	—	(239,849)
Non-cash equity award compensation	—	—	—	—	852,458	17	11,206	—	—	—	11,223	—	11,223
Balance, September 30, 2016	—	\$ —	—	\$ —	173,817,744	\$ 3,476	\$ 3,655,854	\$ 538,443	\$ 1,696,630	\$ (2,416,162)	\$ 3,478,241	\$ —	\$ 3,478,241
Balance, December 31, 2016	—	\$ —	—	\$ —	173,826,163	\$ 3,477	\$ 3,659,973	\$ 199,227	\$ 2,038,033	\$ (2,499,599)	\$ 3,401,111	\$ —	\$ 3,401,111
Net income	—	—	—	—	—	—	—	—	182,667	—	182,667	2,714	185,381
Other comprehensive income before reclassifications, net of tax expense of \$35.7 million	—	—	—	—	—	—	—	215,994	—	—	215,994	10	216,004
Amounts reclassified from accumulated other comprehensive income, net of tax benefit of \$2.7 million	—	—	—	—	—	—	—	7,815	—	—	7,815	—	7,815
Other comprehensive income, net of tax expense of \$33.0 million	—	—	—	—	—	—	—	223,809	—	—	223,809	10	223,819
Issuance of Granite Point Mortgage Trust Inc. stock, net of offering costs	—	—	—	—	—	—	(13,777)	6	—	—	(13,771)	195,646	181,875
Acquisition of noncontrolling interests	—	—	—	—	—	—	(69)	—	—	—	(69)	(5,376)	(5,445)
Issuance of preferred stock, net of offering costs	5,750,000	138,872	11,500,000	278,094	—	—	—	—	—	—	416,966	—	416,966
Issuance of common stock, net of offering costs	—	—	—	—	19,688	—	332	—	—	—	332	—	332
Preferred dividends declared	—	—	—	—	—	—	—	—	—	(13,173)	(13,173)	—	(13,173)
Common dividends declared	—	—	—	—	—	—	—	—	—	(268,697)	(268,697)	(3,177)	(271,874)
Non-cash equity award compensation	—	—	—	—	643,505	13	12,376	—	—	—	12,389	—	12,389
Balance, September 30, 2017	<u>5,750,000</u>	<u>\$ 138,872</u>	<u>11,500,000</u>	<u>\$ 278,094</u>	<u>174,489,356</u>	<u>\$ 3,490</u>	<u>\$ 3,658,835</u>	<u>\$ 423,042</u>	<u>\$ 2,220,700</u>	<u>\$ (2,781,469)</u>	<u>\$ 3,941,564</u>	<u>\$ 189,817</u>	<u>\$ 4,131,381</u>

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

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

	Nine Months Ended September 30,	
	2017	2016
Cash Flows From Operating Activities:		
Net income	\$ 185,381	\$ 11,875
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	39,949	29,469
Amortization of deferred debt issuance costs on convertible senior notes	429	—
Other-than-temporary impairment losses	429	1,822
Realized and unrealized losses (gains) on investment securities, net	15,485	(66,095)
Loss on servicing asset	90,440	211,426
Gain on residential mortgage loans held-for-sale	(2,149)	(17,648)
(Gain) loss on residential mortgage loans held-for-investment and collateralized borrowings in securitization trusts	(14,884)	5,173
(Gain) loss on termination and option expiration of interest rate swaps and swaptions	(68,855)	119,548
Unrealized loss (gain) on interest rate swaps and swaptions	124,978	(5,080)
Unrealized loss on other derivative instruments	37,586	2,025
Equity based compensation	12,389	11,223
Depreciation of fixed assets	776	981
Purchases of residential mortgage loans held-for-sale	(567)	(1,159,782)
Proceeds from sales of residential mortgage loans held-for-sale	3,928	95,331
Proceeds from repayment of residential mortgage loans held-for-sale	4,799	117,092
Net change in assets and liabilities:		
Increase in accrued interest receivable	(22,694)	(17,119)
Increase in deferred income taxes, net	(21,505)	(24,581)
Decrease in income taxes receivable	1,412	3,667
Increase in prepaid and fixed assets	(950)	(62)
(Increase) decrease in other receivables	(1,070)	5,721
Decrease (increase) in servicing advances	5,489	(8,965)
Increase in accrued interest payable	33,227	11,084
Increase (decrease) in income taxes payable	142	(70)
Decrease in accrued expenses and other liabilities	(5,425)	(2,923)
Net cash provided by (used in) operating activities	\$ 418,740	\$ (675,888)

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

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

	Nine Months Ended September 30,	
	2017	2016
Cash Flows From Investing Activities:		
Purchases of available-for-sale securities	\$ (13,677,423)	\$ (13,734,884)
Proceeds from sales of available-for-sale securities	5,726,616	6,567,992
Principal payments on available-for-sale securities	1,075,961	910,386
(Purchases) short sales of derivative instruments, net	(93,812)	(13,953)
Proceeds from sales (payments for termination) of derivative instruments, net	84,791	3,209
Proceeds from repayment of residential mortgage loans held-for-investment in securitization trusts	285,695	649,134
Originations, acquisitions and additional fundings of commercial real estate assets, net of deferred fees	(759,905)	(463,680)
Proceeds from repayment of commercial real estate assets	6,655	15,296
Purchases of mortgage servicing rights, net of purchase price adjustments	(327,341)	(208,474)
Proceeds from sales of mortgage servicing rights	132	41,844
Purchases of Federal Home Loan Bank stock	—	(11,206)
Redemptions of Federal Home Loan Bank stock	82,681	—
(Decrease) increase in due to counterparties, net	(32,652)	4,996
Net cash used in investing activities	(7,628,602)	(6,239,340)
Cash Flows From Financing Activities:		
Proceeds from repurchase agreements	115,034,068	70,805,165
Principal payments on repurchase agreements	(106,053,027)	(65,176,066)
Proceeds from issuance of collateralized borrowings in securitization trusts	—	1,875,371
Principal payments on collateralized borrowings in securitization trusts	(282,468)	(568,485)
Proceeds from Federal Home Loan Bank advances	—	215,000
Principal payments on Federal Home Loan Bank advances	(2,001,238)	—
Proceeds from revolving credit facilities	123,000	30,000
Principal payments on revolving credit facilities	(153,000)	—
Proceeds from convertible senior notes	282,469	—
Proceeds from issuance of preferred stock, net of offering costs	416,966	—
Proceeds from issuance of common stock, net of offering costs	332	356
Proceeds from issuance of Granite Point Mortgage Trust Inc. stock, net of offering costs	181,875	—
Acquisition of noncontrolling interests	(5,445)	—
Repurchase of common stock	—	(61,307)
Dividends paid on preferred stock	(4,285)	—
Dividends paid on common stock	(261,400)	(251,909)
Net cash provided by financing activities	7,277,847	6,868,125
Net increase (decrease) in cash, cash equivalents and restricted cash	67,985	(47,103)
Cash, cash equivalents and restricted cash at beginning of period	815,195	1,000,393
Cash, cash equivalents and restricted cash at end of period	\$ 883,180	\$ 953,290

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

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

	Nine Months Ended	
	September 30,	
	2017	2016
Supplemental Disclosure of Cash Flow Information:		
Cash paid for interest	\$ 169,464	\$ 77,142
Cash received for taxes	\$ (1,152)	\$ (5,154)
Noncash Activities:		
Transfers of residential mortgage loans held-for-sale to residential mortgage loans held-for-investment in securitization trusts	\$ —	\$ 1,031,707
Transfers of residential mortgage loans held-for-sale to other receivables for foreclosed government-guaranteed loans	\$ 2,909	\$ 14,200
Transfer of fair value of mortgage servicing rights to fair value of Ginnie Mae residential mortgage loans held-for-sale upon buyout	\$ 9	\$ 5,973
Additions to mortgage servicing rights due to sale of residential mortgage loans held-for-sale	\$ 20	\$ 764
Dividends declared but not paid at end of period	\$ 102,799	\$ 79,956
Reconciliation of residential mortgage loans held-for-sale:		
Residential mortgage loans held-for-sale at beginning of period	\$ 40,146	\$ 811,431
Purchases of residential mortgage loans held-for-sale	567	1,159,782
Transfers to residential mortgage loans held-for-investment in securitization trusts	—	(1,031,707)
Transfers to other receivables for foreclosed government-guaranteed loans	(2,909)	(14,200)
Transfer of fair value of mortgage servicing rights to fair value of Ginnie Mae residential mortgage loans held-for-sale upon buyout	(9)	(5,973)
Proceeds from sales of residential mortgage loans held-for-sale	(3,928)	(95,331)
Proceeds from repayment of residential mortgage loans held-for-sale	(4,799)	(117,092)
Realized and unrealized gains on residential mortgage loans held-for-sale	2,129	16,264
Residential mortgage loans held-for-sale at end of period	\$ 31,197	\$ 723,174

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

TWO HARBORS INVESTMENT CORP.

Notes to the Condensed Consolidated Financial Statements (unaudited)

Note 1. Organization and Operations

Two Harbors Investment Corp., or the Company, is a Maryland corporation investing in, financing and managing Agency residential mortgage-backed securities, or Agency RMBS, non-Agency securities, 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.

On June 28, 2017, the Company completed the contribution of its portfolio of commercial real estate assets to Granite Point Mortgage Trust Inc., or Granite Point, a newly organized Maryland corporation intended to qualify as a REIT, externally managed and advised by Pine River, and focused on directly originating, investing in and managing senior commercial mortgage loans and other debt and debt-like commercial real estate investments. The Company contributed its equity interests in its wholly owned subsidiary, TH Commercial Holdings LLC, to Granite Point and, in exchange for its contribution, received approximately 33.1 million shares of common stock of Granite Point, which represented approximately 76.5% of the outstanding stock of Granite Point upon completion of the initial public offering, or IPO, of its common stock on June 28, 2017. Subsequent to the end of the third quarter of 2017, on November 1, 2017, the Company distributed, on a pro rata basis, the 33.1 million shares of Granite Point common stock acquired in connection with the contribution to stockholders holding shares of Two Harbors common stock outstanding as of the close of business on October 20, 2017.

Note 2. Basis of Presentation and Significant Accounting Policies

Consolidation and Basis of Presentation

The interim unaudited condensed consolidated financial statements of the Company have been prepared in accordance with the rules and regulations of the Securities and Exchange Commission, or SEC. Certain information and note disclosures normally included in financial statements prepared in accordance with U.S. generally accepted accounting principles, or U.S. GAAP, have been condensed or omitted according to such SEC rules and regulations. However, management believes that the disclosures included in these interim condensed consolidated financial statements are adequate to make the information presented not misleading. Certain prior period amounts have been reclassified to conform to the current period presentation. All per share amounts, common shares outstanding and restricted shares for the three and nine months ended September 30, 2017 and all prior periods reflect the Company's one-for-two reverse stock split, which was effected on November 1, 2017 at 5:01 p.m. Eastern Time (refer to Note 20 - *Equity* for additional information). The accompanying condensed consolidated financial statements should be read in conjunction with the financial statements and notes thereto included in the Company's Annual Report on Form 10-K for the year ended December 31, 2016. In the opinion of management, all normal and recurring adjustments necessary to present fairly the financial condition of the Company at September 30, 2017 and results of operations for all periods presented have been made. The results of operations for the three and nine months ended September 30, 2017 should not be construed as indicative of the results to be expected for future periods or the full year.

TWO HARBORS INVESTMENT CORP.

Notes to the Condensed Consolidated Financial Statements (unaudited)

The condensed consolidated financial statements of the Company have been prepared on the accrual basis of accounting in accordance with U.S. GAAP. The preparation of financial statements in conformity with U.S. GAAP requires us to make a number of significant estimates and assumptions. These estimates 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 and disclosure of contingent assets and liabilities as of the date of the condensed 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.

The condensed consolidated financial statements of the Company include the accounts of all subsidiaries; inter-company accounts and transactions have been eliminated. 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.

Due to its controlling ownership interest in Granite Point during the periods presented, the Company consolidates Granite Point on its financial statements and reflects noncontrolling interest for the portion of equity and comprehensive income not attributable to the Company. During this consolidation period, the Company's financial condition and results of operations reflect all of Granite Point's commercial real estate investments and financing. No other subsidiary of the Company invests in, finances or manages commercial real estate debt and related instruments. Effective November 1, 2017 (the date the 33.1 million shares of Granite Point common stock were distributed to the Company's common stockholders), the Company no longer has a controlling interest in Granite Point and, therefore, will prospectively deconsolidate the financial condition and results of operations Granite Point and its subsidiaries from its financial statements.

Significant Accounting Policies

Included in Note 2 to the Consolidated Financial Statements of the Company's 2016 Annual Report on Form 10-K is a summary of the Company's significant accounting policies. Provided below is a summary of additional accounting policies that are significant to the Company's consolidated financial condition and results of operations for the nine months ended September 30, 2017.

Convertible Senior Notes

Convertible senior notes include unsecured convertible debt that are carried at their unpaid principal balance, net of any unamortized deferred issuance costs, on the Company's condensed consolidated balance sheet. Interest on the notes is payable semiannually until such time the notes mature or are converted into shares of the Company's common stock.

Noncontrolling Interest

Due to its controlling ownership interest in Granite Point during the periods presented, the Company consolidates Granite Point on its financial statements and reflects noncontrolling interest for the portion of Granite Point equity and comprehensive income not attributable to the Company. Noncontrolling interest is presented as a separate component of equity on the condensed consolidated balance sheets. In addition, the presentation of both net income and comprehensive income on the condensed consolidated statements of comprehensive income attributes earnings (losses) to the Company's stockholders (controlling interest) and noncontrolling interests.

Pursuant to Accounting Standards Codification (ASC) 810, *Consolidation*, changes in a parent's ownership interest (and transactions with noncontrolling interest stockholders in the subsidiary) while the parent retains its controlling interest in its subsidiary should be accounted for as equity transactions. The Company adjusts the carrying amount of noncontrolling interest to reflect (i) changes in its ownership interest in Granite Point and (ii) the portion of comprehensive income and dividends declared by Granite Point that are not attributable to the Company, with the offset to equity.

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Earnings Per Share

Basic and diluted earnings per share are computed by dividing net income attributable to common stockholders 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. If the assumed conversion of convertible notes into common shares is dilutive, diluted earnings per share is adjusted by adding back the periodic interest expense (net of any tax effects) associated with dilutive convertible notes to net income attributable to common stockholders and adding the shares issued in an assumed conversion to the diluted weighted average share count. All per share amounts, common shares outstanding and restricted shares for the three and nine months ended September 30, 2017 and all prior periods reflect the Company's one-for-two reverse stock split, which was effected on November 1, 2017 at 5:01 p.m. Eastern Time (refer to Note 20 - *Equity* for additional information).

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 by 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 condensed consolidated balance sheets. Separately, the Company presents cash collateral subject to such arrangements on a net basis, based on counterparty, in its condensed consolidated balance sheets. However, the Company does not offset financial assets and liabilities with the associated cash collateral on its condensed 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 condensed consolidated balance sheets as of September 30, 2017 and December 31, 2016:

September 30, 2017						
(in thousands)	Gross Amounts of Recognized Assets (Liabilities)	Gross Amounts Offset in the Condensed Consolidated Balance Sheets	Net Amounts of Assets (Liabilities) Presented in the Condensed Consolidated Balance Sheets	Gross Amounts Not Offset with Financial Assets (Liabilities) in the Condensed Consolidated Balance Sheets (1)		
				Financial Instruments	Cash Collateral (Received) Pledged	Net Amount
Assets						
Derivative assets	\$ 279,300	\$ (40,995)	\$ 238,305	\$ (11,312)	\$ —	\$ 226,993
Total Assets	\$ 279,300	\$ (40,995)	\$ 238,305	\$ (11,312)	\$ —	\$ 226,993
Liabilities						
Repurchase agreements	\$ (18,297,392)	\$ —	\$ (18,297,392)	\$ 18,297,392	\$ —	\$ —
Derivative liabilities	(52,307)	40,995	(11,312)	11,312	—	—
Total Liabilities	\$ (18,349,699)	\$ 40,995	\$ (18,308,704)	\$ 18,308,704	\$ —	\$ —

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Notes to the Condensed Consolidated Financial Statements (unaudited)

December 31, 2016

(in thousands)	Gross Amounts of Recognized Assets (Liabilities)	Gross Amounts Offset in the Condensed Consolidated Balance Sheets	Net Amounts of Assets (Liabilities) Presented in the Condensed Consolidated Balance Sheets	Gross Amounts Not Offset with Financial Assets (Liabilities) in the Condensed Consolidated Balance Sheets ⁽¹⁾		
				Financial Instruments	Cash Collateral (Received) Pledged	Net Amount
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	\$ (9,463,192)	\$ 64,340	\$ (9,398,852)	\$ 9,398,852	\$ —	\$ —

(1) Amounts presented are limited in total to the net amount of assets or liabilities presented in the condensed 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 condensed 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 evaluated the new guidance and determined that interest income, gains and losses on financial instruments and income from servicing residential mortgage loans are outside the scope of ASC 606, *Revenues from Contracts with Customers*. For income from servicing residential mortgage loans, the Company considered that the FASB Transition Resource Group members generally agreed that an entity should look to ASC 860, *Transfers and Servicing*, to determine the appropriate accounting for these fees and ASC 606 contains a scope exception for contracts that fall under ASC 860. As a result, the Company has determined that the adoption of this ASU will not have a material impact on the Company's financial condition, results of operations or financial statement disclosures.

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. Early adoption of this ASU did not have an impact on the Company's financial condition, results of operations or financial statement disclosures.

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Notes to the Condensed Consolidated Financial Statements (unaudited)

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, results of operations or financial statement disclosures.

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 to determine the impact it may have on its condensed consolidated financial statements, which at the date of adoption, is expected to increase the allowance for credit losses with a resulting negative adjustment to retained earnings, with offsetting impacts to accumulated other comprehensive income.

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. Early adoption of these ASUs did not impact the Company's financial condition or results of operations but impacted the presentation of the statements of cash flows and related footnote disclosures. The Company included restricted cash of \$343.8 million, \$408.3 million, \$264.9 million and \$262.6 million as of September 30, 2017, December 31, 2016, September 30, 2016 and December 31, 2015, respectively, with cash and cash equivalents, as shown on the condensed 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 condensed consolidated financial statements during subsequent reporting periods.

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The following table presents a summary of the assets and liabilities of all consolidated trusts as reported on the condensed consolidated balance sheets as of September 30, 2017 and December 31, 2016:

(in thousands)	September 30, 2017	December 31, 2016
Residential mortgage loans held-for-investment in securitization trusts	\$ 3,031,191	\$ 3,271,317
Commercial real estate assets	45,889	45,885
Accrued interest receivable	17,382	19,090
Total Assets	\$ 3,094,462	\$ 3,336,292
Collateralized borrowings in securitization trusts	\$ 2,785,413	\$ 3,037,196
Accrued interest payable	7,894	8,708
Other liabilities	11,378	12,374
Total Liabilities	\$ 2,804,685	\$ 3,058,278

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 securities, which are classified within available-for-sale securities, at fair value on the condensed consolidated balance sheets. As of September 30, 2017 and December 31, 2016, the carrying value, which also represents the maximum exposure to loss, of all non-Agency securities in unconsolidated VIEs was \$2.6 billion and \$1.9 billion, respectively.

Note 4. Available-for-Sale Securities, at Fair Value

The Company holds AFS investment securities which are carried at fair value on the condensed 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 September 30, 2017 and December 31, 2016:

(in thousands)	September 30, 2017	December 31, 2016
Agency		
Federal National Mortgage Association	\$ 13,057,102	\$ 8,274,507
Federal Home Loan Mortgage Corporation	3,972,963	2,742,630
Government National Mortgage Association	524,306	209,337
Non-Agency	2,644,723	1,902,383
Total available-for-sale securities	\$ 20,199,094	\$ 13,128,857

At September 30, 2017 and December 31, 2016, the Company pledged AFS securities with a carrying value of \$20.0 billion and \$13.1 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 September 30, 2017 and December 31, 2016, the Company did not have any securities purchased from and financed with the same counterparty that did not meet the conditions of ASC 860, to be considered linked transactions and, therefore, classified as derivatives.

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The following tables present the amortized cost and carrying value (which approximates fair value) of AFS securities by collateral type as of September 30, 2017 and December 31, 2016:

(in thousands)	September 30, 2017		
	Agency	Non-Agency	Total
Face Value	\$ 19,303,065	\$ 3,538,252	\$ 22,841,317
Unamortized premium	1,038,789	—	1,038,789
Unamortized discount			
Designated credit reserve	—	(525,687)	(525,687)
Net, unamortized	(2,789,785)	(816,260)	(3,606,045)
Amortized Cost	17,552,069	2,196,305	19,748,374
Gross unrealized gains	120,236	451,182	571,418
Gross unrealized losses	(117,934)	(2,764)	(120,698)
Carrying Value	\$ 17,554,371	\$ 2,644,723	\$ 20,199,094

(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	(2,758,445)	(808,975)	(3,567,420)
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	\$ 11,226,474	\$ 1,902,383	\$ 13,128,857

The following tables present the carrying value of the Company's AFS securities by rate type as of September 30, 2017 and December 31, 2016:

(in thousands)	September 30, 2017		
	Agency	Non-Agency	Total
Adjustable Rate	\$ 24,960	\$ 2,300,247	\$ 2,325,207
Fixed Rate	17,529,411	344,476	17,873,887
Total	\$ 17,554,371	\$ 2,644,723	\$ 20,199,094

(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

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The following table presents the Company's AFS securities according to their estimated weighted average life classifications as of September 30, 2017:

(in thousands)	September 30, 2017		
	Agency	Non-Agency	Total
≤ 1 year	\$ 15,632	\$ 165,060	\$ 180,692
> 1 and ≤ 3 years	38,357	249,220	287,577
> 3 and ≤ 5 years	1,192,719	435,531	1,628,250
> 5 and ≤ 10 years	16,285,575	1,043,103	17,328,678
> 10 years	22,088	751,809	773,897
Total	\$ 17,554,371	\$ 2,644,723	\$ 20,199,094

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.

The following table presents the changes for the three and nine months ended September 30, 2017 and 2016 of the unamortized net discount and designated credit reserves on non-Agency AFS securities.

(in thousands)	Nine Months Ended September 30,					
	2017			2016		
	Designated Credit Reserve	Unamortized Net Discount	Total	Designated Credit Reserve	Unamortized Net Discount	Total
Beginning balance at January 1	\$ (367,437)	\$ (808,975)	\$ (1,176,412)	\$ (409,077)	\$ (707,021)	\$ (1,116,098)
Acquisitions	(217,206)	(111,938)	(329,144)	(45,398)	(140,318)	(185,716)
Accretion of net discount	—	67,219	67,219	—	50,596	50,596
Realized credit losses	11,385	—	11,385	279	—	279
Reclassification adjustment for other-than-temporary impairments	(429)	—	(429)	(1,226)	—	(1,226)
Transfers from (to)	44,412	(44,412)	—	70,371	(70,371)	—
Sales, calls, other	3,588	81,846	85,434	32,562	77,689	110,251
Ending balance at September 30	\$ (525,687)	\$ (816,260)	\$ (1,341,947)	\$ (352,489)	\$ (789,425)	\$ (1,141,914)

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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 September 30, 2017 and December 31, 2016. At September 30, 2017, the Company held 1,380 AFS securities, of which 152 were in an unrealized loss position for less than twelve consecutive months and 164 were in an unrealized loss position for more than twelve consecutive months. 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. Of the \$4.1 billion and \$6.4 billion of AFS securities in an unrealized loss position for less than twelve consecutive months as of September 30, 2017 and December 31, 2016, \$3.9 billion, or 95.1%, and \$6.1 billion, or 95.8%, 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
September 30, 2017	\$ 4,136,362	\$ (22,669)	\$ 2,341,707	\$ (98,029)	\$ 6,478,069	\$ (120,698)
December 31, 2016	\$ 6,416,820	\$ (204,034)	\$ 504,978	\$ (39,955)	\$ 6,921,798	\$ (243,989)

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 income, net of tax, or gain (loss) 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.

During the nine months ended September 30, 2017, the Company recorded \$0.4 million in other-than-temporary credit impairments on one non-Agency security where the future expected cash flows for the security were less than its amortized cost. The Company did not record any other-than-temporary credit impairments during the three months ended September 30, 2017. During the three and nine months ended September 30, 2016, the Company recorded \$1.0 million and \$1.8 million, respectively, in other-than-temporary credit impairments on a total of four non-Agency securities where the future expected cash flows for each security were less than its amortized cost. As of September 30, 2017, impaired securities with a carrying value of \$117.6 million had actual weighted average cumulative losses of 5.3%, weighted average three-month prepayment speed of 7.3%, weighted average 60+ day delinquency of 21.8% of the pool balance, and weighted average FICO score of 659. At September 30, 2017, 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.

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The following table presents the changes in OTTI included in earnings for the three and nine months ended September 30, 2017 and 2016:

(in thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Cumulative credit loss at beginning of period	\$ (6,035)	\$ (6,710)	\$ (5,606)	\$ (6,499)
Additions:				
Other-than-temporary impairments not previously recognized	—	(1,015)	(429)	(1,307)
Increases related to other-than-temporary impairments on securities with previously recognized other-than-temporary impairments	—	—	—	(515)
Reductions:				
Decreases related to other-than-temporary impairments on securities paid down	—	—	—	—
Decreases related to other-than-temporary impairments on securities sold	—	—	—	596
Cumulative credit loss at end of period	\$ (6,035)	\$ (7,725)	\$ (6,035)	\$ (7,725)

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 gain (loss) on investment securities in the Company's condensed consolidated statements of comprehensive income. For the three and nine months ended September 30, 2017, the Company sold AFS securities for \$0.6 billion and \$5.7 billion with an amortized cost of \$0.6 billion and \$5.7 billion for net realized losses of \$3.9 million and \$21.0 million, respectively. For the three and nine months ended September 30, 2016, the Company sold AFS securities for \$2.8 billion and \$6.6 billion with an amortized cost of \$2.8 billion and \$6.5 billion for net realized gains of \$31.8 million and \$63.3 million, respectively.

The following table presents the gross realized gains and losses on sales of AFS securities for the three and nine months ended September 30, 2017 and 2016:

(in thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Gross realized gains	\$ 408	\$ 31,942	\$ 57,133	\$ 77,836
Gross realized losses	(4,342)	(164)	(78,125)	(14,487)
Total realized (losses) gains on sales, net	\$ (3,934)	\$ 31,778	\$ (20,992)	\$ 63,349

Note 5. 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 condensed 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 condensed 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.

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The following tables summarize the Company's commercial real estate assets by asset type, property type and geographic location as of September 30, 2017 and December 31, 2016:

(dollars in thousands)	September 30, 2017			
	First Mortgages	Mezzanine Loans	B-Notes	Total
Unpaid principal balance	\$ 2,041,767	\$ 132,605	\$ 14,892	\$ 2,189,264
Unamortized (discount) premium	(174)	(11)	—	(185)
Unamortized net deferred origination fees	(17,695)	(40)	—	(17,735)
Carrying value	<u>\$ 2,023,898</u>	<u>\$ 132,554</u>	<u>\$ 14,892</u>	<u>\$ 2,171,344</u>
Unfunded commitments	\$ 270,654	\$ 1,580	\$ —	\$ 272,234
Number of loans	50	6	1	57
Weighted average coupon	5.6%	9.1%	8.0%	5.9%
Weighted average years to maturity ⁽¹⁾	2.5	1.9	9.3	2.5

(dollars in thousands)	December 31, 2016			
	First Mortgages	Mezzanine Loans	B-Notes	Total
Unpaid principal balance	\$ 1,286,200	\$ 138,245	\$ —	\$ 1,424,445
Unamortized (discount) premium	(185)	(15)	—	(200)
Unamortized net deferred origination fees	(11,481)	(221)	—	(11,702)
Carrying value	<u>\$ 1,274,534</u>	<u>\$ 138,009</u>	<u>\$ —</u>	<u>\$ 1,412,543</u>
Unfunded commitments	\$ 170,890	1,580	\$ —	\$ 172,470
Number of loans	30	6	—	36
Weighted average coupon	5.1%	8.6%	—%	5.4%
Weighted average years to maturity ⁽¹⁾	2.9	1.5	0.0	2.8

(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)	September 30, 2017		December 31, 2016	
	Carrying Value	% of Commercial Portfolio	Carrying Value	% of Commercial Portfolio
Property Type				
Office	\$ 1,133,866	52.2%	\$ 718,780	50.9%
Multifamily	385,222	17.7%	260,683	18.5%
Retail	247,196	11.4%	237,414	16.8%
Hotel	209,874	9.7%	90,585	6.4%
Industrial	195,186	9.0%	105,081	7.4%
Total	<u>\$ 2,171,344</u>	<u>100.0%</u>	<u>\$ 1,412,543</u>	<u>100.0%</u>

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(in thousands)	Geographic Location	September 30, 2017		December 31, 2016	
		Carrying Value	% of Commercial Portfolio	Carrying Value	% of Commercial Portfolio
	Northeast	\$ 924,383	42.6%	\$ 578,762	41.0%
	West	414,612	19.1%	250,044	17.7%
	Southwest	363,907	16.8%	267,944	19.0%
	Southeast	350,407	16.1%	239,194	16.9%
	Midwest	118,035	5.4%	76,599	5.4%
	Total	\$ 2,171,344	100.0%	\$ 1,412,543	100.0%

At September 30, 2017 and December 31, 2016, the Company pledged commercial real estate assets with a carrying value of \$2.0 billion and \$1.4 billion, 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 three and nine months ended September 30, 2017 and 2016.

(in thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Balance at beginning of period	\$ 1,782,749	\$ 926,377	\$ 1,412,543	\$ 660,953
Originations, acquisitions and additional fundings	393,425	190,100	771,473	470,547
Repayments	(409)	(908)	(6,655)	(15,295)
Net (premium amortization) discount accretion	6	64	(11)	204
Increase in net deferred origination fees	(5,858)	(2,858)	(11,568)	(6,867)
Amortization of net deferred origination fees	1,431	1,773	5,562	5,006
Allowance for loan losses	—	—	—	—
Balance at end of period	\$ 2,171,344	\$ 1,114,548	\$ 2,171,344	\$ 1,114,548

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.

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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 September 30, 2017 and December 31, 2016:

Risk Rating	September 30, 2017			December 31, 2016		
	Number of Loans	Unpaid Principal Balance	Carrying Value	Number of Loans	Unpaid Principal Balance	Carrying Value
1 – 3	57	\$ 2,189,264	\$ 2,171,344	36	\$ 1,424,445	\$ 1,412,543
4 – 5	—	—	—	—	—	—
Total	57	\$ 2,189,264	\$ 2,171,344	36	\$ 1,424,445	\$ 1,412,543

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.

Note 6. 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 three and nine months ended September 30, 2017 and 2016.

(in thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Balance at beginning of period	\$ 898,025	\$ 427,813	\$ 693,815	\$ 493,688
Additions from purchases of mortgage servicing rights	66,280	98,224	340,156	204,435
Additions from sales of residential mortgage loans	—	242	20	764
Subtractions from sales of mortgage servicing rights	—	(60,910)	(946)	(60,910)
Changes in fair value due to:				
Changes in valuation inputs or assumptions used in the valuation model	(154)	3,846	(23,083)	(139,587)
Other changes in fair value ⁽¹⁾	(28,595)	(18,231)	(66,543)	(52,773)
Other changes ⁽²⁾	(4,943)	4,645	(12,806)	10,012
Balance at end of period	<u>\$ 930,613</u>	<u>\$ 455,629</u>	<u>\$ 930,613</u>	<u>\$ 455,629</u>

(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 September 30, 2017 and December 31, 2016, the Company pledged MSR with a carrying value of \$160.6 million and \$180.9 million, respectively, as collateral for revolving credit facilities. See Note 18 - *Revolving Credit Facilities*.

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As of September 30, 2017 and December 31, 2016, 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)	September 30, 2017	December 31, 2016
Weighted average prepayment speed:	10.8%	9.2%
Impact on fair value of 10% adverse change	\$ (36,170)	\$ (25,012)
Impact on fair value of 20% adverse change	\$ (69,455)	\$ (48,602)
Weighted average delinquency:	1.7%	1.9%
Impact on fair value of 10% adverse change	\$ (4,002)	\$ (1,908)
Impact on fair value of 20% adverse change	\$ (8,065)	\$ (3,816)
Weighted average discount rate:	9.9%	9.4%
Impact on fair value of 10% adverse change	\$ (29,873)	\$ (23,590)
Impact on fair value of 20% adverse change	\$ (57,481)	\$ (45,861)

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 its Agency RMBS portfolio.

Mortgage Servicing Income

The following table presents the components of servicing income recorded on the Company's condensed consolidated statements of comprehensive income for the three and nine months ended September 30, 2017 and 2016:

(in thousands)	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2017	2016	2017	2016
Servicing fee income	\$ 53,989	\$ 37,226	\$ 141,923	\$ 104,765
Ancillary and other fee income	310	449	615	1,423
Float income	3,088	1,033	5,930	2,469
Total	\$ 57,387	\$ 38,708	\$ 148,468	\$ 108,657

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 \$20.7 million and \$26.1 million and were included in other assets on the condensed consolidated balance sheets as of September 30, 2017 and December 31, 2016, respectively.

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Serviced Mortgage Assets

The Company's total serviced mortgage assets consist of loans underlying MSR, loans held in consolidated VIEs classified as residential mortgage loans held-for-investment in securitization trusts and loans owned and classified as residential mortgage loans held-for-sale. 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 September 30, 2017 and December 31, 2016:

(dollars in thousands)	September 30, 2017		December 31, 2016	
	Number of Loans	Unpaid Principal Balance	Number of Loans	Unpaid Principal Balance
Mortgage servicing rights	398,580	\$ 88,789,765	280,185	\$ 62,827,975
Residential mortgage loans held-for-investment in securitization trusts	4,288	2,948,349	4,604	3,234,044
Residential mortgage loans held-for-sale	245	38,765	333	49,986
Total serviced mortgage assets	403,113	\$ 91,776,879	285,122	\$ 66,112,005

Note 7. 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 condensed 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 September 30, 2017 and December 31, 2016:

(in thousands)	September 30, 2017	December 31, 2016
Unpaid principal balance	\$ 2,948,349	\$ 3,234,044
Fair value adjustment	82,842	37,273
Carrying value	\$ 3,031,191	\$ 3,271,317

Note 8. 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 September 30, 2017 and December 31, 2016:

(in thousands)	September 30, 2017	December 31, 2016
Unpaid principal balance	\$ 38,765	\$ 49,986
Fair value adjustment	(7,568)	(9,840)
Carrying value	\$ 31,197	\$ 40,146

Note 9. Cash, Cash Equivalents and Restricted Cash

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

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.

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The following table presents the Company's restricted cash balances as of September 30, 2017 and December 31, 2016:

(in thousands)	September 30, 2017	December 31, 2016
Restricted cash balances held by trading counterparties:		
For securities and loan trading activity	\$ 27,823	\$ 26,310
For derivatives trading activity	165,799	218,896
As restricted collateral for repurchase agreements and Federal Home Loan Bank advances	149,844	162,759
Total restricted cash balances held by trading counterparties	343,466	407,965
Restricted cash balance pursuant to letter of credit on office lease	347	347
Total	\$ 343,813	\$ 408,312

The following table provides a reconciliation of cash, cash equivalents, and restricted cash reported on the Company's condensed consolidated balance sheets as of September 30, 2017 and December 31, 2016 that sum to the total of the same such amounts shown in the statements of cash flows:

(in thousands)	September 30, 2017	December 31, 2016
Cash and cash equivalents	\$ 539,367	\$ 406,883
Restricted cash	343,813	408,312
Total cash, cash equivalents and restricted cash	\$ 883,180	\$ 815,195

Note 10. Accrued Interest Receivable

The following table presents the Company's accrued interest receivable by collateral type as of September 30, 2017 and December 31, 2016:

(in thousands)	September 30, 2017	December 31, 2016
Available-for-sale securities:		
Agency		
Federal National Mortgage Association	\$ 42,087	\$ 25,273
Federal Home Loan Mortgage Corporation	13,039	8,914
Government National Mortgage Association	4,036	3,068
Non-Agency	3,165	2,705
Total available-for-sale securities	62,327	39,960
Commercial real estate assets	5,740	3,699
Residential mortgage loans held-for-investment in securitization trusts	17,219	18,928
Residential mortgage loans held-for-sale	159	164
Total	\$ 85,445	\$ 62,751

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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 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, principally market risk and cash flow volatility associated with interest rate risk (including associated prepayment risk). Specifically, the Company enters into derivative and non-derivative instruments to economically hedge interest rate risk or "duration mismatch (or gap)" by adjusting the duration of its floating-rate borrowings into fixed-rate borrowings to more closely match the duration of its assets. This particularly applies to floating-rate borrowing agreements with maturities or interest rate resets of less than six months. Typically, the interest receivable terms (*i.e.*, LIBOR) of certain derivatives 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. The objective is to manage the cash flows associated with current and anticipated interest payments on borrowings, as well as the ability to roll or refinance borrowings at the desired amount by adjusting the duration.

To help manage the adverse impact of interest rate changes on the value of the Company's portfolio as well as its cash flows, the Company may, at times, enter into various forward contracts, including short securities, Agency to-be-announced securities, or TBAs, options, futures, swaps, caps 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, put and call options for TBAs, 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 MSR and Agency interest-only securities (see discussion below).

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 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. 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 condensed 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 September 30, 2017 and December 31, 2016.

(in thousands)	September 30, 2017			
	Derivative Assets		Derivative Liabilities	
	Fair Value	Notional	Fair Value	Notional
Trading instruments				
Inverse interest-only securities	\$ 102,235	\$ 621,549	\$ —	\$ —
Interest rate swap agreements	120,423	13,216,448	(11,312)	6,800,429
Swaptions, net	9,395	2,814,000	—	—
TBAs	5,703	1,405,000	—	—
Put and call options for TBAs, net	156	2,000,000	—	—
Markit IOS total return swaps	393	65,895	—	—
Total	\$ 238,305	\$ 20,122,892	\$ (11,312)	\$ 6,800,429

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(in thousands)	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
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
Total	\$ 324,182	\$ 21,708,907	\$ (12,501)	\$ 3,543,593

Comprehensive Income Statement Presentation

The Company has not applied hedge accounting to its current derivative portfolio held to mitigate interest rate risk and credit risk. As a result, the Company is subject to volatility in its earnings due to movement in the unrealized gains and losses associated with its derivative instruments.

The following table summarizes the location and amount of gains and losses on derivative instruments reported in the condensed consolidated statements of comprehensive income:

(in thousands)	Trading Instruments	Location of Gain (Loss) Recognized in Income on Derivatives	Amount of Gain (Loss) Recognized in Income on Derivatives			
			Three Months Ended September 30,		Nine Months Ended September 30,	
			2017	2016	2017	2016
Interest rate risk management						
	TBAs	Loss on other derivative instruments	\$ (16,891)	\$ (522)	\$ (45,671)	\$ 26,369
	Put and call options for TBAs	Loss on other derivative instruments	(3,405)	(6,226)	(22,467)	(51,259)
	Interest rate swap agreements - Payers	(Loss) gain on interest rate swap and swaption agreements	17,422	48,359	(27,723)	(245,676)
	Interest rate swap agreements - Receivers	(Loss) gain on interest rate swap and swaption agreements	(5,280)	(18,381)	22,813	131,465
	Swaptions	(Loss) gain on interest rate swap and swaption agreements	(12,349)	(24,394)	(62,080)	(18,397)
	Markit IOS total return swaps	Loss on other derivative instruments	(134)	(6,550)	(821)	(41,541)
Credit risk management						
	Credit default swaps - Receive protection	Loss on other derivative instruments	—	(18)	—	364
Non-risk management						
	Inverse interest-only securities	Loss on other derivative instruments	1,506	1,288	2,631	22,003
	Forward purchase commitments	Gain (loss) on residential mortgage loans held-for-sale	—	107	—	2,455
	Total		\$ (19,131)	\$ (6,337)	\$ (133,318)	\$ (174,217)

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For the three and nine months ended September 30, 2017, the Company recognized \$0.4 million and \$10.9 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 and receiving either LIBOR interest or a fixed interest rate on an average \$16.7 billion and \$17.6 billion notional, respectively. For the three and nine months ended September 30, 2016, the Company recognized \$4.3 million and \$18.1 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 and receiving either LIBOR interest or a fixed interest rate on an average \$14.5 billion and \$14.8 billion notional, respectively.

The following tables present information with respect to the volume of activity in the Company's derivative instruments during the three and nine months ended September 30, 2017 and 2016:

Three Months Ended September 30, 2017						
(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	\$ 659,768	\$ —	\$ (38,219)	\$ 621,549	\$ 642,143	\$ (40)
Interest rate swap agreements	14,764,719	9,878,549	(4,626,391)	20,016,877	16,710,894	36,171
Swaptions, net	1,350,000	5,364,000	(3,900,000)	2,814,000	2,213,533	(3,264)
TBAs, net	(1,140,000)	(1,585,000)	1,320,000	(1,405,000)	(1,370,043)	(14,997)
Put and call options for TBAs, net	1,285,000	1,905,000	(1,190,000)	2,000,000	54,402	(3,980)
Markit IOS total return swaps	68,629	—	(2,734)	65,895	66,802	—
Total	\$ 16,988,116	\$ 15,562,549	\$ (8,437,344)	\$ 24,113,321	\$ 18,317,731	\$ 13,890

Three Months Ended September 30, 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	\$ 834,866	\$ —	\$ (50,043)	\$ 784,823	\$ 813,045	\$ —
Interest rate swap agreements	13,697,000	4,451,430	(1,203,000)	16,945,430	14,497,913	(39,369)
Credit default swaps	25,000	—	—	25,000	25,000	—
Swaptions, net	1,800,000	(1,537,000)	7,000	270,000	219,315	(55,692)
TBAs, net	(337,000)	(5,622,000)	5,370,000	(589,000)	(1,051,989)	(18,819)
Put and call options for TBAs, net	8,897,000	2,269,000	(6,697,000)	4,469,000	5,607,728	(26,955)
Markit IOS total return swaps	588,037	99,911	(591,700)	96,248	113,334	(13,897)
Forward purchase commitments	636,467	315,787	(890,851)	61,403	418,333	577
Total	\$ 26,141,370	\$ (22,872)	\$ (4,055,594)	\$ 22,062,904	\$ 20,642,679	\$ (154,155)

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Nine Months Ended September 30, 2017

(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	\$ 740,844	\$ —	\$ (119,295)	\$ 621,549	\$ 681,126	\$ (40)
Interest rate swap agreements	20,371,063	23,408,358	(23,762,544)	20,016,877	17,617,836	47,691
Swaptions, net	225,000	1,109,000	1,480,000	2,814,000	669,377	21,164
TBAs, net	(1,489,000)	(5,710,400)	5,794,400	(1,405,000)	(1,231,793)	(57,424)
Put and call options for TBAs, net	(1,136,000)	4,460,000	(1,324,000)	2,000,000	(13,289)	20,166
Markit IOS total return swaps	90,593	—	(24,698)	65,895	76,670	(181)
Total	\$ 18,802,500	\$ 23,266,958	\$ (17,956,137)	\$ 24,113,321	\$ 17,799,927	\$ 31,376

Nine Months Ended September 30, 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	\$ —	\$ (147,214)	\$ 784,823	\$ 860,920	\$ —
Interest rate swap agreements	14,268,806	16,553,456	(13,876,832)	16,945,430	14,751,923	(33,067)
Credit default swaps	125,000	10,000	(110,000)	25,000	87,883	412
Swaptions, net	5,200,000	1,063,000	(5,993,000)	270,000	3,192,617	(86,481)
TBAs, net	297,000	(1,186,000)	300,000	(589,000)	(239,493)	12,932
Put and call options for TBAs, net	—	13,166,000	(8,697,000)	4,469,000	3,091,679	(28,303)
Markit IOS total return swaps	889,418	99,911	(893,081)	96,248	598,163	(13,374)
Forward purchase commitments	286,120	1,548,027	(1,772,744)	61,403	357,448	1,835
Total	\$ 21,998,381	\$ 31,254,394	\$ (31,189,871)	\$ 22,062,904	\$ 22,701,140	\$ (146,046)

(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 condensed consolidated statements of cash flows. Derivative fair value adjustments are reflected within the unrealized loss (gain) on interest rate swaps and swaptions, unrealized loss on other derivative instruments, and gain on residential mortgage loans held-for-sale line items within the operating activities section of the condensed consolidated statements of cash flows. Realized gains and losses on interest rate swap and swaption agreements are reflected within the (gain) loss on termination and option expiration of interest rate swaps and swaptions line item within the operating activities section of the condensed 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 (decrease) increase in due to counterparties, net line items within the investing activities section of the condensed consolidated statements of cash flows.

Interest Rate Sensitive Assets/Liabilities

The Company's Agency RMBS portfolio is 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. To mitigate the impact of this risk on the Company's fixed-rate Agency pool portfolio, the Company maintains a portfolio of fixed-rate interest-only securities and MSR, which increase in value when interest rates increase. As of September 30, 2017 and December 31, 2016, the Company had \$60.4 million and \$71.1 million, respectively, of interest-only securities, and \$930.6 million and \$693.8 million, respectively, of MSR in place to economically hedge its Agency RMBS. Interest-only securities are included in AFS securities, at fair value, in the condensed consolidated balance sheets.

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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 portfolio. In connection with its risk management activities, the Company enters into a variety of derivative and non-derivative instruments to economically hedge interest rate risk or “duration mismatch (or gap)” by adjusting the duration of its floating-rate borrowings into fixed-rate borrowings to more closely match the duration of its assets. 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 certain derivatives 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. The objective is to manage the cash flows associated with current and anticipated interest payments on borrowings, as well as the ability to roll or refinance borrowings at the desired amount by adjusting the duration. To help manage the adverse impact of interest rate changes on the value of the Company’s portfolio as well as its cash flows, 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 interest rate risk management strategy, the Company has entered into TBAs, put and call options for TBAs, interest rate swap and swaption agreements and Markit IOS total return swaps.

TBAs. At times, the Company may use TBAs 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. 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 September 30, 2017, \$1.4 billion of the Company’s short notional TBA positions were held in order to economically hedge portfolio risk. 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. 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 September 30, 2017 and December 31, 2016:

September 30, 2017					
(in thousands)	Notional Amount ⁽¹⁾	Cost Basis ⁽²⁾	Market Value ⁽³⁾	Net Carrying Value ⁽⁴⁾	
				Derivative Assets	Derivative Liabilities
Purchase contracts	\$ —	\$ —	\$ —	\$ —	\$ —
Sale contracts	(1,405,000)	(1,447,566)	(1,441,863)	5,703	—
TBAs, net	<u>\$ (1,405,000)</u>	<u>\$ (1,447,566)</u>	<u>\$ (1,441,863)</u>	<u>\$ 5,703</u>	<u>\$ —</u>

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	<u>\$ (1,489,000)</u>	<u>\$ (1,452,200)</u>	<u>\$ (1,458,250)</u>	<u>\$ 4,294</u>	<u>\$ (10,344)</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 condensed consolidated balance sheets.

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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. As of September 30, 2017 and December 31, 2016, the Company had purchased put and call options for TBAs with a notional amount of \$2.0 billion and \$2.5 billion, respectively. As of December 31, 2016, the Company had also short sold put and call options for TBAs with a notional amount of \$3.6 billion. The last of the options held at September 30, 2017 expired in October 2017. The put and call options had a fair market value of \$0.2 million included in derivative assets, at fair value, on the condensed consolidated balance sheet as of September 30, 2017. As of December 31, 2016, put and call options for TBAs had a fair market value of \$42.6 million included in derivative assets, at fair value, on the condensed consolidated balance sheet.

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. As of September 30, 2017 and December 31, 2016, the Company held the following interest rate swaps that were utilized as economic hedges of interest rate exposure (or duration) whereby the Company receives interest at a three-month LIBOR rate:

(notional in thousands)

September 30, 2017					
Swaps Maturities	Notional Amount ⁽¹⁾	Weighted Average Fixed Pay Rate ⁽²⁾	Weighted Average Receive Rate ⁽²⁾	Weighted Average Maturity (Years) ⁽²⁾	
2017	\$ 875,000	0.721%	1.322%	0.18	
2018	4,320,000	1.155%	1.314%	0.75	
2019	1,020,000	1.524%	1.313%	1.81	
2020	1,590,000	1.542%	1.311%	2.96	
2021 and Thereafter	7,806,201	1.793%	1.321%	5.93	
Total	<u>\$ 15,611,201</u>	1.509%	1.317%	3.57	

(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	5,340,000	1.232%	0.945%	1.59	
2019	350,000	1.283%	0.895%	2.44	
2020	1,460,000	1.481%	0.920%	3.74	
2021 and Thereafter	5,782,063	1.984%	0.955%	6.17	
Total	<u>\$ 15,307,063</u>	1.441%	0.943%	3.24	

(1) Notional amount includes \$200.0 million and \$777.1 million in forward starting interest rate swaps as of September 30, 2017 and December 31, 2016, respectively.

(2) Weighted averages exclude forward starting interest rate swaps. As of September 30, 2017 and December 31, 2016, the weighted average fixed pay rate on forward starting interest rate swaps was 2.7% and 2.0%, respectively.

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Additionally, as of September 30, 2017 and December 31, 2016, the Company held the following interest rate swaps in order to mitigate mortgage interest rate exposure (or duration) risk whereby the Company pays interest at a three-month LIBOR rate:

(notional in thousands)

September 30, 2017

Swaps Maturities	Notional Amounts	Weighted Average Pay Rate	Weighted Average Fixed Receive Rate	Weighted Average Maturity (Years)
2019	\$ 508,273	1.314%	1.582%	1.88
2020	200,000	1.312%	1.642%	2.85
2021 and Thereafter	3,697,403	1.316%	2.187%	7.21
Total	\$ 4,405,676	1.316%	2.093%	6.39

(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	\$ 5,064,000	0.941%	1.894%	4.57

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. As of September 30, 2017 and December 31, 2016, the Company had the following outstanding interest rate swaptions that were utilized as macro-economic hedges:

September 30, 2017

(notional and dollars in thousands)

Swaption	Expiration	Option			Underlying Swap			
		Cost Basis	Fair Value	Average Months to Expiration	Notional Amount	Average Pay Rate	Average Receive Rate	Average Term (Years)
Purchase contracts:								
Payer	< 6 Months	\$ 9,260	\$ 6,295	3.86	\$ 3,225,000	2.25%	3M Libor	5.0
Total Payer		\$ 9,260	\$ 6,295	3.86	\$ 3,225,000	2.25%	3M Libor	5.0
Receiver	< 6 Months	\$ 17,570	\$ 7,716	2.32	\$ 4,570,000	3M Libor	1.96%	8.0
Receiver	≥ 6 Months	—	4,490	7.80	250,000	3M Libor	2.35%	10.0
Total Receiver		\$ 17,570	\$ 12,206	3.05	\$ 4,820,000	3M Libor	1.98%	8.1
Sale contracts:								
Payer	< 6 Months	\$ —	\$ —	0.37	\$ (600,000)	2.42%	3M Libor	5.0
Total Payer		\$ —	\$ —	0.37	\$ (600,000)	2.42%	3M Libor	5.0
Receiver	< 6 Months	\$ (9,260)	\$ (5,257)	3.77	\$ (4,006,000)	3M Libor	1.72%	5.0
Receiver	≥ 6 Months	(1,400)	(3,849)	7.80	(625,000)	3M Libor	1.95%	10.0
Total Receiver		\$ (10,660)	\$ (9,106)	4.29	\$ (4,631,000)	3M Libor	1.75%	5.7

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December 31, 2016								
(notional and dollars in thousands)								
Swaption	Expiration	Option			Underlying Swap			
		Cost	Fair Value	Average Months to Expiration	Notional Amount	Average Fixed Pay Rate	Average Receive Rate	Average Term (Years)
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

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. 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 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 September 30, 2017 and December 31, 2016:

(notional and dollars in thousands)					
September 30, 2017					
Maturity Date	Current Notional Amount	Fair Value	Cost Basis	Unrealized Gain (Loss)	
January 12, 2043	\$ (25,262)	\$ 124	\$ (201)	\$ (77)	
January 12, 2044	(40,633)	269	(366)	(97)	
Total	\$ (65,895)	\$ 393	\$ (567)	\$ (174)	

(notional and dollars in thousands)					
December 31, 2016					
Maturity Date	Current Notional Amount	Fair Value	Cost Basis	Unrealized Gain (Loss)	
January 12, 2043	\$ (45,083)	\$ (5)	\$ (320)	\$ (325)	
January 12, 2044	(45,510)	(12)	(366)	(378)	
Total	\$ (90,593)	\$ (17)	\$ (686)	\$ (703)	

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.

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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 securities, residential mortgage loans and commercial real estate assets.

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 September 30, 2017, the fair value of derivative financial instruments as an asset and liability position was \$238.3 million and \$11.3 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 September 30, 2017, the Company had received cash deposits from counterparties of \$2.8 million and placed cash deposits of \$167.6 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 condensed 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 inverse interest-only Agency RMBS.

Inverse Interest-Only Securities. As of September 30, 2017 and December 31, 2016, inverse interest-only securities with a carrying value of \$102.2 million and \$127.8 million, including accrued interest receivable of \$1.0 million and \$1.2 million, respectively, are accounted for as derivative financial instruments in the condensed consolidated financial statements. The following table presents the amortized cost and carrying value (which approximates fair value) of inverse interest-only securities as of September 30, 2017 and December 31, 2016:

(in thousands)	September 30, 2017	December 31, 2016
Face Value	\$ 621,549	\$ 740,844
Unamortized premium	—	—
Unamortized discount		
Designated credit reserve	—	—
Net, unamortized	(529,809)	(631,082)
Amortized Cost	91,740	109,762
Gross unrealized gains	11,121	18,389
Gross unrealized losses	(1,577)	(1,552)
Market Value	\$ 101,284	\$ 126,599

TWO HARBORS INVESTMENT CORP.**Notes to the Condensed Consolidated Financial Statements (unaudited)****Note 12. Other Assets**

Other assets as of September 30, 2017 and December 31, 2016 are summarized in the following table:

(in thousands)	September 30, 2017	December 31, 2016
Property and equipment at cost	\$ 6,754	\$ 6,481
Accumulated depreciation ⁽¹⁾	(5,342)	(4,566)
Net property and equipment	1,412	1,915
Prepaid expenses	2,083	1,406
Income taxes receivable	120	1,532
Deferred tax assets, net	45,880 ⁽²⁾	57,361
Servicing advances	20,658	26,147
Federal Home Loan Bank stock	85,175	167,856
Equity investments	3,000	3,000
Other receivables	48,632	43,653
Total other assets	\$ 206,960	\$ 302,870

(1) Depreciation expense for the three and nine months ended September 30, 2017 was \$0.2 million and \$0.8 million, respectively.

(2) Net of valuation allowance of \$4.3 million.

Note 13. Other Liabilities

Other liabilities as of September 30, 2017 and December 31, 2016 are summarized in the following table:

(in thousands)	September 30, 2017	December 31, 2016
Accrued expenses	\$ 28,392	\$ 28,944
Accrued interest payable	62,732	29,505
Income taxes payable	142	—
Other	17,609	21,127
Total other liabilities	\$ 108,875	\$ 79,576

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.

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- 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 condensed consolidated balance sheets and primarily comprised of Agency RMBS and non-Agency securities. 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 securities, 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 99.4% and 0.6% of its AFS securities as Level 2 and Level 3 fair value assets, respectively, at September 30, 2017. AFS securities account for 82.7% of all assets reported at fair value at September 30, 2017.

Mortgage servicing rights. The Company holds a portfolio of MSR that are carried at fair value on the condensed 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 September 30, 2017.

Residential mortgage loans held-for-investment in securitization trusts. The Company recognizes on its condensed 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 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. The Company classified 100% of its residential mortgage loans held-for-investment in securitization trusts as Level 2 fair value assets at September 30, 2017.

Residential mortgage loans held-for-sale. The Company holds residential mortgage loans held-for-sale that are carried at fair value in the condensed 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 1.5% and 98.5% of its residential mortgage loans held-for-sale as Level 2 and Level 3 fair value assets, respectively, at September 30, 2017.

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 Markit IOS total returns swaps reported at fair value as Level 2 at September 30, 2017.

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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 September 30, 2017. The Company reported 100% of its TBAs as Level 1 as of September 30, 2017. The Company did not hold any short U.S. Treasuries at September 30, 2017.

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.

Collateralized borrowings in securitization trusts. The Company recognizes on its condensed 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 September 30, 2017.

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			
	September 30, 2017			
	Level 1	Level 2	Level 3	Total
Assets				
Available-for-sale securities	\$ —	\$ 20,085,812	\$ 113,282	\$ 20,199,094
Mortgage servicing rights	—	—	930,613	930,613
Residential mortgage loans held-for-investment in securitization trusts	—	3,031,191	—	3,031,191
Residential mortgage loans held-for-sale	—	470	30,727	31,197
Derivative assets	5,703	232,602	—	238,305
Total assets	\$ 5,703	\$ 23,350,075	\$ 1,074,622	\$ 24,430,400
Liabilities				
Collateralized borrowings in securitization trusts	\$ —	\$ 2,785,413	\$ —	\$ 2,785,413
Derivative liabilities	—	11,312	—	11,312
Total liabilities	\$ —	\$ 2,796,725	\$ —	\$ 2,796,725

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(in thousands)	Recurring Fair Value Measurements			
	December 31, 2016			
	Level 1	Level 2	Level 3	Total
Assets				
Available-for-sale securities	\$ —	\$ 13,128,857	\$ —	\$ 13,128,857
Mortgage servicing rights	—	—	693,815	693,815
Residential mortgage loans held-for-investment in securitization trusts	—	3,271,317	—	3,271,317
Residential mortgage loans held-for-sale	—	925	39,221	40,146
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

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 September 30, 2017, the Company did not have any assets or liabilities measured at fair value on a nonrecurring basis in the periods presented.

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 condensed 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 Condensed Consolidated Financial Statements (unaudited)**

The following tables present the reconciliation for all of the Company's Level 3 assets measured at fair value on a recurring basis:

(in thousands)	Three Months Ended September 30, 2017		
	Available-For-Sale Securities	Mortgage Servicing Rights	Residential Mortgage Loans Held-For-Sale
Beginning of period level 3 fair value	\$ —	\$ 898,025	\$ 31,460
Gains (losses) included in net income:			
Realized (losses) gains	—	(29,092)	145
Unrealized (losses) gains	—	(154) ⁽¹⁾	284 ⁽³⁾
Total gains (losses) included in net income	—	(29,246)	429
Other comprehensive income	282	—	—
Purchases	113,000	66,280	—
Sales	—	497	—
Settlements	—	(4,943)	(1,162)
Gross transfers into level 3	—	—	—
Gross transfers out of level 3	—	—	—
End of period level 3 fair value	\$ 113,282	\$ 930,613	\$ 30,727
Change in unrealized gains or losses for the period included in earnings for assets held at the end of the reporting period	\$ 282	\$ (154) ⁽²⁾	\$ 295 ⁽⁴⁾

TWO HARBORS INVESTMENT CORP.
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(in thousands)	Nine Months Ended September 30, 2017		
	Available-For-Sale Securities	Mortgage Servicing Rights	Residential Mortgage Loans Held-For-Sale
Beginning of period level 3 fair value	\$ —	\$ 693,815	\$ 39,221
Gains (losses) included in net income:			
Realized (losses) gains	—	(67,357)	1,833
Unrealized (losses) gains	—	(23,083) ⁽¹⁾	446 ⁽³⁾
Total gains (losses) included in net income	—	(90,440)	2,279
Other comprehensive income	282	—	—
Purchases	113,000	340,176	569
Sales	—	(132)	(3,717)
Settlements	—	(12,806)	(7,625)
Gross transfers into level 3	—	—	—
Gross transfers out of level 3	—	—	—
End of period level 3 fair value	\$ 113,282	\$ 930,613	\$ 30,727
Change in unrealized gains or losses for the period included in earnings for assets held at the end of the reporting period	\$ 282	\$ (23,551) ⁽²⁾	\$ 750 ⁽⁴⁾

(1) The change in unrealized gains or losses on MSR was recorded in loss on servicing asset on the condensed consolidated statements of comprehensive income.

(2) 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 condensed consolidated statements of comprehensive income.

(3) The change in unrealized gains or losses on residential mortgage loans held-for-sale was recorded in gain (loss) on residential mortgage loans held-for-sale on the condensed consolidated statements of comprehensive income.

(4) 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 (loss) on residential mortgage loans held-for-sale on the condensed consolidated statements of comprehensive income.

The Company did not incur transfers between Level 1, Level 2 or Level 3 during the nine months ended September 30, 2017. 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 broker quotes in the fair value measurement of its Level 3 available-for-sale securities. The significant unobservable inputs used by the broker included prepayment rate, probability of delinquency and discount rate. Significant increases (decreases) in any of the inputs in isolation may result in significantly lower (higher) fair value measurement.

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 providers in the fair value measurement of the Company's MSR classified as Level 3 fair value assets at September 30, 2017:

September 30, 2017			
Valuation Technique	Unobservable Input ⁽¹⁾	Range	Weighted Average
Discounted cash flow	Constant prepayment speed	9.2 - 12.2 %	10.8%
	Delinquency	1.4 - 2.0 %	1.7%
	Discount rate	8.6 - 11.0 %	9.9%

(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.

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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.

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 condensed 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 gain (loss) on investment securities on the condensed consolidated statements of comprehensive income.

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 condensed 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 income (loss) on the condensed consolidated statements of comprehensive income.

The Company elected the fair value option for its residential mortgage loans held-for-sale. 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 condensed 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 (loss) on residential mortgage loans held-for-sale on the condensed consolidated statements of comprehensive income. The fair value option is irrevocable once the loan is acquired.

The following tables summarize the fair value option elections and information regarding the line items and amounts recognized in the condensed consolidated statements of comprehensive income for each fair value option-elected item.

Three Months Ended September 30, 2017							
(in thousands)	Interest income (expense)	Gain (loss) on investment securities	Gain (loss) on residential mortgage loans held-for-sale	Other income (loss)	Total included in net income	Change in fair value due to credit risk	
Assets							
Available-for-sale securities	\$ (2,283)	\$ 4,757	\$ —	\$ —	\$ 2,474	N/A	
Residential mortgage loans held-for-investment in securitization trusts	29,865 ⁽¹⁾	—	—	14,670	44,535	\$ —	⁽²⁾
Residential mortgage loans held-for-sale	479 ⁽¹⁾	—	355	—	834	(400)	⁽³⁾
Liabilities							
Collateralized borrowings in securitization trusts	(23,970)	—	—	(7,863)	(31,833)	— ⁽²⁾	
Total	\$ 4,091	\$ 4,757	\$ 355	\$ 6,807	\$ 16,010	\$ (400)	

TWO HARBORS INVESTMENT CORP.
Notes to the Condensed Consolidated Financial Statements (unaudited)

		Three Months Ended September 30, 2016						
(in thousands)		Interest income (expense)	Gain (loss) on investment securities	Gain (loss) on residential mortgage loans held-for-sale	Other income (loss)	Total included in net income	Change in fair value due to credit risk	
Assets								
Available-for-sale securities	\$	(249)	\$ 12	\$ —	\$ —	\$ (237)		N/A
Residential mortgage loans held-for-investment in securitization trusts		33,495 ⁽¹⁾	—	—	24,628	58,123	\$	— ⁽²⁾
Residential mortgage loans held-for-sale		7,627 ⁽¹⁾	—	(419)	—	7,208		145 ⁽³⁾
Liabilities								
Collateralized borrowings in securitization trusts		(26,422)	—	—	(20,360)	(46,782)		— ⁽²⁾
Total	\$	14,451	\$ 12	\$ (419)	\$ 4,268	\$ 18,312	\$	145
		Nine Months Ended September 30, 2017						
(in thousands)		Interest income (expense)	Gain (loss) on investment securities	Gain (loss) on residential mortgage loans held-for-sale	Other income (loss)	Total included in net income	Change in fair value due to credit risk	
Assets								
Available-for-sale securities	\$	(5,565)	\$ 9,124	\$ —	\$ —	\$ 3,559		N/A
Residential mortgage loans held-for-investment in securitization trusts		92,319 ⁽¹⁾	—	—	45,569	137,888	\$	— ⁽²⁾
Residential mortgage loans held-for-sale		1,380 ⁽¹⁾	—	2,149	—	3,529	\$	(1,281) ⁽³⁾
Liabilities								
Collateralized borrowings in securitization trusts		(74,199)	—	—	(30,685)	(104,884)		— ⁽²⁾
Total	\$	13,935	\$ 9,124	\$ 2,149	\$ 14,884	\$ 40,092	\$	(1,281)

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Notes to the Condensed Consolidated Financial Statements (unaudited)

Nine Months Ended September 30, 2016

(in thousands)	Interest income (expense)	Gain (loss) on investment securities	Gain (loss) on residential mortgage loans held-for-sale	Other income (loss)	Total included in net income	Change in fair value due to credit risk
Assets						
Available-for-sale securities	\$ (132)	\$ (1,262)	\$ —	\$ —	\$ (1,394)	N/A
Residential mortgage loans held-for-investment in securitization trusts	100,765 ⁽¹⁾	—	—	63,737	164,502	\$ — ⁽²⁾
Residential mortgage loans held-for-sale	19,789 ⁽¹⁾	—	17,028	—	36,817	209 ⁽³⁾
Liabilities						
Collateralized borrowings in securitization trusts	(70,965)	—	—	(68,910)	(139,875)	— ⁽²⁾
Total	\$ 49,457	\$ (1,262)	\$ 17,028	\$ (5,173)	\$ 60,050	\$ 209

- (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 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.
- (3) 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.

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)	September 30, 2017		December 31, 2016	
	Unpaid Principal Balance	Fair Value ⁽¹⁾	Unpaid Principal Balance	Fair Value ⁽¹⁾
Residential mortgage loans held-for-investment in securitization trusts				
Total loans	\$ 2,948,349	\$ 3,031,191	\$ 3,234,044	\$ 3,271,317
Nonaccrual loans	\$ 2,812	\$ 2,892	\$ 2,373	\$ 2,408
Loans 90+ days past due	\$ 1,618	\$ 1,666	\$ 1,401	\$ 1,419
Residential mortgage loans held-for-sale				
Total loans	\$ 38,765	\$ 31,197	\$ 49,986	\$ 40,146
Nonaccrual loans	\$ 14,257	\$ 11,775	\$ 25,445	\$ 21,162
Loans 90+ days past due	\$ 11,180	\$ 9,047	\$ 21,759	\$ 18,203
Collateralized borrowings in securitization trusts				
Total borrowings	\$ 2,732,694	\$ 2,785,413	\$ 3,015,162	\$ 3,037,196

- (1) Excludes accrued interest receivable.

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Notes to the Condensed Consolidated Financial Statements (unaudited)

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 condensed consolidated balance sheets, for which fair value can be estimated.

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 September 30, 2017, the Company held \$1.4 billion of repurchase agreements and \$2.0 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.
- Convertible senior notes are carried at their unpaid principal balance, net of any unamortized deferred issuance costs. The Company estimates the fair value of its convertible senior notes using the market transaction price on September 30, 2017. The Company categorizes the fair value measurement of these assets as Level 2.

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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 September 30, 2017 and December 31, 2016.

(in thousands)	September 30, 2017		December 31, 2016	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Assets				
Available-for-sale securities	\$ 20,199,094	\$ 20,199,094	\$ 13,128,857	\$ 13,128,857
Commercial real estate assets	\$ 2,171,344	\$ 2,187,721	\$ 1,412,543	\$ 1,411,733
Mortgage servicing rights	\$ 930,613	\$ 930,613	\$ 693,815	\$ 693,815
Residential mortgage loans held-for-investment in securitization trusts	\$ 3,031,191	\$ 3,031,191	\$ 3,271,317	\$ 3,271,317
Residential mortgage loans held-for-sale	\$ 31,197	\$ 31,197	\$ 40,146	\$ 40,146
Cash and cash equivalents	\$ 539,367	\$ 539,367	\$ 406,883	\$ 406,883
Restricted cash	\$ 343,813	\$ 343,813	\$ 408,312	\$ 408,312
Derivative assets	\$ 238,305	\$ 238,305	\$ 324,182	\$ 324,182
Federal Home Loan Bank stock	\$ 85,175	\$ 85,175	\$ 167,856	\$ 167,856
Equity investments	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000
Liabilities				
Repurchase agreements	\$ 18,297,392	\$ 18,297,392	\$ 9,316,351	\$ 9,316,351
Collateralized borrowings in securitization trusts	\$ 2,785,413	\$ 2,785,413	\$ 3,037,196	\$ 3,037,196
Federal Home Loan Bank advances	\$ 1,998,762	\$ 1,998,762	\$ 4,000,000	\$ 4,000,000
Revolving credit facilities	\$ 40,000	\$ 40,000	\$ 70,000	\$ 70,000
Convertible senior notes	\$ 282,543	\$ 306,906	\$ —	\$ —
Derivative liabilities	\$ 11,312	\$ 11,312	\$ 12,501	\$ 12,501

Note 15. Repurchase Agreements

As of September 30, 2017 and December 31, 2016, the Company had outstanding \$18.3 billion and \$9.3 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 1.76% and 1.31% and weighted average remaining maturities of 154 and 77 days as of September 30, 2017 and December 31, 2016, respectively.

At September 30, 2017 and December 31, 2016, the repurchase agreement balances were as follows:

(in thousands)	September 30, 2017	December 31, 2016
Short-term	\$ 16,856,537	\$ 9,130,717
Long-term	1,440,855	185,634
Total	\$ 18,297,392	\$ 9,316,351

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At September 30, 2017 and December 31, 2016, the repurchase agreements had the following characteristics and remaining maturities:

September 30, 2017					
Collateral Type					
(in thousands)	Agency RMBS	Non-Agency Securities ⁽¹⁾	Agency Derivatives	Commercial Real Estate Assets	Total Amount Outstanding
Within 30 days	\$ 2,398,041	\$ 746,438	\$ 23,038	\$ —	\$ 3,167,517
30 to 59 days	2,583,705	250,472	51,718	25,934	2,911,829
60 to 89 days	—	—	—	—	—
90 to 119 days	2,994,737	303,896	—	—	3,298,633
120 to 364 days	6,913,298	562,782	2,478	—	7,478,558
One year and over	—	—	—	1,440,855	1,440,855
Total	\$ 14,889,781	\$ 1,863,588	\$ 77,234	\$ 1,466,789	\$ 18,297,392
Weighted average borrowing rate	1.43%	2.93%	2.10%	3.56%	1.76%

December 31, 2016					
Collateral Type					
(in thousands)	Agency RMBS	Non-Agency Securities ⁽¹⁾	Agency Derivatives	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%

(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.

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)	September 30, 2017	December 31, 2016
Available-for-sale securities, at fair value	\$ 17,940,144	\$ 9,540,849
Commercial real estate assets	1,997,077	648,885
Net economic interests in consolidated securitization trusts ⁽¹⁾	224,394	211,095
Cash and cash equivalents	14,796	15,000
Restricted cash	149,845	162,759
Due from counterparties	23,602	48,939
Derivative assets, at fair value	101,187	126,341
Total	\$ 20,451,045	\$ 10,753,868

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

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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 September 30, 2017 and December 31, 2016:

(dollars in thousands)	September 30, 2017				December 31, 2016			
	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
JP Morgan Chase	\$ 1,950,484	\$ 264,974	6%	219	\$ 605,768	\$ 174,197	5%	110
All other counterparties ⁽²⁾	16,346,908	1,887,168	46%	147	8,710,583	1,261,204	37%	75
Total	\$ 18,297,392	\$ 2,152,142			\$ 9,316,351	\$ 1,435,401		

(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 of \$17.9 million are not included in the September 30, 2017 amounts presented above. The Company did not have any such payables at December 31, 2016.

(2) Represents amounts outstanding with 24 and 22 counterparties at September 30, 2017 and December 31, 2016, 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 condensed 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 September 30, 2017 and December 31, 2016, collateralized borrowings in securitization trusts had a carrying value of \$2.8 billion and \$3.0 billion, respectively, with a weighted average interest rate of 3.4% for both periods. The stated maturity dates for all collateralized borrowings were more than five years from both September 30, 2017 and December 31, 2016.

Note 17. Federal Home Loan Bank of Des Moines Advances

The Company's 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 has access to a variety of products and services offered by the FHLB, including secured advances. As of September 30, 2017 and December 31, 2016, TH Insurance had \$2.0 billion and \$4.0 billion in outstanding secured advances with a weighted average borrowing rate of 1.56% and 0.85%, respectively. As of September 30, 2017, TH Insurance had an additional \$1.4 billion of available uncommitted capacity for borrowings. TH Insurance had no additional uncommitted capacity to borrow as of December 31, 2016. 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 securities with a rating of A and above.

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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 September 30, 2017 and December 31, 2016, FHLB advances had the following remaining maturities:

(in thousands)	September 30, 2017	December 31, 2016
≤ 1 year	\$ —	\$ 651,238
> 1 and ≤ 3 years	815,024	815,024
> 3 and ≤ 5 years	—	—
> 5 and ≤ 10 years	—	—
> 10 years	1,183,738	2,533,738
Total	<u>\$ 1,998,762</u>	<u>\$ 4,000,000</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)	September 30, 2017	December 31, 2016
Available-for-sale securities, at fair value	\$ 2,048,924	\$ 3,576,481
Commercial real estate assets	33,626	708,989
Net economic interests in consolidated securitization trusts ⁽¹⁾	2,040	2,015
Total	<u>\$ 2,084,590</u>	<u>\$ 4,287,485</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.

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 September 30, 2017 and December 31, 2016, the Company had stock in the FHLB totaling \$85.2 million and \$167.9 million, respectively, which is included in other assets on the condensed 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 September 30, 2017 and December 31, 2016, 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 September 30, 2017 and December 31, 2016, the Company had outstanding short-term borrowings under revolving credit facilities of \$40.0 million and \$70.0 million with a weighted average borrowing rate of 4.98% and 4.53% and weighted average remaining maturities of 208 and 306 days, respectively.

TWO HARBORS INVESTMENT CORP.**Notes to the Condensed Consolidated Financial Statements (unaudited)**

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 September 30, 2017 and December 31, 2016, MSR with a carrying value of \$160.6 million and \$180.9 million, respectively, 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. Convertible Senior Notes

On January 19, 2017, the Company closed an underwritten public offering of \$287.5 million aggregate principal amount of convertible senior notes due 2022, which included \$37.5 million aggregate principal amount sold by the Company to the underwriter of the offering pursuant to an overallotment option. The net proceeds from the offering were approximately \$282.2 million after deducting underwriting discounts and estimated offering expenses payable by the Company. 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. As of September 30, 2017, the notes had a conversion rate of 50.2537 shares of common stock per \$1,000 principal amount of the notes (based on the retroactive adjustment due to the Company's one-for-two reverse stock split described in Note 20 - *Equity*). The outstanding amount due on the convertible senior notes as of September 30, 2017 was \$282.5 million, net of deferred issuance costs.

Note 20. Equity***Preferred Stock***

On March 14, 2017, the Company issued 5,000,000 shares of 8.125% Series A Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock, par value \$0.01 per share, in a public offering at a price of \$25.00 per share. On March 21, 2017, an additional 750,000 shares were sold by the Company to the underwriters of the offering pursuant to an overallotment option. Holders of the preferred stock are entitled to receive, when and as declared, a dividend at a fixed rate of 8.125% per annum of the \$25.00 liquidation preference. On and after April 27, 2027, dividends will accumulate and be payable at a floating rate of three-month LIBOR plus a spread of 5.66% per annum of the \$25.00 liquidation preference. The preferred stock ranks senior to the Company's common stock and on parity with our 7.625% Series B Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock with respect to the payment of dividends and the distribution of assets upon the voluntary or involuntary liquidation, dissolution or winding up of the Company. Under certain circumstances upon a change of control, the preferred stock is convertible into shares of the Company's common stock. The preferred stock will not be redeemable before April 27, 2027, except under certain limited circumstances. On or after April 27, 2027, the Company may, at its option, redeem, in whole or in part, at any time or from time to time, the preferred stock at a redemption price of \$25.00 per share, plus any accumulated and unpaid dividends thereon (whether or not authorized or declared) up to, but excluding, the redemption date. The net proceeds from the offering were approximately \$138.9 million, after deducting underwriting discounts and estimated offering expenses payable by the Company.

On July 19, 2017, the Company issued 11,500,000 shares of 7.625% Series B Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock, par value \$0.01 per share, in a public offering at a price of \$25.00 per share, which included 1,500,000 shares sold to the underwriters of the offering pursuant to an overallotment option. Holders of the preferred stock are entitled to receive, when and as declared, a dividend at a fixed rate of 7.625% per annum of the \$25.00 liquidation preference. On and after July 27, 2027, dividends will accumulate and be payable at a floating rate of three-month LIBOR plus a spread of 5.352% per annum of the \$25.00 liquidation preference. The preferred stock ranks senior to the Company's common stock and on parity with the Company's 8.125% Series A Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock with respect to the payment of dividends and the distribution of assets upon the voluntary or involuntary liquidation, dissolution or winding up of the Company. Under certain circumstances upon a change of control, the preferred stock is convertible into shares of the Company's common stock. The preferred stock will not be redeemable before July 27, 2027, except under certain limited circumstances. On or after July 27, 2027, the Company may, at its option, redeem, in whole or in part, at any time or from time to time, the preferred stock at a redemption price of \$25.00 per share, plus any accumulated and unpaid dividends thereon (whether or not authorized or declared) up to, but excluding, the redemption date. The net proceeds from the offering were approximately \$278.1 million, after deducting underwriting discounts and estimated offering expenses payable by the Company.

TWO HARBORS INVESTMENT CORP.**Notes to the Condensed Consolidated Financial Statements (unaudited)***Distributions to Preferred Stockholders*

The following table presents cash dividends declared by the Company on its preferred stock during the three and nine months ended September 30, 2017:

Declaration Date	Record Date	Payment Date	Cash Dividend Per Preferred Share
<u>Series A Preferred Stock:</u>			
September 14, 2017	October 12, 2017	October 27, 2017	\$ 0.50781
June 15, 2017	July 12, 2017	July 27, 2017	\$ 0.75043
<u>Series B Preferred Stock:</u>			
September 14, 2017	October 12, 2017	October 27, 2017	\$ 0.51892

*Common Stock**Reverse Stock Split*

On September 14, 2017, the Company's board of directors approved a one-for-two reverse stock split of its outstanding shares of common stock. The reverse stock split was effected on November 1, 2017 at 5:01 p.m. Eastern Time, following the special dividend of Granite Point common stock. At the effective time, every two issued and outstanding shares of the Company's common stock were converted into one share of common stock. No fractional shares were issued in connection with the reverse stock split; instead, each stockholder holding fractional shares was entitled to receive, in lieu of such fractional shares, cash in an amount determined on the basis of the volume weighted average price of the Company's common stock on the NYSE on November 1, 2017. In connection with the reverse stock split, the number of authorized shares of the Company's common stock was also reduced on a one-for-two basis, from 900 million to 450 million. The par value of each share of common stock remained unchanged. All per share amounts, common shares outstanding and restricted shares for all periods presented have been adjusted on a retroactive basis to reflect the reverse stock split.

Distributions to Common Stockholders

The following table presents cash dividends declared by the Company on its common stock during the three months ended September 30, 2017, and the four immediately preceding quarters:

Declaration Date	Record Date	Payment Date	Cash Dividend Per Common Share
September 14, 2017	September 29, 2017	October 27, 2017	\$ 0.52
June 15, 2017	June 30, 2017	July 27, 2017	\$ 0.52
March 14, 2017	March 31, 2017	April 27, 2017	\$ 0.50
December 15, 2016	December 30, 2016	January 27, 2017	\$ 0.48
September 15, 2016	September 30, 2016	October 20, 2016	\$ 0.46

On September 14, 2017, the Company's board of directors declared a special dividend pursuant to which the 33.1 million shares of Granite Point common stock acquired by the Company in exchange for the contribution of its equity interests in TH Commercial Holdings LLC to Granite Point on June 28, 2017 would be distributed, on a pro rata basis, to the holders of Two Harbors common stock outstanding at the close of business on October 20, 2017. The Granite Point common stock was distributed on November 1, 2017. Due to its controlling ownership interest in Granite Point during the periods presented, the Company consolidates Granite Point on its financial statements and does not recognize the dividend declaration until November 1, 2017, the date the Company no longer held a controlling interest in Granite Point.

On September 18, 2017, Granite Point's board of directors declared a quarterly cash dividend on its common stock of \$0.32 per share. The dividend was payable on October 18, 2017 to common stockholders of record at the close of business on September 29, 2017.

TWO HARBORS INVESTMENT CORP.**Notes to the Condensed Consolidated Financial Statements (unaudited)***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. The plan allows for the issuance of up to an aggregate of 3,750,000 shares of the Company's common stock. As of September 30, 2017, 191,635 shares have been issued under the plan for total proceeds of approximately \$3.8 million, of which 6,469 and 19,688 shares were issued for total proceeds of \$0.1 million and \$0.4 million during the three and nine months ended September 30, 2017, respectively. During the three and nine months ended September 30, 2016, 7,310 and 21,882 shares were issued for total proceeds of \$0.1 million and \$0.4 million, respectively.

Share Repurchase Program

The Company's share repurchase program allows for the repurchase of up to an aggregate of 37,500,000 shares of the Company's common stock. 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 September 30, 2017, a total of 12,067,500 shares had been repurchased by the Company under the program for an aggregate cost of \$200.4 million; of these, 4,010,000 shares were repurchased for a total cost of \$61.3 million during the nine months ended September 30, 2016. No shares were repurchased during the three months ended September 30, 2016, or the three and nine months ended September 30, 2017.

At-the-Market Offering

The Company has entered into an equity distribution agreement under which the Company may sell up to an aggregate of 10,000,000 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. As of September 30, 2017, 3,792,935 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 three and nine months ended September 30, 2017 and 2016.

Accumulated Other Comprehensive Income

Accumulated other comprehensive income at September 30, 2017 and December 31, 2016 was as follows:

(in thousands)	September 30, 2017	December 31, 2016
Available-for-sale securities		
Unrealized gains	\$ 508,607	\$ 393,555
Unrealized losses	(85,565)	(194,328)
Accumulated other comprehensive income	\$ 423,042	\$ 199,227

TWO HARBORS INVESTMENT CORP.
Notes to the Condensed Consolidated Financial Statements (unaudited)
Reclassifications out of Accumulated Other Comprehensive Income

The following table summarizes reclassifications out of accumulated other comprehensive income for the three and nine months ended September 30, 2017 and 2016:

(in thousands)	Affected Line Item in the Condensed Consolidated Statements of Comprehensive Income	Amount Reclassified out of Accumulated Other Comprehensive Income			
		Three Months Ended September 30,		Nine Months Ended September 30,	
		2017	2016	2017	2016
Other-than-temporary impairments on AFS securities	Total other-than-temporary impairment losses	\$ —	\$ 1,015	\$ 429	\$ 1,822
Realized gains on sales of certain AFS securities, net of tax	Gain (loss) on investment securities	4,220	(30,396)	7,386	(54,652)
Total		<u>\$ 4,220</u>	<u>\$ (29,381)</u>	<u>\$ 7,815</u>	<u>\$ (52,830)</u>

Noncontrolling Interest

On June 28, 2017, the Company contributed its equity interests in its wholly owned subsidiary, TH Commercial Holdings LLC, to Granite Point and, in exchange for its contribution, received approximately 33.1 million shares of common stock of Granite Point, representing approximately 76.5% of the outstanding stock of Granite Point upon completion of the IPO of its common stock on June 28, 2017. Granite Point issued 10,000,000 shares of its common stock in the IPO at a price of \$19.50 per share, for gross proceeds of \$195.0 million. Net proceeds were approximately \$181.9 million, net of issuance costs of approximately \$13.1 million.

In connection with the Granite Point IPO, the Company agreed, subject to certain conditions, to purchase up to \$20 million of Granite Point common stock in the open market at designated prices below Granite Point's publicly reported book value pursuant to a share purchase program that ended on November 1, 2017. During the three and nine months ended September 30, 2017, the Company purchased 285,662 shares of Granite Point common stock under the program for a total cost of \$5.4 million.

Due to its controlling ownership interest in Granite Point during the periods presented, the Company consolidates Granite Point on its financial statements and reflects noncontrolling interest for the portion of equity and comprehensive income not attributable to the Company. During the three and nine months ended September 30, 2017, in accordance with ASC 810, *Consolidation*, the carrying amount of noncontrolling interest was adjusted to reflect (i) changes in its ownership interest in Granite Point as a result of the purchases of Granite Point common stock discussed above and (ii) the portion of comprehensive income and dividends declared by Granite Point that are not attributable to the Company, with the offset to equity.

Note 21. Equity Incentive Plan

All per share amounts, common shares outstanding and restricted shares for all periods presented have been adjusted on a retroactive basis to reflect the reverse stock split.

During the nine months ended September 30, 2017 and 2016, the Company granted 34,559 and 40,869 shares of common stock, respectively, to its independent directors pursuant to the Company's Second Restated 2009 Equity Incentive Plan, or the Plan. The estimated fair value of these awards was \$19.82 and \$16.86 per share on grant date, based on the adjusted closing price of the Company's common stock on the NYSE on such date. The grants vested immediately.

TWO HARBORS INVESTMENT CORP.

Notes to the Condensed Consolidated Financial Statements (unaudited)

Additionally, during the nine months ended September 30, 2017 and 2016, the Company granted 637,286 and 968,761 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 \$17.48 and \$15.04 per share on grant date, based on the adjusted 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 September 30, 2017 was \$20.16 per share based on the adjusted 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.

The following table summarizes the activity related to restricted common stock for the nine months ended September 30, 2017 and 2016:

	Nine Months Ended September 30,			
	2017		2016	
	Shares	Weighted Average Grant Date Fair Market Value	Shares	Weighted Average Grant Date Fair Market Value
Outstanding at Beginning of Period	1,319,712	\$ 17.10	1,145,305	\$ 20.73
Granted	671,845	17.60	1,009,630	15.11
Vested	(645,325)	(17.90)	(604,557)	(20.39)
Forfeited	(22,789)	(17.90)	(150,609)	(17.01)
Outstanding at End of Period	<u>1,323,443</u>	<u>\$ 16.95</u>	<u>1,399,769</u>	<u>\$ 17.23</u>

For the three and nine months ended September 30, 2017, the Company recognized compensation related to restricted common stock granted pursuant to the Plan of \$3.5 million and \$11.7 million, respectively. For the three and nine months ended September 30, 2016, the Company recognized compensation related to restricted common stock granted pursuant to the Plan of \$3.5 million and \$11.2 million, respectively.

Granite Point has adopted a 2017 Equity Incentive Plan, or the Granite Point Plan, to provide incentive compensation to attract and retain qualified directors, officers, advisors, consultants and other personnel. The Granite Point Plan permits the granting of stock options, restricted shares of common stock, phantom shares, dividend equivalent rights, and other equity-based awards. During the nine months ended September 30, 2017, Granite Point granted 14,103 shares of its restricted common stock to its independent directors and 150,000 shares of its restricted common stock to its executive officers and certain other personnel of an affiliate of its manager pursuant to the Granite Point Plan. The grants to Granite Point's independent directors vested immediately, while the grants to its executive officers and certain other personnel will 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. For both the three and nine months ended September 30, 2017, Granite Point recognized compensation related to restricted common stock granted pursuant to the Granite Point Plan of \$0.7 million.

TWO HARBORS INVESTMENT CORP.**Notes to the Condensed Consolidated Financial Statements (unaudited)****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 condensed consolidated statements of comprehensive income, for the three and nine months ended September 30, 2016:

(in thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Termination benefits	\$ —	\$ 652	\$ —	\$ 652
Contract terminations	—	519	—	519
Other associated costs	—	18	—	18
Total	\$ —	\$ 1,189	\$ —	\$ 1,189

The mortgage loan conduit and securitization business wind down process was completed at the end of 2016. The Company did not incur any additional restructuring costs in 2017.

Note 23. Income Taxes

For the three and nine months ended September 30, 2017 and 2016, 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. 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.

During the three and nine months ended September 30, 2017, the Company's TRSs recognized a benefit from income taxes of \$5.3 million and \$21.1 million, respectively, which was primarily due to realized losses on sales of AFS securities and net losses incurred on derivative instruments held in the Company's TRSs. During the three and nine months ended September 30, 2016, the Company's TRSs recognized a benefit from income taxes of \$16.8 million and \$26.1 million, respectively, which was primarily due to losses incurred on MSR and derivative instruments held in the Company's TRSs. As of September 30, 2017, a \$4.3 million valuation allowance was recorded because the Company determined that it is more likely than not that the associated deferred tax asset will not be realized. At December 31, 2016, 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.

Based on the Company's evaluation, it has been concluded that there are no significant uncertain tax positions requiring recognition in the Company's condensed consolidated financial statements of a contingent tax liability for uncertain tax positions.

TWO HARBORS INVESTMENT CORP.
Notes to the Condensed Consolidated Financial Statements (unaudited)
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 three and nine months ended September 30, 2017 and 2016. All per share amounts, common shares outstanding and restricted shares for all periods presented have been adjusted on a retroactive basis to reflect the reverse stock split.

(in thousands, except share data)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Numerator:				
Net income	\$ 104,738	\$ 117,786	\$ 185,381	\$ 11,875
Net income attributable to noncontrolling interest	2,674	—	2,714	—
Net income attributable to Two Harbors Investment Corp.	102,064	117,786	182,667	11,875
Dividends on preferred stock	8,888	—	13,173	—
Net income attributable to common stockholders - basic	93,176	117,786	169,494	11,875
Interest expense attributable to convertible notes ⁽¹⁾	4,727	—	—	—
Net income attributable to common stockholders - diluted	97,903	117,786	169,494	11,875
Denominator:				
Weighted average common shares outstanding	173,162,988	172,372,459	173,022,717	172,545,883
Weighted average restricted stock shares	1,325,308	1,441,154	1,392,515	1,563,234
Basic weighted average shares outstanding	174,488,296	173,813,613	174,415,232	174,109,117
Effect of dilutive shares issued in an assumed conversion	14,419,060	—	—	—
Diluted weighted average shares outstanding	188,907,356	173,813,613	174,415,232	174,109,117
Earnings Per Share				
Basic	\$ 0.53	\$ 0.68	\$ 0.97	\$ 0.07
Diluted	\$ 0.52	\$ 0.68	\$ 0.97	\$ 0.07

(1) Includes a nondiscretionary adjustment for the assumed change in the management fee calculation.

For the nine months ended September 30, 2017, excluded from the calculation of diluted earnings per share is the effect of adding back \$13.1 million of interest expense, net of a nondiscretionary adjustment for the assumed change in the management fee calculation, and 13,447,072 weighted average common share equivalents related to the assumed conversion of the Company's convertible senior notes, as their inclusion would be antidilutive.

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 \$10.2 million and \$33.3 million as a management fee to PRCM Advisers for the three and nine months ended September 30, 2017, respectively, and \$11.4 million and \$35.3 million as a management fee to PRCM Advisers for the three and nine months ended September 30, 2016, 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 the consolidated stockholders' equity of Granite Point and its subsidiaries included in the Company's condensed consolidated balance sheet and 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 \$4.8 million and \$18.8 million for the three and nine months ended September 30, 2017, respectively, and \$6.3 million and \$19.1 million for the three and nine months ended September 30, 2016, respectively.

TWO HARBORS INVESTMENT CORP.

Notes to the Condensed Consolidated Financial Statements (unaudited)

Upon the closing of its IPO on June 28, 2017, Granite Point entered into a management agreement with Pine River. In accordance with Granite Point's management agreement with Pine River, the Company incurred \$3.1 million and \$3.2 million as a management fee to Pine River for the three and nine months ended September 30, 2017, respectively, which represents approximately 1.5% of Granite Point's equity on an annualized basis as defined by the management agreement. For purposes of calculating the management fee, 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.

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 \$3.5 million and \$11.7 million of compensation during the three and nine months ended September 30, 2017, respectively, and \$3.5 million and \$11.2 million of compensation during the three and nine months ended September 30, 2016, respectively, related to restricted common stock issued to employees of PRCM Advisers and the Company's independent directors pursuant to the Plan. In addition, Granite Point recognized \$0.7 million of compensation during both the three and nine months ended September 30, 2017 related to restricted common stock issued to its independent directors, executive officers and certain other personnel of an affiliate of its manager pursuant to the Granite Point Plan. See Note 21 - *Equity Incentive Plan* for additional information.

Note 26. Subsequent Events

On September 14, 2017, the Company's board of directors declared a special dividend pursuant to which the 33.1 million shares of Granite Point common stock acquired by the Company in exchange for the contribution of its equity interests in TH Commercial Holdings LLC to Granite Point on June 28, 2017 would be distributed, on a pro rata basis, to the holders of Two Harbors common stock outstanding as of the close of business on October 20, 2017. The special dividend was distributed on November 1, 2017.

Also on September 14, 2017, the Company's board of directors approved a one-for-two reverse stock split of its outstanding shares of common stock. The reverse stock split was effected on November 1, 2017 at 5:01 p.m. Eastern Time, following the special dividend of Granite Point common stock. At the effective time, every two issued and outstanding shares of the Company's common stock were converted into one share of common stock. No fractional shares were issued in connection with the reverse stock split; instead, each stockholder holding fractional shares was entitled to receive, in lieu of such fractional shares, cash in an amount determined on the basis of the volume weighted average price of the Company's common stock on the NYSE on November 1, 2017. In connection with the reverse stock split, the number of authorized shares of the Company's common stock was also reduced on a one-for-two basis, from 900 million to 450 million. The par value of each share of common stock remained unchanged.

Events subsequent to September 30, 2017, were evaluated through the date these financial statements were issued and no additional events were identified requiring further disclosure in these condensed consolidated financial statements.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis should be read in conjunction with our unaudited condensed consolidated financial statements and accompanying notes included elsewhere in this Quarterly Report on Form 10-Q as well as our Annual Report on Form 10-K for the year ended December 31, 2016.

General

We are a Maryland corporation focused on investing in, financing and managing Agency residential mortgage-backed securities, or Agency RMBS, non-Agency securities, mortgage servicing rights, or MSR, 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.

We are externally managed by PRCM Advisers LLC, or PRCM Advisers, which is a wholly owned subsidiary of Pine River Capital Management L.P., or 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. generally accepted accounting principles, or U.S. GAAP), 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), or collectively, the government sponsored entities, or GSEs;
- Non-Agency securities, meaning securities that are not issued or guaranteed by Ginnie Mae, Fannie Mae or Freddie Mac;
- MSR; and
- Other financial assets comprising approximately 5% to 10% of the portfolio.

We generally view our target assets in two 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 securities. Other assets include financial and mortgage-related assets other than the target assets in our rates and credit 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 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 over time. During the nine months ended September 30, 2017, however, we increased our allocation towards Agency RMBS slightly due to attractive market prices. Within our non-Agency securities portfolio, we have a substantial emphasis on "legacy" securities, which include securities issued prior to 2009. We also hold "new issue" non-Agency securities, which we believe have enabled us to find attractive returns and further diversify our non-Agency securities portfolio.

On June 28, 2017, we completed the contribution of our portfolio of commercial real estate assets to Granite Point Mortgage Trust Inc., or Granite Point, a newly organized Maryland corporation intended to qualify as a REIT and focused on directly originating, investing in and managing senior commercial mortgage loans and other debt and debt-like commercial real estate investments. We contributed our equity interests in our wholly owned subsidiary, TH Commercial Holdings LLC, to Granite Point and, in exchange for our contribution, received approximately 33.1 million shares of common stock of Granite Point, representing approximately 76.5% of the outstanding stock of Granite Point upon completion of the initial public offering, or IPO, of its common stock on June 28, 2017. Subsequent to the end of the third quarter of 2017, on November 1, 2017, we distributed, on a pro rata basis, the 33.1 million shares of Granite Point common stock acquired in connection with the contribution to the holders of our common shares outstanding as of the close of business on October 20, 2017. Due to our controlling ownership interest in Granite Point during the periods presented, we consolidate Granite Point on our financial statements and reflect noncontrolling interest for the portion of equity and comprehensive income not attributable to us. During this consolidation period, our financial condition and results of operations reflect Granite Point's commercial strategy, which includes as target assets first mortgages, mezzanine loans, B-notes and preferred equity. As of November 1, 2017, we no longer have a controlling interest in Granite Point and, therefore, will prospectively deconsolidate Granite Point and its subsidiaries from our financial statements.

In July 2016, we announced our plan to discontinue our mortgage loan conduit and securitization business. The wind down of this business was completed at the end of 2016, though we currently 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 September 30, 2017 and the four immediately preceding period ends:

	As of				
	September 30, 2017	June 30, 2017	March 31, 2017	December 31, 2016	September 30, 2016
Rates strategy	55%	54%	58%	58%	54%
Credit strategy	29%	28%	27%	27%	31%
Commercial strategy ⁽¹⁾	16%	18%	15%	15%	15%

(1) Represents capital allocated to our controlling interest in Granite Point's commercial strategy.

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 September 30, 2017, our net yield realized on the portfolio was lower than recent periods. Yields on non-Agency securities were generally lower than recent quarters due to purchases at slightly lower yields; however, the main driver is an increase in our cost of financing as a result of increases in borrowing rates offered by counterparties, growth in and increased financing of the commercial real estate portfolio, the addition of revolving credit facilities for financing of mortgage servicing rights and the issuance of convertible senior notes during the nine months ended September 30, 2017. The following table provides the average annualized yield on our assets, including Agency RMBS, non-Agency securities, commercial real estate assets, MSR, residential mortgage loans held-for-investment, net of collateralized borrowings, in securitization trusts, and residential mortgage loans held-for-sale for the three months ended September 30, 2017, and the four immediately preceding quarters:

	Three Months Ended				
	September 30, 2017	June 30, 2017	March 31, 2017	December 31, 2016	September 30, 2016
Average annualized portfolio yield ⁽¹⁾	3.90%	3.96%	3.99%	3.54%	3.50%
Cost of financing ⁽²⁾	1.83%	1.60%	1.52%	1.17%	1.08%
Net portfolio yield	2.07%	2.36%	2.47%	2.37%	2.42%

(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 Agency RMBS and non-Agency securities, 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. In addition, on January 19, 2017, we closed an underwritten public offering of \$287.5 million aggregate principal amount of convertible senior notes due 2022, which included \$37.5 million aggregate principal amount sold 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 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. As of September 30, 2017, the notes had a conversion rate of 50.2537 shares of common stock per \$1,000 principal amount of the notes (based on the retroactive adjustment due to our one-for-two reverse stock split described below). The net proceeds from the offering were approximately \$282.2 million after deducting underwriting discounts and estimated offering expenses. The majority of these proceeds were used to help fund our MSR assets, which previously had largely been funded with cash.

Our Agency RMBS, given their liquidity and high credit quality, are eligible for higher levels of leverage, while non-Agency securities, 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 securities, commercial real estate assets and MSR, which includes any unsecured debt we may use to fund our target assets, 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 securities portfolio, commercial real estate assets, MSR and residential mortgage loans held-for-sale, on a fully deployed capital basis. Our debt-to-equity ratio is directly correlated to the composition 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 securities, 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 market, 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 subsidiaries of Granite Point are licensed to originate commercial real estate loans.

On September 14, 2017, our board of directors approved a one-for-two reverse stock split of our outstanding shares of common stock. The reverse stock split was effected on November 1, 2017 at 5:01 p.m. Eastern Time, following the special dividend of Granite Point common stock. At the effective time, every two issued and outstanding shares of our common stock were converted into one share of common stock. No fractional shares were issued in connection with the reverse stock split; instead, each stockholder holding fractional shares was entitled to receive, in lieu of such fractional shares, cash in an amount determined on the basis of the volume weighted average price of our common stock on the NYSE on November 1, 2017. In connection with the reverse stock split, the number of authorized shares of our common stock was also reduced on a one-for-two basis, from 900 million to 450 million. The par value of each share of common stock remained unchanged. All per share amounts, common shares outstanding and restricted shares for all periods presented have been adjusted on a retroactive basis to reflect the reverse stock split.

Forward-Looking Statements

This Quarterly Report on Form 10-Q 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 our Annual Report on Form 10-K for the year ended December 31, 2016, 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 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 condensed consolidated statements of comprehensive income 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 MSR business, as well as our legacy mortgage loan conduit business, 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;
- our decision to contribute our portfolio of commercial real estate assets to Granite Point and the distribution of Granite Point shares to the holders of our common stock;
- 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 Quarterly Report on Form 10-Q 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.

Factors Affecting our Operating Results

Our net interest income includes income from our securities portfolio, including the amortization of purchase premiums and accretion of purchase discounts, and income from our commercial real estate assets and residential mortgage loans. 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 securities and in our commercial real estate and residential mortgage loan portfolios.

Fair Value Measurement

A significant portion of our assets and liabilities are reported at fair value and, therefore, our condensed consolidated balance sheets and statements of comprehensive income are significantly affected by fluctuations in market prices. At September 30, 2017, approximately 87.9% of our total assets, or \$24.4 billion, and approximately 11.8% of our total liabilities, or \$2.8 billion, consisted of financial instruments recorded at fair value. See Note 14 - *Fair Value* to the condensed consolidated financial statements, included in this Quarterly Report on Form 10-Q, 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, including interest rate swap and swaption agreements and certain other derivative instruments (*i.e.*, TBAs, put and call options for TBAs, Markit IOS total return swaps and inverse interest-only securities), which are accounted for as derivative trading instruments under U.S. GAAP, Agency interest-only mortgage-backed securities, MSR, net economic interests in consolidated securitization trusts and residential mortgage loans held-for-sale.

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 securities, including interest-only Agency RMBS, inverse interest-only Agency RMBS, and non-Agency securities. We also currently receive three vendor quotes for the 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 securities, 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 MSR and residential mortgage loans, 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 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 Agency RMBS and non-Agency securities 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.

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 first three quarters of 2017 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 high and new job creation has not generated meaningful wage growth. 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.

More recently, natural disasters have impacted certain geographic areas of the U.S. We continuously monitor and evaluate our portfolio for market value deterioration or asset impairment in light of these events and do not expect material impacts to our portfolio.

The Federal Reserve has continued to modestly raise the Federal Funds Target, recently noting a roughly balanced outlook, with two increases so far in 2017 and one more expected by year end. At the same time, due in part to the absence of meaningful inflation, longer term rates in the U.S. are lower and the interest rate curve is flatter. The Trump administration continues to 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. While the Federal Reserve has announced plans to reduce its mortgage-backed securities holdings in the near term, the plan seems to be to focus on a gradual approach which reduces reinvestment of principal and interest but with a capped amount that increases over time.

We believe our blended Agency and non-Agency securities portfolio and our investing expertise, as well as our operational capabilities to invest in MSR, 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.

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 securities portfolio by product type:

(dollars in thousands)	September 30, 2017		December 31, 2016	
Agency				
Fixed Rate	\$ 17,529,411	86.4%	\$ 11,196,011	84.5%
Hybrid ARM	24,960	0.1%	30,463	0.2%
Total Agency	17,554,371	86.5%	11,226,474	84.7%
Agency Derivatives	101,284	0.5%	126,599	1.0%
Non-Agency				
Senior	1,693,960	8.3%	1,210,462	9.1%
Mezzanine	945,447	4.7%	687,644	5.2%
Interest-only securities	5,316	—%	4,277	—%
Total Non-Agency	2,644,723	13.0%	1,902,383	14.4%
Total	\$ 20,300,378		\$ 13,255,456	

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 March 2017 and June 2017, 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 for the three months ended September 30, 2017, and the four immediately preceding quarters:

Agency RMBS	Three Months Ended				
	September 30, 2017	June 30, 2017	March 31, 2017	December 31, 2016	September 30, 2016
Weighted Average CPR	8.0%	8.0%	5.6%	7.1%	9.7%

Although we are unable to predict the movement in interest rates in the remainder of 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:

		September 30, 2017						
(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								
3.0-3.5%	\$ 4,465,427	\$ 4,622,661	26.2%	76.1%	3.5%	\$ 4,664,694	12	
4.0-4.5%	11,045,306	11,859,921	67.2%	97.6%	4.2%	11,820,200	17	
≥ 5%	552,223	616,470	3.5%	86.4%	5.4%	598,561	76	
	16,062,956	17,099,052	96.9%	91.3%	4.1%	17,083,455	18	
15-Year & Other Fixed								
Hybrid ARM	224,041	222,397	1.3%	0.7%	4.6%	216,224	148	
Interest-only	23,206	24,960	0.1%	—%	4.9%	24,481	163	
Agency Derivatives	2,992,862	207,962	1.1%	—%	2.2%	227,909	74	
	621,549	101,284	0.6%	—%	5.2%	91,740	160	
Total Agency RMBS	\$ 19,924,614	\$ 17,655,655	100.0%	88.5%		\$ 17,643,809		

		December 31, 2016						
(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								
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								
Hybrid ARM	234,949	229,928	2.0%	0.8%	4.6%	227,918	141	
Interest-only	28,582	30,463	0.3%	—%	4.9%	30,165	154	
Agency Derivatives	2,961,895	229,349	2.0%	—%	2.3%	246,373	39	
	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		

Our non-Agency securities 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 prices that principally arose from credit or payment default expectations.

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

		September 30, 2017			
(in thousands)	Principal and Interest Securities		Interest-Only Securities	Total	
	Senior	Mezzanine			
Face Value	\$ 2,161,983	\$ 1,210,506	\$ 165,763	\$ 3,538,252	
Unamortized discount					
Designated credit reserve		(401,820)	(123,867)	(525,687)	
Unamortized net discount		(400,656)	(159,830)	(816,260)	
Amortized Cost	\$ 1,359,507	\$ 830,865	\$ 5,933	\$ 2,196,305	

(in thousands)	December 31, 2016			
	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	<u>\$ 930,578</u>	<u>\$ 620,786</u>	<u>\$ 4,363</u>	<u>\$ 1,555,727</u>

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 securities, commercial real estate assets and residential mortgage loans.

The credit support built into non-Agency securities 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 securities 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 securities 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 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.

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.

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. We include in the following discussion the obligations and borrowing capacity of Granite Point due to its consolidation on our condensed consolidated balance sheet; however, we do not have access to their cash nor do we have any obligation to fund Granite Point's investments or obligations with respect to Granite Point's financing arrangements.

As of September 30, 2017, we had entered into repurchase agreements with 33 counterparties, 25 of which had outstanding balances at September 30, 2017, including five facilities that provide both short- and long-term financing for our commercial real estate collateral with outstanding balances at September 30, 2017. In addition, we held long-term secured advances from the FHLB, short-term borrowings under revolving credit facilities and long-term unsecured convertible senior notes. As of September 30, 2017, we had a total consolidated debt-to-equity ratio of 5.7:1.0. The debt-to-equity ratio funding our AFS securities, commercial real estate assets, MSR and Agency Derivatives only, which includes unsecured borrowings under convertible senior notes, was 5.0:1.0. 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 September 30, 2017, we held \$539.4 million in cash and cash equivalents, approximately \$1.9 million of unpledged Agency securities and derivatives and \$223.7 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 securities and retained interests of approximately \$145.6 million. We also held approximately \$89.2 million of unpledged mezzanine commercial real estate loans and \$51.5 million of unpledged commercial real estate first mortgages, and had an overall estimated unused borrowing capacity on unpledged commercial real estate assets of approximately \$82.2 million, which may be used to fund Granite Point's target assets. As of September 30, 2017, we held approximately \$770.0 million of unpledged MSR and had an overall estimated unused borrowing capacity on unpledged MSR of approximately \$50.0 million. We also held approximately \$31.2 million of unpledged residential mortgage loans held-for-sale, 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 MSR and mortgage loan 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; however, some of our MSR were purchased on a bifurcated basis, meaning the representation and warranty obligations remain with the seller. If the representations and warranties we make 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

All per share amounts, common shares outstanding and restricted shares for all periods presented have been adjusted on a retroactive basis to reflect the reverse stock split.

Our GAAP net income attributable to common stockholders was \$93.2 million and \$169.5 million (\$0.52 and \$0.97 per diluted weighted average share) for the three and nine months ended September 30, 2017, as compared to GAAP net income attributable to common stockholders of \$117.8 million and \$11.9 million (\$0.68 and \$0.07 per diluted weighted average share) for the three and nine months ended September 30, 2016.

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 condensed 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 nine months ended September 30, 2017, net unrealized gains on AFS securities recognized as other comprehensive income, net of tax, were \$68.4 million and \$223.8 million, respectively. This, combined with GAAP net income attributable to common stockholders of \$93.2 million and \$169.5 million, resulted in comprehensive income attributable to common stockholders of \$161.6 million and \$393.3 million for the three and nine months ended September 30, 2017, respectively. For the three and nine months ended September 30, 2016, net unrealized gains on AFS securities recognized as other comprehensive income, net of tax, were \$18.7 million and \$179.4 million, respectively. This, combined with GAAP net income attributable to common stockholders of \$117.8 million and \$11.9 million, resulted in comprehensive income attributable to common stockholders of \$136.5 million and \$191.3 million for the three and nine months ended September 30, 2016, respectively.

Our book value per common share for U.S. GAAP purposes was \$20.12 at September 30, 2017, an increase from \$19.56 book value per common share at December 31, 2016. During this nine month period, we recognized comprehensive income attributable to common stockholders of \$393.3 million, which drove the overall increase in book value, offset by common dividends declared of \$268.7 million.

The following tables present the components of our comprehensive income for the three and nine months ended September 30, 2017 and 2016:

(in thousands, except share data)

Income Statement Data:	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Interest income:	(unaudited)		(unaudited)	
Available-for-sale securities	\$ 164,169	\$ 111,393	\$ 449,908	\$ 292,333
Commercial real estate assets	30,595	15,907	80,005	40,279
Residential mortgage loans held-for-investment in securitization trusts	29,865	33,495	92,319	100,765
Residential mortgage loans held-for-sale	479	7,627	1,380	19,789
Cash and cash equivalents	1,408	440	3,087	1,235
Total interest income	226,516	168,862	626,699	454,401
Interest expense:				
Repurchase agreements	71,754	27,056	158,065	65,782
Collateralized borrowings in securitization trusts	23,970	26,422	74,199	70,965
Federal Home Loan Bank advances	10,317	6,744	30,554	18,804
Revolving credit facilities	701	128	1,727	128
Convertible senior notes	4,745	—	13,157	—
Total interest expense	111,487	60,350	277,702	155,679
Net interest income	115,029	108,512	348,997	298,722
Other-than-temporary impairment losses	—	(1,015)	(429)	(1,822)
Other income (loss):				
Gain (loss) on investment securities	5,618	28,290	(15,485)	66,095
(Loss) gain on interest rate swap and swaption agreements	(207)	5,584	(66,990)	(132,608)
Loss on other derivative instruments	(18,924)	(12,028)	(66,328)	(44,064)
Servicing income	57,387	38,708	148,468	108,657
Loss on servicing asset	(29,245)	(33,451)	(90,440)	(211,426)
Gain on residential mortgage loans held-for-sale	355	(889)	2,149	17,648
Other income (loss)	8,076	5,757	18,904	(977)
Total other income (loss)	23,060	31,971	(69,722)	(196,675)
Expenses:				
Management fees	13,276	11,387	36,518	35,268
Servicing expenses	8,893	9,073	26,116	24,510
Securitization deal costs	—	2,080	—	6,241
Other operating expenses	16,526	14,780	51,934	47,280
Restructuring charges	—	1,189	—	1,189
Total expenses	38,695	38,509	114,568	114,488
Income (loss) before income taxes	99,394	100,959	164,278	(14,263)
Benefit from income taxes	(5,344)	(16,827)	(21,103)	(26,138)
Net income	104,738	117,786	185,381	11,875
Net income attributable to noncontrolling interest	2,674	—	2,714	—
Net income attributable to Two Harbors Investment Corp.	102,064	117,786	182,667	11,875
Dividends on preferred stock	8,888	—	13,173	—
Net income attributable to common stockholders	\$ 93,176	\$ 117,786	\$ 169,494	\$ 11,875

(in thousands) Income Statement Data:	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
	(unaudited)		(unaudited)	
Basic earnings per weighted average common share	\$ 0.53	\$ 0.68	\$ 0.97	\$ 0.07
Diluted earnings per weighted average common share	\$ 0.52	\$ 0.68	\$ 0.97	\$ 0.07
Dividends declared per common share	\$ 0.52	\$ 0.46	\$ 1.54	\$ 1.38
Weighted average number of shares of common stock:				
Basic	174,488,296	173,813,613	174,415,232	174,109,117
Diluted	188,907,356	173,813,613	174,415,232	174,109,117
Comprehensive income:				
Net income	\$ 104,738	\$ 117,786	\$ 185,381	\$ 11,875
Other comprehensive income, net of tax:				
Unrealized gain on available-for-sale securities	68,433	18,746	223,823	179,382
Other comprehensive income	68,433	18,746	223,823	179,382
Comprehensive income	173,171	136,532	409,204	191,257
Comprehensive income attributable to noncontrolling interest	2,682	—	2,724	—
Comprehensive income attributable to Two Harbors Investment Corp.	170,489	136,532	406,480	191,257
Dividends on preferred stock	8,888	—	13,173	—
Comprehensive income attributable to common stockholders	\$ 161,601	\$ 136,532	\$ 393,307	\$ 191,257

(in thousands) Balance Sheet Data:	September 30,	December 31,
	2017	2016
	(unaudited)	
Available-for-sale securities	\$ 20,199,094	\$ 13,128,857
Total assets	\$ 27,803,774	\$ 20,112,056
Repurchase agreements	\$ 18,297,392	\$ 9,316,351
Federal Home Loan Bank advances	\$ 1,998,762	\$ 4,000,000
Total stockholders' equity	\$ 3,941,564	\$ 3,401,111
Total equity	\$ 4,131,381	\$ 3,401,111

Results of Operations

The following analysis focuses on financial results during the three and nine months ended September 30, 2017 and 2016.

Interest Income

Interest income increased from \$168.9 million and \$454.4 million for the three and nine months ended September 30, 2016, respectively, to \$226.5 million and \$626.7 million for the same periods in 2017 due to the growth of our AFS securities and commercial real estate portfolios, offset by the sale of substantially all of our remaining prime nonconforming residential mortgage loans held-for-sale during the latter half of 2016.

Interest Expense

Interest expense increased from \$60.4 million and \$155.7 million for the three and nine months ended September 30, 2016 to \$111.5 million and \$277.7 million for the same periods in 2017 due to increased financing on AFS securities and commercial real estate assets due to purchases, increases in the borrowing rates offered by counterparties, increased interest expense on collateralized borrowings due to sales of retained interests from our on-balance sheet securitizations, the addition of revolving credit facilities for financing of mortgage servicing rights and the issuance of convertible senior notes during the nine months ended September 30, 2017.

Net Interest Income

The following tables present the components of interest income and average annualized net asset yield earned by asset type, the components of interest expense and average annualized cost of funds on borrowings incurred by liability and/or collateral type, and net interest income and average annualized net interest rate spread for the three and nine months ended September 30, 2017 and 2016:

(dollars in thousands)	Three Months Ended September 30, 2017			Nine Months Ended September 30, 2017		
	Average Balance (1)	Interest Income/Expense	Net Yield/Cost of Funds (2)	Average Balance (1)	Interest Income	Net Asset Yield
Interest-earning assets						
Agency available-for-sale securities	\$ 16,470,462	\$ 122,130	3.0%	\$ 14,805,036	\$ 333,288	3.0%
Non-Agency available-for-sale securities	2,063,882	42,039	8.1%	1,839,868	116,620	8.5%
Commercial real estate assets	1,924,222	30,595	6.4%	1,702,824	80,005	6.3%
Residential mortgage loans held-for-investment in securitization trusts	3,068,728	29,865	3.9%	3,159,352	92,319	3.9%
Residential mortgage loans held-for-sale	34,082	479	5.6%	36,324	1,380	5.1%
Other		1,408			3,087	
Total interest income/net asset yield	\$ 23,561,376	\$ 226,516	3.8%	\$ 21,543,404	\$ 626,699	3.9%
Interest-bearing liabilities						
Repurchase agreements, FHLB advances and borrowings in securitization trusts collateralized by:						
Agency available-for-sale securities	\$ 15,809,657	\$ 56,190	1.4%	\$ 14,084,616	\$ 127,495	1.2%
Non-Agency available-for-sale securities	1,592,472	11,950	3.0%	1,412,781	30,716	2.9%
Commercial real estate assets	1,239,542	12,427	4.0%	1,175,731	26,181	3.0%
Residential mortgage loans held-for-investment in securitization trusts	3,010,900	25,056	3.3%	3,096,905	77,166	3.3%
Residential mortgage loans held-for-sale	—	—	—%	—	—	—%
Agency derivatives	79,106	418	2.1%	85,334	1,260	2.0%
Financing of mortgage servicing rights and other unassignable: (3)						
Revolving credit facilities	47,939	701	5.8%	38,092	1,727	6.0%
Convertible senior notes	282,448	4,745	6.7%	268,886	13,157	6.5%
Total interest expense/cost of funds	\$ 22,062,064	111,487	2.0%	\$ 20,162,345	277,702	1.8%
Net interest income/spread (4)		\$ 115,029	1.8%		\$ 348,997	2.1%

(dollars in thousands)	Three Months Ended September 30, 2016			Nine Months Ended September 30, 2016		
	Average Balance (1)	Interest Income/Expense	Net Yield/Cost of Funds (2)	Average Balance (1)	Interest Income/Expense	Net Yield/Cost of Funds (2)
Interest-earning assets						
Agency available-for-sale securities	\$ 11,934,779	\$ 80,267	2.7%	\$ 9,624,519	\$ 204,860	2.8%
Non-Agency available-for-sale securities	1,424,635	31,126	8.7%	1,400,498	87,473	8.3%
Commercial real estate assets	1,033,049	15,907	6.2%	861,090	40,279	6.2%
Residential mortgage loans held-for-investment in securitization trusts	3,472,738	33,495	3.9%	3,475,782	100,765	3.9%
Residential mortgage loans held-for-sale	741,589	7,627	4.1%	645,189	19,789	4.1%
Other		440			1,235	
Total interest income/net asset yield	\$ 18,606,790	\$ 168,862	3.6%	\$ 16,007,078	\$ 454,401	3.8%
Interest-bearing liabilities						
Repurchase agreements, FHLB advances and borrowings in securitization trusts collateralized by:						
Agency available-for-sale securities	\$ 11,431,995	\$ 21,277	0.7%	\$ 9,156,113	\$ 49,101	0.7%
Non-Agency available-for-sale securities	1,172,717	7,207	2.5%	1,139,236	20,482	2.4%
Commercial real estate assets	647,967	2,968	1.8%	507,613	6,884	1.8%
Residential mortgage loans held-for-investment in securitization trusts	3,389,061	27,379	3.2%	3,372,159	75,413	3.0%
Residential mortgage loans held-for-sale	503,204	950	0.8%	438,516	2,402	0.7%
Agency derivatives	112,283	441	1.6%	113,216	1,269	1.5%
Financing of mortgage servicing rights and other unassignable: (3)						
Revolving credit facilities	9,457	128	5.4%	3,175	128	5.4%
Convertible senior notes	—	—	—%	—	—	—%
Total interest expense/cost of funds	\$ 17,266,684	\$ 60,350	1.4%	\$ 14,730,028	\$ 155,679	1.4%
Net interest income/spread (4)		\$ 108,512	2.2%		\$ 298,722	2.4%

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

(2) 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 (loss) gain on interest rate swap and swaption agreements in the condensed consolidated statements of comprehensive income. For the three and nine months ended September 30, 2017, our total average cost of funds on the assets assigned as collateral for borrowings shown in the table above, including interest spread expense associated with interest rate swaps, was 2.1% and 2.0%, respectively, compared to 1.5% and 1.6% for the same periods in 2016.

(3) Yields on mortgage servicing rights not shown as these assets do not earn interest.

(4) Net interest 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 (loss) gain on interest rate swap and swaption agreements in the condensed consolidated statements of comprehensive income. For the three and nine months ended September 30, 2017, our total average net interest rate spread on the assets and liabilities shown in the table above, including interest spread expense associated with interest rate swaps, was 1.8% and 1.9%, respectively, compared to 2.2% and 2.3% for the same periods in 2016.

The increase in yields on Agency AFS securities for the three and nine months ended September 30, 2017, as compared to the same periods in 2016, was predominantly driven by purchases of pools with higher yields and sales of pools with lower yields. The increase in cost of funds associated with the financing of Agency AFS securities for the three and nine months ended September 30, 2017, as compared to the same periods in 2016, was the result of increases in the borrowing rates offered by counterparties.

The decrease in yields on non-Agency securities for the three months ended September 30, 2017, as compared to the same period in 2016, was predominantly driven by purchases of non-Agency securities at lower yields than our existing portfolio. The increase in yields on non-Agency securities for the nine months ended September 30, 2017, as compared to the same period in 2016, was due to continued improvement in legacy non-Agency fundamentals, credit performance and prepayments. The increase in cost of funds associated with the financing of non-Agency AFS securities for the three and nine months ended September 30, 2017, as compared to the same periods in 2016, was the result of increases in the borrowing rates offered by counterparties.

The increase in yields on commercial real estate assets for the three and nine months ended September 30, 2017, as compared to the same periods in 2016, was predominantly driven by the origination of commercial real estate first mortgages at higher yields. The increase in cost of funds on commercial real estate assets for the three and nine months ended September 30, 2017, as compared to the same periods in 2016, was primarily the result of increases in borrowing rates and secondarily the result of an increase in the proportion of total borrowings financed through repurchase agreements (relative to FHLB advances).

Yields on residential mortgage loans held-for-investment in securitization trusts for the three and nine months ended September 30, 2017 were generally consistent with those for the same periods in 2016. The increase in cost of funds associated with the financing of residential mortgage loans held-for-investment in securitization trusts for the three and nine months ended September 30, 2017, as compared to the same periods in 2016, was primarily the result of the sale of retained interests from our on-balance sheet securitizations in 2016, thereby increasing the amount of collateralized borrowings in securitization trusts.

The increase in yields on residential mortgage loans held-for-sale for the three and nine months ended September 30, 2017, as compared to the same periods in 2016, was due to the sale of substantially all of our remaining prime nonconforming residential mortgage loans held-for-sale during the latter half of 2016. We did not have any financing of residential mortgage loans held-for-sale in place for the three and nine months ended September 30, 2017.

The increase in cost of funds associated with the financing of Agency Derivatives for the three and nine months ended September 30, 2017, as compared to the same periods in 2016, was the result of increases in the borrowing rates offered by counterparties.

The increase in cost of funds associated with the financing of MSR through revolving credit facilities for the three and nine months ended September 30, 2017, as compared to the same periods in 2016, was the result of increases in the borrowing rates offered by counterparties as well as increased amortization of deferred debt issuance costs.

Our convertible senior notes were issued in January 2017, are unsecured and pay interest semiannually at a rate of 6.25% per annum. The cost of funds associated with our convertible senior notes also includes amortization of deferred debt issuance costs.

The following tables present the components of the yield earned by investment type on our AFS securities portfolio as a percentage of our average amortized cost of securities for the three and nine months ended September 30, 2017 and 2016:

	Three Months Ended September 30, 2017			Nine Months Ended September 30, 2017		
	Agency ⁽¹⁾	Non-Agency	Total	Agency ⁽¹⁾	Non-Agency	Total
Gross yield/stated coupon	4.1 %	3.7%	4.0 %	4.0 %	3.6%	4.0 %
Net (premium amortization) discount accretion	(1.1)%	4.4%	(0.5)%	(1.0)%	4.9%	(0.4)%
Net yield ⁽²⁾	3.0 %	8.1%	3.5 %	3.0 %	8.5%	3.6 %

	Three Months Ended September 30, 2016			Nine Months Ended September 30, 2016		
	Agency ⁽¹⁾	Non-Agency	Total	Agency ⁽¹⁾	Non-Agency	Total
Gross yield/stated coupon	3.8 %	3.6%	3.8 %	4.0 %	3.5%	4.0 %
Net (premium amortization) discount accretion	(1.1)%	5.1%	(0.5)%	(1.2)%	4.8%	(0.5)%
Net yield ⁽²⁾	2.7 %	8.7%	3.3 %	2.8 %	8.3%	3.5 %

(1) Excludes Agency Derivatives. For the three and nine months ended September 30, 2017, the average annualized net yield on total Agency RMBS, including Agency Derivatives, was 3.0% and 3.1%, respectively, compared to 2.8% and 3.0% for the same periods in 2016.

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

Other-Than-Temporary Impairments

We review each of our securities on a quarterly basis to determine if an OTTI charge is necessary. During the three and nine months ended September 30, 2017, we recorded \$0.4 million in other-than-temporary credit impairments on one non-Agency security where the future expected cash flows for the security were less than its amortized cost. We did not record any other-than-temporary credit impairments during the three months ended September 30, 2017. During the three and nine months ended September 30, 2016, we recorded \$1.0 million and \$1.8 million, respectively, in other-than-temporary credit impairments on a total of four non-Agency securities where the future expected cash flows for each security were less than its amortized cost. 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 condensed consolidated financial statements.

Gain (Loss) on Investment Securities

During the three and nine months ended September 30, 2017, we sold AFS securities for \$0.6 billion and \$5.7 billion with an amortized cost of \$0.6 billion and \$5.7 billion, for net realized losses of \$3.9 million and \$21.0 million, respectively. During the three and nine months ended September 30, 2016, we sold AFS securities for \$2.8 billion and \$6.6 billion with an amortized cost of \$2.8 billion and \$6.5 billion, for net realized gains of \$31.8 million and \$63.3 million, 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 three and nine months ended September 30, 2017, Agency interest-only mortgage-backed securities experienced a change in unrealized gains of \$9.6 million and \$5.5 million, respectively. For the three and nine months ended September 30, 2016, Agency interest-only mortgage-backed securities and GSE credit risk transfer securities experienced a change in unrealized losses of \$3.5 million and a change in unrealized gains of \$2.7 million, respectively. The increase in change in unrealized gains (decrease in losses) for the three and nine months ended September 30, 2017, as compared to the same periods in 2016, was predominantly driven by lower prepayment expectations on Agency interest-only mortgage-backed securities.

(Loss) Gain on Interest Rate Swap and Swaption Agreements

For the three and nine months ended September 30, 2017, we recognized \$0.4 million and \$10.9 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 and receiving either LIBOR interest or a fixed interest rate on an average \$16.7 billion and \$17.6 billion notional, respectively, held to economically hedge/mitigate portfolio interest rate exposure (or duration) risk. For the three and nine months ended September 30, 2016, we recognized \$4.3 million and \$18.1 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 and receiving either LIBOR interest or a fixed interest rate on an average \$14.5 billion and \$14.8 billion notional, respectively, held to economically hedge/mitigate portfolio interest rate exposure (or duration) risk.

During the three and nine months ended September 30, 2017, we terminated, had agreements mature or had options expire on 49 and 121 interest rate swap and swaption positions of \$17.9 billion and \$55.4 billion notional, respectively. Upon settlement of the early terminations and option expirations, we received \$3.1 million and paid \$19.5 million in full settlement of our net interest spread asset/liability and recognized \$32.9 million and \$68.9 million in realized gains on the swaps and swaptions for the three and nine months ended September 30, 2017, respectively, including early termination penalties. During the three and nine months ended September 30, 2016, we terminated, had agreements mature or had options expire on 26 and 81 interest rate swap and swaption positions of \$8.0 billion and \$27.7 billion notional, respectively. Upon settlement of the early terminations and option expirations, we paid \$0.7 million and \$2.7 million in full settlement of our net interest spread liability and recognized \$95.1 million and \$119.5 million in realized losses on the swaps and swaptions for the three and nine months ended September 30, 2016, 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 nine months ended September 30, 2017, was the recognition of a change in unrealized valuation losses of \$32.7 million and \$125.0 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 \$104.9 million and \$5.1 million for the same periods in 2016. 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 nine months ended September 30, 2017 and 2016. 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 income, net of tax, or to gain (loss) 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 September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Net interest spread	\$ (389)	\$ (4,294)	\$ (10,867)	\$ (18,140)
Early termination, agreement maturation and option expiration gains (losses)	32,906	(95,061)	68,854	(119,548)
Change in unrealized (loss) gain on interest rate swap and swaption agreements, at fair value	(32,724)	104,939	(124,977)	5,080
(Loss) gain on interest rate swap and swaption agreements	\$ (207)	\$ 5,584	\$ (66,990)	\$ (132,608)

Loss on Other Derivative Instruments

Included in our financial results for the three and nine months ended September 30, 2017, was the recognition of \$18.9 million and \$66.3 million of losses, respectively, on other derivative instruments we hold for purposes of both hedging and non-hedging activities, principally 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 nine months ended September 30, 2017, was the recognition of \$2.8 million and \$10.0 million of interest income, net of accretion on inverse interest-only securities on an average amortized cost basis of \$93.4 million and \$96.7 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 nine months ended September 30, 2016, was the recognition of \$12.0 million and \$44.1 million of losses, respectively, on other derivative instruments we hold for purposes of both hedging and non-hedging activities, principally TBAs, put and call options for TBAs, Markit IOS total return swaps, credit default swaps and inverse interest-only securities. Included within these results for the three and nine months ended September 30, 2016, was the recognition of \$4.0 million and \$15.4 million of interest income, net of accretion on inverse interest-only securities on an average amortized cost basis of \$119.0 million and \$123.1 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 AFS securities and residential mortgage loan portfolios.

Servicing Income

For the three and nine months ended September 30, 2017, we recognized total servicing income from our MSR portfolio of \$57.4 million and \$148.5 million, respectively. These amounts include servicing fee income of \$54.0 million and \$141.9 million, ancillary and other fee income of \$0.3 million and \$0.6 million, and float income of \$3.1 million and \$6.0 million, respectively. For the three and nine months ended September 30, 2016, we recognized total servicing income of \$38.7 million and \$108.7 million, respectively. These amounts include servicing fee income of \$37.2 million and \$104.8 million, ancillary and other fee income of \$0.4 million and \$1.4 million, and float income of \$1.0 million and \$2.5 million, respectively. The increase in servicing income for the three and nine months ended September 30, 2017, as compared to the same periods in 2016, was the result of an increase in the size of our MSR portfolio.

Loss on Servicing Asset

For the three and nine months ended September 30, 2017, loss on servicing asset of \$29.2 million and \$90.4 million, respectively, includes a decrease in fair value of MSR due to realization of cash flows (runoff) of \$28.6 million and \$66.5 million, respectively, and a decrease in fair value of MSR due to changes in valuation inputs or assumptions of \$0.2 million and \$23.1 million, respectively. Additionally, we recognized losses on sales of MSR of \$0.5 million and \$0.8 million for the three and nine months ended September 30, 2017, respectively. For the three and nine months ended September 30, 2016, loss on servicing asset of \$33.5 million and \$211.4 million, respectively, includes a decrease in fair value of MSR due to realization of cash flows (runoff) of \$18.2 million and \$52.8 million, respectively, and an increase in fair value of MSR due to changes in valuation inputs or assumptions of \$3.8 million and a decrease in fair value of MSR due to changes in valuation inputs or assumptions of \$139.6 million, respectively. The decrease in loss on servicing asset for the three and nine months ended September 30, 2017, as compared to the same periods in 2016, was predominantly driven by a decrease in prepayment speed assumptions, offset by portfolio runoff during the three and nine months ended September 30, 2017.

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

For the three and nine months ended September 30, 2017, we recorded gains of \$0.4 million and \$2.1 million, respectively, on residential mortgage loans held-for-sale. For the three and nine months ended September 30, 2016, we recorded losses of \$0.9 million and gains of \$17.6 million, respectively, on residential mortgage loans held-for-sale. The increase in gains (decrease in losses) on residential mortgage loans held-for-sale during the three months ended September 30, 2017, as compared to the same period in 2016, was driven by increases in interest rates during the three months ended September 30, 2017. The decrease in gains on residential mortgage loans held-for-sale during the nine months ended September 30, 2017, as compared to the same periods in 2016, was due to the sale of substantially all of our prime nonconforming residential mortgage loans held-for-sale during the latter half of 2016.

Other Income (Loss)

For the three and nine months ended September 30, 2017, we recorded other income of \$8.1 million and \$18.9 million, which includes \$14.7 million and \$45.5 million in gains on residential mortgage loans held-for-investment in securitization trusts, \$7.9 million and \$30.7 million in losses on collateralized borrowings in securitization trusts, \$1.2 million and \$4.0 million of dividend income on our FHLB stock and \$0.1 million and \$0.1 million, respectively, of other miscellaneous income. For the three and nine months ended September 30, 2016, we recorded other income of \$5.8 million and other loss of \$1.0 million, which includes \$24.6 million and \$63.7 million in gains on residential mortgage loans held-for-investment in securitization trusts, \$20.3 million and \$68.9 million in losses on collateralized borrowings in securitization trusts, \$1.4 million and \$4.1 million of dividend income on our FHLB stock and \$0.1 million and \$0.1 million, respectively, of other miscellaneous income. The increase in other income for the three and nine months ended September 30, 2017, as compared to the same periods in 2016, was driven by increases in interest rates during the three and nine months ended September 30, 2017.

Management Fees

We incurred management fees of \$10.2 million and \$33.3 million for the three and nine months ended September 30, 2017 and \$11.4 million and \$35.3 million for the three and nine months ended September 30, 2016, 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.

Additionally, in accordance with Granite Point's management agreement with Pine River, we incurred management fees of \$3.1 million and \$3.2 million for the three and nine months ended September 30, 2017, respectively. Granite Point's management fee is also calculated based on its equity with certain adjustments outlined in its management agreement. See further discussion of the management fee calculations in Note 25 - *Related Party Transactions* of the notes to the condensed consolidated financial statements.

Servicing Expenses

For the three and nine months ended September 30, 2017, we recognized \$8.9 million and \$26.1 million, respectively, in servicing expenses generally related to the subservicing of MSR, commercial real estate assets and residential mortgage loans, compared to \$9.1 million and \$24.5 million for the same periods in 2016. The decrease in servicing expenses during the three months ended September 30, 2017, as compared to the same period in 2016, was the result of efficiencies gained by repositioning our MSR portfolio across our servicer network during the three months ended June 30, 2017 as well as the release of MSR representation and warranty reserves due to a higher concentration of MSR purchased on a bifurcated basis (meaning the representation and warranty obligations remain with the seller). The increase in servicing expenses during the nine months ended September 30, 2017, as compared to the same periods in 2016, was the result of an increase in the size of our MSR and commercial real estate portfolios as well as the recognition of de-boarding and transfer fees related to our servicer network repositioning during the nine months ended September 30, 2017, offset by the release of MSR representation and warranty reserves due to a refinement of the reserve method and a higher concentration of MSR purchased on a bifurcated basis.

Securitization Deal Costs

Due to the discontinuation of our mortgage loan conduit and securitization business, we did not record any securitization deal costs related to the sponsoring of securitization trusts during the three and nine months ended September 30, 2017. For the three and nine months ended September 30, 2016, we recognized net upfront securitization deal costs of \$2.1 million and \$6.2 million. 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 condensed consolidated statements of comprehensive income. We do not expect to incur securitization deal costs going forward.

Other Operating Expenses

For the three and nine months ended September 30, 2017, we recognized \$16.5 million and \$51.9 million of other operating expenses, which, for the nine months ended September 30, 2017, includes \$2.2 million of transaction expenses related to the initial public offering of Granite Point stock. Excluding these transaction expenses, our annualized expense ratio was 1.7% and 1.8% of average common equity for the three and nine months ended September 30, 2017, respectively. For the three and nine months ended September 30, 2016, we recognized \$14.8 million and \$47.3 million of other operating expenses, which represents an annualized expense ratio of 1.7% and 1.8% of average common equity, respectively. Our operating expense ratios for the three and nine months ended September 30, 2017 were consistent with those for the the three and nine months ended September 30, 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 nine months ended September 30, 2017, these direct and allocated costs totaled approximately \$4.8 million and \$18.8 million, respectively, compared to \$6.3 million and \$19.1 million for the same periods in 2016. 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 \$1.6 million for the three and nine months ended September 30, 2017 and \$0.2 million and \$1.6 million for the three and nine months ended September 30, 2016, 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 nine months ended September 30, 2017 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 \$2.0 million and \$6.4 million, compared to \$1.7 million and \$5.6 million for the three and nine months ended September 30, 2016, 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 \$1.2 million for both the three and nine months ended September 30, 2016.

Income Taxes

During the three and nine months ended September 30, 2017, our TRSs recognized a benefit from income taxes of \$5.3 million and \$21.1 million, respectively, which was primarily due to realized losses on sales of AFS securities and net losses incurred on derivative instruments held in our TRSs. During the three and nine months ended September 30, 2016, our TRSs recognized a benefit from income taxes of \$16.8 million and \$26.1 million, respectively, which was primarily due to losses incurred on MSR and derivative instruments held in the 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 ("P&I") 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 table below summarizes certain characteristics of our Agency RMBS AFS at September 30, 2017:

September 30, 2017								
(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	\$ 16,286,997	\$ 1,012,682	\$ 17,299,679	\$ 104,544	\$ (82,774)	\$ 17,321,449	4.06%	\$ 106.62
Hybrid ARM	23,206	1,275	24,481	507	(28)	24,960	4.90%	\$ 108.31
Total P&I securities	16,310,203	1,013,957	17,324,160	105,051	(82,802)	17,346,409	4.06%	\$ 106.62
Interest-only securities								
Fixed	351,071	(297,649)	53,422	2,452	(837)	55,037	3.81%	\$ 17.39
Fixed Other ⁽¹⁾	2,641,791	(2,467,304)	174,487	12,733	(34,295)	152,925	1.56%	\$ 8.80
Total	\$ 19,303,065	\$ (1,750,996)	\$ 17,552,069	\$ 120,236	\$ (117,934)	\$ 17,554,371		

(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 September 30, 2017, on an annualized basis, was 8.0%. The following table summarizes the number of months until the next reset for our floating or adjustable rate Agency RMBS AFS portfolio at September 30, 2017:

(in thousands)	September 30, 2017
0-12 months	\$ 24,698
13-36 months	262
Total	\$ 24,960

Non-Agency Securities

Our non-Agency securities portfolio is comprised of senior and mezzanine tranches of mortgage-backed and asset-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 table provides investment information on our non-Agency securities as of September 30, 2017:

September 30, 2017							
(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	\$ 2,161,983	\$ (400,656)	\$ (401,820)	\$ 1,359,507	\$ 335,055	\$ (602)	\$ 1,693,960
Mezzanine	1,210,506	(255,774)	(123,867)	830,865	116,082	(1,500)	945,447
Total P&I Securities	3,372,489	(656,430)	(525,687)	2,190,372	451,137	(2,102)	2,639,407
Interest-only securities	165,763	(159,830)	—	5,933	45	(662)	5,316
Total	\$ 3,538,252	\$ (816,260)	\$ (525,687)	\$ 2,196,305	\$ 451,182	\$ (2,764)	\$ 2,644,723

The majority of our non-Agency securities were rated at September 30, 2017. Note that credit ratings are based on the par value of the non-Agency securities, whereas the distressed non-Agency securities in our portfolio were acquired at heavily discounted prices. The following table summarizes the credit ratings of our non-Agency securities 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 September 30, 2017:

	September 30, 2017
AAA	—%
AA	—%
A	—%
BBB	3.1%
BB	1.2%
B	3.1%
Below B	75.5%
Not rated	17.1%
Total	100.0%

Within our non-Agency securities portfolio, we have a substantial emphasis on “legacy” securities, which include securities issued up to and including 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 prepays. We also hold “new issue” non-Agency securities (issued after 2009), which include commercial mortgage-backed securities, term notes backed by MSR-related collateral and other newly issued non-Agency securities. We believe these “new issue” securities have enabled us to find attractive returns and further diversify our non-Agency securities portfolio.

The following table provides the carrying value of our “legacy” and “new issue” non-Agency securities at September 30, 2017:

(dollars in thousands)	September 30, 2017	
	Carrying Value	% of Non-Agency Portfolio
“Legacy” non-Agency principal and interest securities	\$ 2,311,206	87.4%
“Legacy” non-Agency interest-only securities	5,316	0.2%
“New issue” non-Agency securities	328,201	12.4%
Total	\$ 2,644,723	100.0%

Due to acquisitions of “legacy” non-Agency securities, our designated credit reserve as a percentage of total discount increased slightly from September 30, 2016 to September 30, 2017 (as disclosed in Note 4 - *Available-for-Sale Securities, at Fair Value* of the notes to the condensed consolidated financial statements). When focused on principal and interest securities, from September 30, 2016 to September 30, 2017, our designated credit reserve as a percentage of total discount increased from 37.1% to 44.5%.

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 their respective underlying loan characteristics for our “legacy” senior and mezzanine non-Agency securities, excluding our non-Agency interest-only portfolio, at September 30, 2017:

“Legacy” Non-Agency P&I Securities	September 30, 2017		
	Senior	Mezzanine	Total
Carrying Value (in thousands)	\$ 1,558,361	\$ 752,845	\$ 2,311,206
% of Total	67.4%	32.6%	100.0%
Average Purchase Price ⁽¹⁾	\$ 57.38	\$ 65.30	\$ 59.96
Average Coupon	2.7%	2.0%	2.5%
Average Fixed Coupon	5.9%	5.4%	5.8%
Average Floating Coupon	2.4%	1.9%	2.2%
Average Hybrid Coupon	3.4%	—%	3.4%
Collateral Attributes			
Average Loan Age (months)	134	142	137
Average Loan Size (in thousands)	\$ 369	\$ 358	\$ 366
Average Original Loan-to-Value	69.8%	69.1%	69.6%
Average Original FICO ⁽²⁾	634	574	615
Current Performance			
60+ day delinquencies	22.8%	20.0%	21.9%
Average Credit Enhancement ⁽³⁾	8.2%	15.8%	10.7%
3-Month CPR ⁽⁴⁾	5.6%	8.0%	6.4%

(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 “legacy” non-Agency securities, excluding our non-Agency interest-only portfolio, would be \$54.87, \$62.66 and \$57.40, respectively, at September 30, 2017.

(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 “legacy” non-Agency securities 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.

(dollars in thousands)	September 30, 2017					
	Senior		Mezzanine		Total	
	Carrying Value	% of Senior	Carrying Value	% of Mezzanine	Carrying Value	% of Total
Collateral Type						
Prime	\$ 22,196	1.4%	\$ 13,944	1.9%	\$ 36,140	1.6%
Alt-A	120,202	7.7%	91,944	12.2%	212,146	9.2%
POA	90,267	5.8%	144,621	19.2%	234,888	10.1%
Subprime	1,325,696	85.1%	502,336	66.7%	1,828,032	79.1%
Total	\$ 1,558,361	100.0%	\$ 752,845	100.0%	\$ 2,311,206	100.0%

(dollars in thousands)	September 30, 2017					
	Senior		Mezzanine		Total	
	Carrying Value	% of Senior	Carrying Value	% of Mezzanine	Carrying Value	% of Total
Coupon Type						
Fixed Rate	\$ 148,690	9.5%	\$ 19,901	2.6%	\$ 168,591	7.3%
Hybrid or Floating	1,409,671	90.5%	732,944	97.4%	2,142,615	92.7%
Total	\$ 1,558,361	100.0%	\$ 752,845	100.0%	\$ 2,311,206	100.0%

(dollars in thousands)	September 30, 2017					
	Senior		Mezzanine		Total	
	Carrying Value	% of Senior	Carrying Value	% of Mezzanine	Carrying Value	% of Total
2006 and Thereafter	\$ 1,377,132	88.4%	\$ 293,992	39.0%	\$ 1,671,124	72.3%
2002-2005	176,427	11.3%	457,378	60.8%	633,805	27.4%
Pre-2002	4,802	0.3%	1,475	0.2%	6,277	0.3%
Total	\$ 1,558,361	100.0%	\$ 752,845	100.0%	\$ 2,311,206	100.0%

Commercial Real Estate Assets

Through our controlling interest in Granite Point, 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 our condensed 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 condensed 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 September 30, 2017:

(dollars in thousands)	September 30, 2017			
	First Mortgages	Mezzanine Loans	B-Notes	Total
Unpaid principal balance	\$ 2,041,767	\$ 132,605	\$ 14,892	\$ 2,189,264
Unamortized (discount) premium	(174)	(11)	—	(185)
Unamortized net deferred origination fees	(17,695)	(40)	—	(17,735)
Carrying value	\$ 2,023,898	\$ 132,554	\$ 14,892	\$ 2,171,344
Unfunded commitments	\$ 270,654	\$ 1,580	\$ —	\$ 272,234
Number of loans	50	6	1	57
Weighted average coupon	5.6%	9.1%	8.0%	5.9%
Weighted average years to maturity ⁽¹⁾	2.5	1.9	9.3	2.5

(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	September 30, 2017	
		Carrying Value	% of Commercial Portfolio
	Office	\$ 1,133,866	52.2%
	Multifamily	385,222	17.7%
	Retail	247,196	11.4%
	Hotel	209,874	9.7%
	Industrial	195,186	9.0%
	Total	\$ 2,171,344	100.0%

(in thousands)	Geographic Location	September 30, 2017	
		Carrying Value	% of Commercial Portfolio
	Northeast	\$ 924,383	42.6%
	West	414,612	19.1%
	Southwest	363,907	16.8%
	Southeast	350,407	16.1%
	Midwest	118,035	5.4%
	Total	\$ 2,171,344	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 September 30, 2017, our MSR had a fair market value of \$930.6 million.

As of September 30, 2017, our MSR portfolio included MSR on 398,580 loans with an unpaid principal balance of approximately \$88.8 billion. During 2016, we sold substantially all of our Ginnie Mae MSR portfolio. The following table summarizes certain characteristics of the loans underlying our MSR at September 30, 2017:

	September 30, 2017
Unpaid principal balance (in thousands)	\$ 88,789,765
Number of loans	398,580
Average Coupon	3.9%
Average Loan Age (months)	26
Average Loan Size (in thousands)	\$ 223
Average Original Loan-to-Value	73.3%
Average Original FICO	753
60+ day delinquencies	0.3%
3-Month CPR	10.1%

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 condensed 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 condensed consolidated financial statements for additional information regarding consolidation of the securitization trusts. As of September 30, 2017, residential mortgage loans held-for-investment in securitization trusts had a carrying value of \$3.0 billion.

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

As of September 30, 2017, we held prime nonconforming residential mortgage loans with a carrying value of \$0.5 million. In July 2016, we announced our 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 September 30, 2017, we held CSL with a carrying value of \$9.0 million.

Additionally, as the previous owner of MSR on loans from securitizations guaranteed by Ginnie Mae, we were 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. As of September 30, 2017, we held Ginnie Mae buyout residential mortgage loans with a carrying value of \$21.7 million. During 2016, we sold substantially all of our Ginnie Mae MSR portfolio, and we anticipate that the remaining balance will continue to decline.

The following table presents our residential mortgage loans held-for-sale portfolio by loan type as of September 30, 2017:

(in thousands)	September 30, 2017			
	Unpaid Principal Balance	Fair Value - Purchase Price	Fair Value - Unrealized	Carrying Value
Prime nonconforming residential mortgage loans	\$ 471	\$ —	\$ (1)	\$ 470
Credit sensitive residential mortgage loans	14,746	(4,012)	(1,716)	9,018
Ginnie Mae buyout residential mortgage loans	23,548	(1,128)	(711)	21,709
Residential mortgage loans held-for-sale	<u>\$ 38,765</u>	<u>\$ (5,140)</u>	<u>\$ (2,428)</u>	<u>\$ 31,197</u>

Financing

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 securities and commercial real estate assets have been pledged, either through repurchase agreements or FHLB advances. Additionally, on January 19, 2017, we closed an underwritten public offering of \$287.5 million aggregate principal amount of convertible senior notes due 2022, which included \$37.5 million aggregate principal amount sold to the underwriter of the offering pursuant to an overallotment option. The net proceeds from the offering were approximately \$282.2 million after deducting underwriting discounts and estimated offering expenses. The majority of these proceeds were used to help fund our MSR assets, which previously had largely been funded with cash.

At September 30, 2017, borrowings under repurchase agreements, FHLB advances, revolving credit facilities and convertible senior notes had the following characteristics:

(dollars in thousands)	Collateral Type	September 30, 2017		
		Amount Outstanding	Weighted Average Borrowing Rate	Weighted Average Haircut on Collateral Value
	Agency RMBS	\$ 16,859,426	1.45%	4.9%
	Non-Agency securities ⁽¹⁾	1,865,247	2.93%	27.9%
	Agency Derivatives	77,234	2.10%	26.7%
	Commercial real estate assets	1,494,247	3.52%	25.3%
	Mortgage servicing rights	40,000	4.98%	37.5%
	Other ⁽²⁾	282,543	6.25%	NA
	Total	<u>\$ 20,618,697</u>	1.81%	8.6%

(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.

(2) Includes unsecured convertible senior notes paying interest semiannually at a rate of 6.25% per annum on the aggregate principal amount of \$287.5 million.

As of September 30, 2017, we had outstanding \$18.3 billion of repurchase agreements, and the term to maturity ranged from two days to over 33 months. Repurchase agreements had a weighted average borrowing rate of 1.76% and weighted average remaining maturities of 154 days as of September 30, 2017.

As of September 30, 2017, we had outstanding \$2.0 billion of FHLB advances with a weighted average term to maturity of 133 months, ranging from approximately 19 months to over 18 years. The weighted average cost of funds for our advances was 1.56% at September 30, 2017.

As of September 30, 2017, we had outstanding \$40.0 million of short-term borrowings under revolving credit facilities with a weighted average borrowing rate of 4.98% and weighted average remaining maturities of 208 days.

As of September 30, 2017, the outstanding amount due on convertible senior notes was \$282.5 million, net of deferred issuance costs. These notes are unsecured, pay interest semiannually at a rate of 6.25% per annum and mature in January 2022.

As of September 30, 2017, the debt-to-equity ratio funding our AFS securities, commercial real estate assets, MSR and Agency Derivatives, which includes unsecured borrowings under convertible senior notes, was 5.0:1.0. We believe our debt-to-equity ratio provides unused borrowing capacity and, thus, improves our liquidity and the strength of our balance sheet.

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, revolving credit facilities and convertible senior notes for the three months ended September 30, 2017, 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 September 30, 2017	\$ 19,207,645	\$ 20,618,697	\$ 20,618,697	5.0:1.0
For the Three Months Ended June 30, 2017	\$ 17,156,888	\$ 16,877,933	\$ 17,521,935	4.5:1.0
For the Three Months Ended March 31, 2017	\$ 15,297,535	\$ 17,509,745	\$ 17,509,745	4.9:1.0
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

(1) Includes borrowings under repurchase agreements, FHLB advances, revolving credit facilities and convertible senior notes 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 condensed 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 condensed consolidated financial statements for additional information regarding consolidation of the securitization trusts. As of September 30, 2017, collateralized borrowings in securitization trusts had a carrying value of \$2.8 billion with a weighted average interest rate of 3.4%. The stated maturity dates for all collateralized borrowings were greater than five years from September 30, 2017.

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 condensed 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 September 30, 2017:

	September 30, 2017
Carrying Value (in thousands)	\$ 241,906
Average Coupon	3.0%
Collateral Attributes	
Average Loan Age (months)	33
Average Loan Size (in thousands)	\$ 807
Average Original Loan-to-Value	64.7%
Average Original FICO	772
Current Performance	
60+ day delinquencies	0.04%

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 September 30, 2017:

(dollars in thousands)	September 30, 2017	
	Carrying Value	% of Retained Portfolio
AAA	\$ 31,825	13.2%
AA	36,304	15.0%
A	27,602	11.4%
BBB	46,359	19.2%
BB	34,917	14.4%
B	—	—%
Below B	—	—%
Not rated	64,899	26.8%
Total	<u>\$ 241,906</u>	<u>100.0%</u>

Equity

The table below provides details of our changes in stockholders' equity from June 30, 2017 to September 30, 2017. All per share amounts, common shares outstanding and restricted shares for all periods presented have been adjusted on a retroactive basis to reflect the reverse stock split.

(dollars in millions, except per share amounts)	Book Value	Common Shares Outstanding	Common Book Value Per Share
Common stockholders' equity at June 30, 2017	\$ 3,444.6	174.5	\$ 19.74
Reconciliation of non-GAAP measures to GAAP net income and Comprehensive income:			
Core Earnings, net of tax expense of \$2.0 million ⁽¹⁾⁽²⁾	98.1		
Dividends on preferred stock	(8.9)		
Core Earnings attributable to common stockholders, net of tax expense of \$2.0 million ⁽¹⁾⁽²⁾	89.2		
Realized and unrealized gains and losses, net of tax benefit of \$7.3 million	4.0		
GAAP net income	93.2		
Other comprehensive income, net of tax	68.4		
Comprehensive income	161.6		
Dividend declaration	(90.7)		
Other	4.1	—	
Balance before capital transactions	3,519.6	174.5	
Preferred stock issuance costs	(9.4)		
Issuance of common stock, net of offering costs	0.1	—	
Common stockholders' equity at September 30, 2017	\$ 3,510.3	174.5	\$ 20.12
Total preferred stock liquidation preference	431.3		
Noncontrolling interest	189.8		
Total equity at September 30, 2017	\$ 4,131.4		

- (1) Core Earnings is a non-U.S. GAAP measure that we define as comprehensive income attributable to common stockholders, excluding “realized and unrealized gains and losses” (impairment losses, realized and unrealized gains or losses on the aggregate portfolio, reserve expense for representation and warranty obligations on MSR, certain upfront costs related to securitization transactions, non-cash compensation expense related to restricted common stock, restructuring charges and transaction costs related to Granite Point’s initial public offering). 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. We believe the presentation of Core Earnings provides investors greater transparency into our period-over-period financial performance and facilitates comparisons to peer REITs.
- (2) For the three months ended September 30, 2017, Core Earnings excludes our controlling interest in Granite Point’s Core Earnings and includes our share of Granite Point’s declared dividend. We believe this presentation is the most accurate reflection of our incoming cash associated with holding shares of Granite Point common stock and assists with the understanding of the forward-looking financial presentation of the company.

Issuance of Preferred Stock

On March 14, 2017, we issued 5,000,000 shares of 8.125% Series A Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock, par value \$0.01 per share, in a public offering at a price of \$25.00 per share. On March 21, 2017, an additional 750,000 shares were sold to the underwriters of the offering pursuant to an overallotment option. Holders of the preferred stock are entitled to receive, when and as declared, a dividend at a fixed rate of 8.125% per annum of the \$25.00 liquidation preference. On and after April 27, 2027, dividends will accumulate and be payable at a floating rate of three-month LIBOR plus a spread of 5.66% per annum of the \$25.00 liquidation preference. The preferred stock ranks senior to our common stock and on parity with our 7.625% Series B Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock with respect to the payment of dividends and the distribution of assets upon the voluntary or involuntary liquidation, dissolution or winding up of the company. Under certain circumstances upon a change of control, the preferred stock is convertible into shares of our common stock. The preferred stock will not be redeemable before April 27, 2027, except under certain limited circumstances. On or after April 27, 2027, we may, at our option, redeem, in whole or in part, at any time or from time to time, the preferred stock at a redemption price of \$25.00 per share, plus any accumulated and unpaid dividends thereon (whether or not authorized or declared) up to, but excluding, the redemption date. The net proceeds from the offering were approximately \$138.9 million, after deducting underwriting discounts and estimated offering expenses payable by us.

On July 19, 2017, we issued 11,500,000 shares of 7.625% Series B Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock, par value \$0.01 per share, in a public offering at a price of \$25.00 per share, which included 1,500,000 shares sold to the underwriters of the offering pursuant to an overallotment option. Holders of the preferred stock are entitled to receive, when and as declared, a dividend at a fixed rate of 7.625% per annum of the \$25.00 liquidation preference. On and after July 27, 2027, dividends will accumulate and be payable at a floating rate of three-month LIBOR plus a spread of 5.352% per annum of the \$25.00 liquidation preference. The preferred stock ranks senior to our common stock and on parity with our 8.125% Series A Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock with respect to the payment of dividends and the distribution of assets upon the voluntary or involuntary liquidation, dissolution or winding up of the company. Under certain circumstances upon a change of control, the preferred stock is convertible into shares of our common stock. The preferred stock will not be redeemable before July 27, 2027, except under certain limited circumstances. On or after July 27, 2027, we may, at our option, redeem, in whole or in part, at any time or from time to time, the preferred stock at a redemption price of \$25.00 per share, plus any accumulated and unpaid dividends thereon (whether or not authorized or declared) up to, but excluding, the redemption date. The net proceeds from the offering were approximately \$278.1 million, after deducting underwriting discounts and estimated offering expenses payable by us.

Noncontrolling Interest

On June 28, 2017, we completed the contribution of our portfolio of commercial real estate assets to Granite Point. We contributed our equity interests in our wholly owned subsidiary, TH Commercial Holdings LLC, to Granite Point and, in exchange for our contribution, received approximately 33.1 million shares of common stock of Granite Point, representing approximately 76.5% of the outstanding stock of Granite Point upon completion of the IPO of its common stock on June 28, 2017. In connection with the Granite Point IPO, we agreed, subject to certain conditions, to purchase up to \$20 million of Granite Point common stock in the open market at designated prices below Granite Point's publicly reported book value pursuant to a share purchase program that ended on November 1, 2017. During the three and nine months ended September 30, 2017, we purchased 285,662 shares of Granite Point common stock under the program for a total cost of \$5.4 million.

Due to our controlling ownership interest in Granite Point during the periods presented, we consolidate Granite Point on our financial statements and reflect noncontrolling interest for the portion of equity and comprehensive income not attributable to us. During the three and nine months ended September 30, 2017, in accordance with ASC 810, *Consolidation*, the carrying amount of noncontrolling interest was adjusted to reflect (i) changes in our ownership interest in Granite Point as a result of the purchases of Granite Point common stock discussed above and (ii) the portion of comprehensive income and dividends declared by Granite Point that are not attributable to us, with the offset to equity.

As of November 1, 2017, we no longer have a controlling interest in Granite Point and, therefore, will prospectively deconsolidate the financial condition and results of operations of Granite Point and its subsidiaries from our financial statements.

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, 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.

To the extent that we raise additional equity capital through capital market transactions, we anticipate using cash proceeds from such transactions to purchase additional Agency RMBS, non-Agency securities, MSR and other target assets and for other general corporate purposes. We include in the following discussion the liquidity and capital resources of Granite Point due to its consolidation on our condensed consolidated balance sheet; however, we do not have access to their cash nor do we have any obligation to fund Granite Point's investments or obligations with respect to Granite Point's financing arrangements.

As of September 30, 2017, we held \$539.4 million in cash and cash equivalents available to support our operations; \$26.6 billion of AFS securities, commercial real estate assets, MSR, residential mortgage loans held-for-investment in securitization trusts, residential mortgage loans held-for-sale and derivative assets held at fair value; and \$23.4 billion of outstanding debt in the form of repurchase agreements, FHLB advances, borrowings under revolving credit facilities, convertible senior notes and collateralized borrowings in securitization trusts. During the three months ended September 30, 2017, our total consolidated debt-to-equity ratio increased from 5.2:1.0 to 5.7:1.0. The debt-to-equity ratio funding our AFS securities, commercial real estate assets, MSR and Agency Derivatives only, which includes unsecured borrowings under convertible senior notes, also increased from 4.5:1.0 to 5.0:1.0, predominantly driven by the purchase of and increased financing on AFS securities and commercial real estate assets. 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 September 30, 2017, we held approximately \$1.9 million of unpledged Agency securities and derivatives and \$223.7 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 securities and retained interests of approximately \$145.6 million. We also held approximately \$89.2 million of unpledged mezzanine commercial real estate loans and \$51.5 million of unpledged commercial real estate first mortgages, and had an overall estimated unused borrowing capacity on unpledged commercial real estate assets of approximately \$82.2 million, which may be used to fund Granite Point's target assets. As of September 30, 2017, we held approximately \$770.0 million of unpledged MSR and had an overall estimated unused borrowing capacity on unpledged MSR of approximately \$50.0 million. We also held approximately \$31.2 million of unpledged residential mortgage loans held-for-sale, 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 nine months ended September 30, 2017, 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 September 30, 2017, we had master repurchase agreements in place with 33 counterparties (lenders), the majority of which are U.S. domiciled financial institutions, and we continue to evaluate additional 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 September 30, 2017 and December 31, 2016:

(dollars in thousands)	September 30, 2017			December 31, 2016		
	Amount Outstanding	Net Counterparty Exposure ⁽¹⁾	Percent of Funding	Amount Outstanding	Net Counterparty Exposure ⁽¹⁾	Percent of Funding
North America	\$ 9,958,346	\$ 1,443,661	67.1%	\$ 4,916,309	\$ 965,621	67.3%
Europe ⁽²⁾	5,729,340	565,723	26.3%	2,617,372	355,060	24.7%
Asia ⁽²⁾	2,609,706	142,758	6.6%	1,782,670	114,720	8.0%
Total	\$ 18,297,392	\$ 2,152,142	100.0%	\$ 9,316,351	\$ 1,435,401	100.0%

(1) Represents the net carrying value of the securities 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 of \$17.9 million are not included in the September 30, 2017 amounts presented above. The Company did not have any such payables at December 31, 2016.

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

In addition to our master repurchase agreements to fund our Agency RMBS, non-Agency securities and commercial real estate assets, we have six 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)

September 30, 2017						
Expiration Date ⁽¹⁾	Committed	Amount Outstanding	Unused Capacity	Total Capacity	Eligible Collateral	
June 28, 2019	No	\$ 330,024	\$ 169,976	\$ 500,000	Commercial real estate assets	
June 28, 2020 ⁽²⁾	No	\$ 397,464	\$ 102,536	\$ 500,000	Commercial real estate assets	
June 28, 2019 ⁽³⁾	No	\$ 447,840	\$ 25,955	\$ 473,795	Commercial real estate assets	
May 2, 2019	No	\$ 158,236	\$ 91,764	\$ 250,000	Commercial real estate assets	
June 28, 2020	No	\$ 107,291	\$ 142,709	\$ 250,000	Commercial real estate assets	
October 26, 2017 ⁽⁴⁾	No	\$ —	\$ 100,000	\$ 100,000	Commercial real estate assets	
September 1, 2018	No	\$ 20,000	\$ 30,000	\$ 50,000	Mortgage servicing rights	
December 18, 2017	No	\$ 20,000	\$ 20,000	\$ 40,000	Mortgage servicing rights	

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

(2) Includes an option, to be exercised at the Company's discretion, to increase the maximum facility amount to \$600.0 million, subject to certain customary conditions contained in the agreement.

(3) Fixed pool of assets after ramp-up period.

(4) This facility is a short-term bridge facility.

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 September 30, 2017, TH Insurance had \$2.0 billion in outstanding secured advances with a weighted average borrowing rate of 1.56%, and an additional \$1.4 billion 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 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 securities 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 September 30, 2017:

- Total indebtedness to net worth must be less than the specified threshold ratio in the repurchase agreement. As of September 30, 2017, our debt to net worth, as defined, was 5.7:1.0 while our threshold ratio, as defined, was 6.0:1.0.
- Liquidity must be greater than \$100.0 million. As of September 30, 2017, our liquidity, as defined, was \$1.2 billion.
- Net worth must be greater than \$1.75 billion. As of September 30, 2017, our net worth, as defined, was \$4.1 billion.
- Interest coverage must not be less than 2.0:1.0. As of September 30, 2017, our interest coverage ratio, as defined, was 2.2:1.0.

Subsequent to September 30, 2017, the debt to net worth and threshold ratios were redefined with all counterparties. Under the new definitions, our debt to net worth, as defined, would have been 5.0:1.0 and our threshold ratio, as defined, would have been 6.5:1.0 as of September 30, 2017.

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)	September 30, 2017	December 31, 2016
Available-for-sale securities, at fair value	\$ 19,989,068	\$ 13,117,330
Commercial real estate assets	2,030,703	1,357,874
Mortgage servicing rights, at fair value	160,635	180,948
Net economic interests in consolidated securitization trusts ⁽¹⁾	226,434	213,110
Cash and cash equivalents	14,796	15,000
Restricted cash	149,844	162,759
Due from counterparties	23,602	48,939
Derivative assets, at fair value	101,187	126,341
Total	\$ 22,696,269	\$ 15,222,301

(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 Agency RMBS and non-Agency securities are generally actively traded and thus, in most circumstances, readily liquid. However, certain of our assets, including commercial real estate assets, MSR and residential mortgage loans, 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 commercial real estate assets, MSR and residential mortgage loans, 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 commercial real estate assets, MSR and residential mortgage loans, 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, revolving credit facilities and convertible senior notes as of September 30, 2017 and December 31, 2016:

(in thousands)	September 30, 2017	December 31, 2016
Within 30 days	\$ 3,167,517	\$ 3,286,783
30 to 59 days	2,911,829	2,376,002
60 to 89 days	20,000	1,365,394
90 to 119 days	3,298,633	1,504,056
120 to 364 days	7,498,558	1,319,720
One to three years	2,255,879	1,000,658
Three to five years	282,543	—
Five to ten years	—	—
Ten years and over	1,183,738	2,533,738
Total	<u>\$ 20,618,697</u>	<u>\$ 13,386,351</u>

For the three months ended September 30, 2017, our restricted and unrestricted cash balance decreased approximately \$18.3 million to \$883.2 million at September 30, 2017. The cash movements can be summarized by the following:

- *Cash flows from operating activities.* For the three months ended September 30, 2017, operating activities increased our cash balances by approximately \$142.4 million, primarily driven by our financial results for the quarter.
- *Cash flows from investing activities.* For the three months ended September 30, 2017, investing activities decreased our cash balances by approximately \$4.0 billion, primarily driven by purchases of AFS securities, commercial real estate assets and MSR.
- *Cash flows from financing activities.* For the three months ended September 30, 2017, financing activities increased our cash balance by approximately \$3.8 billion, primarily driven by proceeds from repurchase agreements and our second preferred stock offering, offset by the repayment of a portion of our outstanding FHLB advances.

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.

Item 3. 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 enter into a variety of derivative and non-derivative instruments to economically hedge interest rate risk or “duration mismatch (or gap)” by adjusting the duration of our floating-rate borrowings into fixed-rate borrowings to more closely match the duration of our assets. 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 certain derivatives 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. The objective is to manage the cash flows associated with current and anticipated interest payments on borrowings, as well as the ability to roll or refinance borrowings at the desired amount by adjusting the duration. To help manage the adverse impact of interest rate changes on the value of our portfolio as well as our cash flows, we 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 interest rate risk management strategy, the Company has entered into TBAs, put and call options for TBAs, interest rate swap and swaption agreements and Markit IOS total return swaps. In addition, because MSR are negative duration assets, they provide a natural hedge to interest rate exposure on our Agency RMBS portfolio. In hedging interest rate risk, 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, improve risk-adjusted returns and, where possible, obtain a favorable spread between the yield on our assets and the cost of our financing.

Income of a REIT arising from “clearly identified” hedging transactions that are entered into to manage the risk of interest rate or price changes with respect to borrowings, including gain from the disposition of such hedging transactions, to the extent the hedging transactions hedge indebtedness incurred, or to be incurred, by the REIT to acquire or carry real estate assets, will not be treated as gross income for purposes of the either the 75% or the 95% gross income tests. In general, for a hedging transaction to be “clearly identified,” (i) it must be identified as a hedging transaction before the end of the day on which it is acquired, originated, or entered into; and (ii) the items of risks being hedged must be identified “substantially contemporaneously” with entering into the hedging transaction (generally not more than 35 days after entering into the hedging transaction). We intend to structure any hedging transactions in a manner that does not jeopardize our qualification as a REIT, although this determination depends on an analysis of the facts and circumstances concerning each hedging transaction. We also 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 Agency RMBS and non-Agency securities 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 securities 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 Agency RMBS and non-Agency securities. 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 securities could effectively be limited by caps. This issue will be magnified to the extent we acquire adjustable-rate and hybrid securities that are not based on mortgages that are fully indexed. In addition, adjustable-rate and hybrid securities 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 non-Agency securities 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 Agency RMBS, non-Agency securities, commercial real estate assets and residential mortgage loans held-for-sale of September 30, 2017 and December 31, 2016, respectively, based on carrying value (dollars in thousands).

Index Type	September 30, 2017				December 31, 2016			
	Floating	Hybrid ⁽¹⁾	Total	Index %	Floating	Hybrid ⁽¹⁾	Total	Index %
CMT	\$ 12,366	\$ 19,760	\$ 32,126	1%	\$ 13,188	\$ 23,953	\$ 37,141	1%
LIBOR	4,464,894	14,058	4,478,952	97%	3,043,945	13,086	3,057,031	96%
Other ⁽²⁾	49,697	63,045	112,742	2%	45,880	41,760	87,640	3%
Total	\$ 4,526,957	\$ 96,863	\$ 4,623,820	100%	\$ 3,103,013	\$ 78,799	\$ 3,181,812	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 September 30, 2017.

All changes in value are measured as the change from the September 30, 2017 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	\$ 482,035	\$ 279,672	\$ (367,792)	\$ (798,770)
<i>As a % of September 30, 2017 total equity</i>	<i>11.7 %</i>	<i>6.8 %</i>	<i>(8.9)%</i>	<i>(19.3)%</i>
Commercial real estate assets	\$ 711	\$ 401	\$ (447)	\$ (894)
<i>As a % of September 30, 2017 total equity</i>	<i>— %</i>	<i>— %</i>	<i>— %</i>	<i>— %</i>
Mortgage servicing rights	\$ (323,324)	\$ (137,398)	\$ 94,395	\$ 158,371
<i>As a % of September 30, 2017 total equity</i>	<i>(7.8)%</i>	<i>(3.3)%</i>	<i>2.3 %</i>	<i>3.8 %</i>
Residential mortgage loans held-for-investment in securitization trusts	\$ 19,349	\$ 25,798	\$ (51,596)	\$ (118,855)
<i>As a % of September 30, 2017 total equity</i>	<i>0.5 %</i>	<i>0.6 %</i>	<i>(1.3)%</i>	<i>(2.9)%</i>
Residential mortgage loans held-for-sale	\$ 496	\$ 135	\$ (281)	\$ (924)
<i>As a % of September 30, 2017 total equity</i>	<i>— %</i>	<i>— %</i>	<i>— %</i>	<i>— %</i>
Derivatives, net	\$ (229,874)	\$ (131,520)	\$ 208,065	\$ 475,125
<i>As a % of September 30, 2017 total equity</i>	<i>(5.6)%</i>	<i>(3.2)%</i>	<i>5.0 %</i>	<i>11.5 %</i>
Repurchase agreements	\$ (48,610)	\$ (24,305)	\$ 24,305	\$ 48,610
<i>As a % of September 30, 2017 total equity</i>	<i>(1.2)%</i>	<i>(0.6)%</i>	<i>0.6 %</i>	<i>1.2 %</i>
Collateralized borrowings in securitization trusts	\$ (38,019)	\$ (35,054)	\$ 56,225	\$ 125,016
<i>As a % of September 30, 2017 total equity</i>	<i>(0.9)%</i>	<i>(0.9)%</i>	<i>1.4 %</i>	<i>3.0 %</i>
Federal Home Loan Bank advances	\$ (1,993)	\$ (997)	\$ 997	\$ 1,993
<i>As a % of September 30, 2017 total equity</i>	<i>(0.1)%</i>	<i>— %</i>	<i>— %</i>	<i>— %</i>
Revolving credit facilities	\$ (17)	\$ (8)	\$ 8	\$ 17
<i>As a % of September 30, 2017 total equity</i>	<i>— %</i>	<i>— %</i>	<i>— %</i>	<i>— %</i>
Total Net Assets	\$ (139,246)	\$ (23,276)	\$ (36,121)	\$ (110,311)
<i>As a % of September 30, 2017 total assets</i>	<i>(0.5)%</i>	<i>(0.1)%</i>	<i>(0.1)%</i>	<i>(0.4)%</i>
<i>As a % of September 30, 2017 total equity</i>	<i>(3.4)%</i>	<i>(0.6)%</i>	<i>(0.9)%</i>	<i>(2.7)%</i>
	-100 bps	-50 bps	+50 bps	+100 bps
Change in annualized net interest income:	\$ 14,274	\$ 6,073	\$ (4,864)	\$ (9,728)
<i>% change in net interest income</i>	<i>3.5 %</i>	<i>1.5 %</i>	<i>(1.2)%</i>	<i>(2.4)%</i>

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 September 30, 2017. 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 RMBS and non-Agency securities, 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, interest-only securities and MSR and higher realized yields on Agency RMBS and non-Agency securities 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 on Agency RMBS and non-Agency securities 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 September 30, 2017, 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 RMBS and non-Agency securities 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. While this table reflects the estimated impact of interest rate changes on the static portfolio, we actively manage our portfolio and continuously make adjustments to the size and composition of our asset and hedge portfolio. 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 Agency RMBS and non-Agency securities, 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 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.

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.

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 commercial real estate and residential mortgage loans and the potential proceeds available to borrowers to repay the loans, which could cause us to suffer losses on our non-Agency securities and commercial real estate and residential mortgage 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 Quarterly Report on Form 10-Q 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 securities and on our commercial real estate and residential mortgage loans. With respect to our non-Agency securities that are senior in the credit structure, credit support contained in 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 securities and commercial real estate and residential mortgage 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 commercial real estate and residential mortgage 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 4. 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 Quarterly Report on Form 10-Q. 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 Quarterly Report on Form 10-Q, 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 September 30, 2017 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. 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 1A. Risk Factors

Except as set forth in our Quarterly Report on Form 10-Q for the period ended March 31, 2017, or the Q1 Form 10-Q, and our Quarterly Report on Form 10-Q for the period ended June 30, 2017, or the Q2 Form 10-Q, there have been no material changes to the risk factors set forth under the heading “Item 1A. Risk Factors” of our Annual Report on Form 10-K for the year ended December 31, 2016, or the Form 10-K. The materialization of any risks and uncertainties identified in our Forward-Looking Statements contained in this Quarterly Report on Form 10-Q, together with those previously disclosed in the Form 10-K, the Q1 Form 10-Q, the Q2 Form 10-Q, or those that are presently unforeseen could result in significant adverse effects on our financial condition, results of operations, and cash flows. See Item 2, “*Management’s Discussion and Analysis of Financial Condition and Results of Operations - Forward-Looking Statements*” in this Quarterly Report on Form 10-Q.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

(a) None.

(b) None.

(c) The Company’s share repurchase program allows for the repurchase of up to an aggregate of 37,500,000 shares of the Company’s common stock. 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 September 30, 2017, we had repurchased 12,067,500 shares under the program for a total cost of \$200.4 million. We did not repurchase shares during the three months ended September 30, 2017.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

None.

Item 5. Other Information

None.

Item 6. Exhibits

(a) Exhibits

Exhibits - The exhibits listed on the accompanying Index of Exhibits are filed or incorporated by reference as a part of this report. Such Index is incorporated herein by reference.

<u>Exhibit Number</u>	<u>Exhibit Index</u>
3.1	Articles of Amendment and Restatement of Two Harbors Investment Corp. (incorporated by reference to Exhibit 99.1 to Annex B filed with Pre-effective Amendment No. 4 to the Company's Registration Statement on Form S-4 (File No. 333-160199), filed with the SEC on October 8, 2009).
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 Company's Current Report on Form 8-K, filed with the SEC on December 19, 2012).
3.3	Articles of Amendment to the Articles of Amendment and Restatement of Two Harbors Investment Corp. (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K, filed with the SEC on November 2, 2017).
3.4	Articles of Amendment to the Articles of Amendment and Restatement of Two Harbors Investment Corp. (incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K, filed with the SEC on November 2, 2017).
3.5	Articles Supplementary to the Articles of Amendment to the Articles of Amendment and Restatement of Two Harbors Investment Corp. designating the shares of 8.125% Series A Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock, \$0.01 par value per share (incorporated by reference to Exhibit 3.3 of the Company's Form 8-A filed with the SEC on March 13, 2017).
3.6	Articles Supplementary to the Articles of Amendment to the Articles of Amendment and Restatement of Two Harbors Investment Corp. designating the shares of 7.625% Series B Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock, \$0.01 par value per share (incorporated by reference to Exhibit 3.4 of the Company's Form 8-A filed with the SEC on July 17, 2017).
3.7	Amended and Restated Bylaws of Two Harbors Investment Corp. (incorporated by reference to Exhibit 3.4 to the Company's Current Report on Form 8-K, filed with the SEC on April 6, 2017).
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 Quarterly Report on Form 10-Q of Two Harbors Investment Corp. for the three months ended September 30, 2017, filed with the SEC on November 8, 2017, formatted in XBRL: (i) the Condensed Consolidated Balance Sheets, (ii) the Condensed Consolidated Statements of Comprehensive Income, (iii) the Condensed Consolidated Statements of Stockholders' Equity, (iv) the Condensed Consolidated Statements of Cash Flows, and (v) the Notes to the Condensed Consolidated Financial Statements. (filed herewith)

SIGNATURES

Pursuant to the requirements 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:	November 8, 2017	By:	TWO HARBORS INVESTMENT CORP. <u>/s/ Thomas E. Siering</u> Thomas E. Siering Chief Executive Officer, President and Director (Principal Executive Officer)
Dated:	November 8, 2017	By:	<u>/s/ Brad Farrell</u> Brad Farrell Chief Financial Officer and Treasurer (Principal Financial Officer)
Dated:	November 8, 2017	By:	<u>/s/ Mary Risky</u> Mary Risky Chief Accounting Officer (Principal Accounting Officer)

**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 Quarterly Report on Form 10-Q 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: November 8, 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 Quarterly Report on Form 10-Q 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: November 8, 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 Quarterly Report on Form 10-Q for the three months ended September 30, 2017 (the "Quarterly 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 Quarterly Report fairly presents, in all material respects, the financial condition and results of operations of the Registrant.

Date: November 8, 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 Quarterly 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 Quarterly Report on Form 10-Q for the three months ended September 30, 2017 (the "Quarterly 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 Quarterly Report fairly presents, in all material respects, the financial condition and results of operations of the Registrant.

Date: November 8, 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 Quarterly Report or as a separate disclosure document.