



Second Quarter 2018 Earnings Call

AUGUST 8, 2018



TWO HARBORS
Investment Corp.

A Pine River Capital Managed Company

Safe Harbor Statement



FORWARD-LOOKING STATEMENTS

This presentation includes “forward-looking statements” within the meaning of the safe harbor provisions of the United States Private Securities Litigation Reform Act of 1995. Actual results may differ from expectations, estimates and projections and, consequently, readers should not rely on these forward-looking statements as predictions of future events. Words such as “expect,” “target,” “assume,” “estimate,” “project,” “budget,” “forecast,” “anticipate,” “intend,” “plan,” “may,” “will,” “could,” “should,” “believe,” “predicts,” “potential,” “continue,” and similar expressions are intended to identify such forward-looking statements. These forward-looking statements involve significant risks and uncertainties that could cause actual results to differ materially from expected results, including, among other things, those described in our Annual Report on Form 10-K for the year ended December 31, 2017, and any subsequent Quarterly Reports on Form 10-Q, under the caption “Risk Factors.” Factors that could cause actual results to differ include, but are not limited to: the state of credit markets and general economic conditions; changes in interest rates and the market value of our assets; changes in prepayment rates of mortgages underlying our target assets; the rates of default or decreased recovery on the mortgages underlying our target assets; the occurrence, extent and timing of credit losses within our portfolio; the concentration of credit risks we are exposed to; declines in home prices; our ability to establish, adjust and maintain appropriate hedges for the risks in our portfolio; the availability and cost of our target assets; the availability and cost of financing; changes in the competitive landscape within our industry; our ability to effectively execute and to realize the benefits of strategic transactions and initiatives we have pursued or may in the future pursue; our acquisition of CYS and our ability to realize the benefits related thereto; our ability to manage various operational risks and costs associated with our business; interruptions in or impairments to our communications and information technology systems; our ability to acquire mortgage servicing rights (MSR) and successfully operate our seller-servicer subsidiary and oversee our subservicers; the impact of any deficiencies in the servicing or foreclosure practices of third parties and related delays in the foreclosure process; our exposure to legal and regulatory claims; legislative and regulatory actions affecting our business; the impact of new or modified government mortgage refinance or principal reduction programs; our ability to maintain our REIT qualification; and limitations imposed on our business due to our REIT status and our exempt status under the Investment Company Act of 1940.

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STRONG QUARTER HIGHLIGHTED BY GROWTH IN BOOK VALUE AND CORE EARNINGS

- Reported book value of \$15.69 per common share, representing a 3.4% total quarterly return on book value⁽¹⁾
- Generated Comprehensive Income of \$90.8 million, or \$0.52 per weighted average basic common share
- Reported Core Earnings, including dollar roll income, of \$93.9 million, or \$0.53 per weighted average basic common share, representing a return on average common equity of 13.5%⁽²⁾
 - Dollar roll income of \$16.5 million, or \$0.09 per weighted average basic common share
- Added \$10.5 billion unpaid principal balance (UPB) of MSR through a bulk acquisition and monthly flow-sale arrangements, bringing total holdings to \$119.5 billion UPB
- Added \$330 million facility to finance conventional MSR collateral; continued to advance discussions with other potential MSR financing counterparties
- Post quarter-end, completed the acquisition of CYS Investments, Inc. on July 31, 2018, increasing the company's total capital to approximately \$4.8 billion
- Post quarter-end, declared interim third quarter 2018 dividend of \$0.158370 per share, representing a partial payment of Two Harbors' regular third quarter common stock dividend, which is expected to be \$0.47 per share; anticipate declaring the remaining \$0.311630 per common share portion in the ordinary course in September 2018

(1) Return on book value for the quarter ended June 30, 2018 is defined as the increase in book value per common share from March 31, 2018 to June 30, 2018 of \$0.06, plus the dividend declared of \$0.47 per common share, divided by March 31, 2018 book value of \$15.63 per common share.

(2) Core Earnings and Core Earnings, including dollar roll income, are non-GAAP measures. Please see Appendix slide 20 of this presentation for a definition of Core Earnings and Core Earnings including dollar roll income and a reconciliation of GAAP to non-GAAP financial information.

Acquisition of CYS Investments, Inc.



TRANSACTION SUMMARY

- For each share of CYS common stock owned, CYS common stockholders received (i) 0.4680 newly issued shares of Two Harbors common stock and (ii) cash consideration of \$0.0965
 - As an illustrative example, a CYS stockholder holding 1,000 shares of CYS common stock received 468 shares of Two Harbors common stock and an additional \$96.50 of cash consideration
- Each share of CYS 7.75% Series A Cumulative Redeemable Preferred Stock was converted into one share of newly classified TWO 7.75% Series D Cumulative Redeemable Preferred Stock, and each share of CYS 7.50% Series B Cumulative Redeemable Preferred Stock was converted into one share of newly classified TWO 7.50% Series E Cumulative Redeemable Preferred Stock

UNIQUE OPPORTUNITY TO DRIVE VALUE FOR TWO HARBORS STOCKHOLDERS

- ✓ Enhanced scale, liquidity and larger capital base supports continued growth in target assets
- ✓ Anticipate improved Agency spreads in second half of 2018; believe this deal can be accretive to earnings and endorses the capital raising attendant to this transaction
- ✓ Combination of Two Harbors and CYS should create cost efficiencies and decrease Two Harbors' other operating expense ratio by 30 to 40 basis points going forward
- ✓ Expect to maintain \$0.47 per common share quarterly dividend for the remainder of 2018, subject to market conditions and the discretion and approval of Two Harbors' Board of Directors

Two Harbors Strategic Overview



KEY DIFFERENTIATING FACTORS

- ✓ Utilize a variety of instruments to hedge interest rate exposure
 - ✓ Strategy of pairing MSR with Agency RMBS
- ✓ Unique portfolio of discounted legacy non-Agency securities

AREAS OF FOCUS IN 2018

- ➡ Acute focus on Rates⁽¹⁾ and Credit⁽²⁾ strategies
 - Leverage competitive advantages in MSR and legacy non-Agency RMBS
- ➡ Maintain sophisticated approach to risk management
- ➡ Manage balance sheet composition to optimize earnings and stockholder returns
- ➡ Emphasis on technology efficiencies to grow MSR platform

✓ **Deliver strong results and book value stability through a variety of rate environments**

(1) Assets in “Rates” include Agency RMBS, MSR and other interest rate sensitive assets.

(2) Assets in “Credit” include non-Agency securities and other credit sensitive assets.



Book Value

(Dollars in millions, except per share data)	Q2-2018 Book Value	Q2-2018 Book Value per share	YTD-2018 Book Value	YTD-2018 Book Value per share
Beginning common stockholders' equity	\$2,741.4	\$15.63	\$2,845.1	\$16.31
GAAP Net Income:				
Core Earnings, net of tax ⁽¹⁾	91.1		185.2	
Dividend declaration - preferred	(13.7)		(27.5)	
Core Earnings attributable to common stockholders, net of tax ⁽¹⁾	77.4		157.7	
Dollar roll income	16.5		20.0	
Core Earnings attributable to common stockholders, including dollar roll income, net of tax ⁽¹⁾	93.9		177.7	
Realized and unrealized gains and losses, net of tax	31.8		269.1	
Other comprehensive loss, net of tax	(34.9)		(379.7)	
Dividend declaration - common	(82.5)		(164.9)	
Other	4.1		6.4	
Balance before capital transactions	2,753.8		2,753.7	
Issuance of common stock, net of offering costs	0.1		0.2	
Ending common stockholders' equity	\$2,753.9	\$15.69	\$2,753.9	\$15.69
Total preferred stock liquidation preference	726.3		726.3	
Ending total equity	\$3,480.2		\$3,480.2	

Comprehensive Income (GAAP)

Incurred Q2-2018 Comprehensive Income of \$90.8 million.

Declared Q2-2018 dividends of \$0.47 per common share and Series A, B and C preferred stock dividends totaling \$13.7 million.

(1) Please see Appendix slide 20 for a definition of Core Earnings and Core Earnings, including dollar roll income, and a reconciliation of GAAP to non-GAAP financial information.



Core Earnings Summary⁽¹⁾

(Dollars in millions, except per share data)	Q1-2018	Q2-2018	Variance (\$)
Interest income	\$194.0	\$187.3	(\$6.7)
Interest expense	96.6	108.4	(11.8)
Net interest income	97.4	78.9	(18.5)
Gain on investment securities	0.6	0.7	0.1
Servicing income, net of amortization on MSR	28.3	31.7	8.5
(Loss) gain on swaps and swaptions	3.8	13.8	10.0
Gain on other derivatives	2.5	1.7	(0.8)
Other	0.7	0.5	(0.2)
Total other income	35.9	48.4	12.5
Expenses	38.1	35.1	3.0
Provision for income taxes	1.1	1.1	—
Core Earnings⁽¹⁾	94.1	91.1	(3.0)
Dividends on preferred stock	13.7	13.7	—
Core Earnings attributable to common stockholders⁽¹⁾	\$80.4	\$77.4	(\$3.0)
Dollar roll income	3.4	16.5	13.1
Core Earnings, including dollar roll income, attributable to common stockholders⁽¹⁾	\$83.8	\$93.9	\$10.1
Basic weighted average Core EPS	\$0.46	\$0.44	(\$0.02)
Basic weighted average Core EPS, including dollar roll income	\$0.48	\$0.53	
Core Earnings as a % of average common equity	11.3%	11.1%	
Core Earnings as a % of average common equity, including dollar roll income	11.8%	13.5%	

- Core Earnings, including dollar roll income, of \$0.09, was \$0.53 per weighted average basic common share, representing a return on average common equity of 13.5%
- Core Earnings benefitted from slightly higher economic leverage as well as dollar roll income
- Other operating expense ratio, excluding non-cash LTIP amortization, of 1.4% was unchanged quarter-over-quarter

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Optimizing Financing Profile and Capital Structure

DEBT-TO-EQUITY

- 5.3x debt-to-equity at June 30, 2018⁽¹⁾
- Economic debt-to-equity, which includes to-be-announced (“TBA”) position, of 6.2x at June 30, 2018, compared to 6.0x at March 31, 2018⁽²⁾
- Maintain substantial liquidity to opportunistically take advantage of market opportunities

PREFERRED STOCK

- \$726 million outstanding with weighted average dividend rate of 7.6%
- Accounts for approximately 20% of capital base

RATES – AGENCY RMBS

- Outstanding repurchase agreements of \$16.9 billion with 25 active counterparties
- Outstanding secured FHLB advances of \$865.0 million with weighted average borrowing rate of 2.39%
- Repo markets functioning efficiently for RMBS with new counterparties entering market

CREDIT – NON-AGENCY SECURITIES

- Outstanding borrowings of \$2.3 billion with 14 active counterparties
- Market for non-Agency securities has seen improvement in both advance rates and spreads; in the second quarter saw haircuts generally between 20-30% and spreads of 100-125 basis points over LIBOR

RATES – MSR

- Added \$330 million financing facility for conventional MSR
- Outstanding borrowings of \$470.0 million under MSR financing facilities; additional available capacity of \$350.0 million
- Continue to advance MSR financing discussions with additional counterparties

(1) Defined as total borrowings to fund RMBS, MSR and Agency Derivatives, divided by total equity.

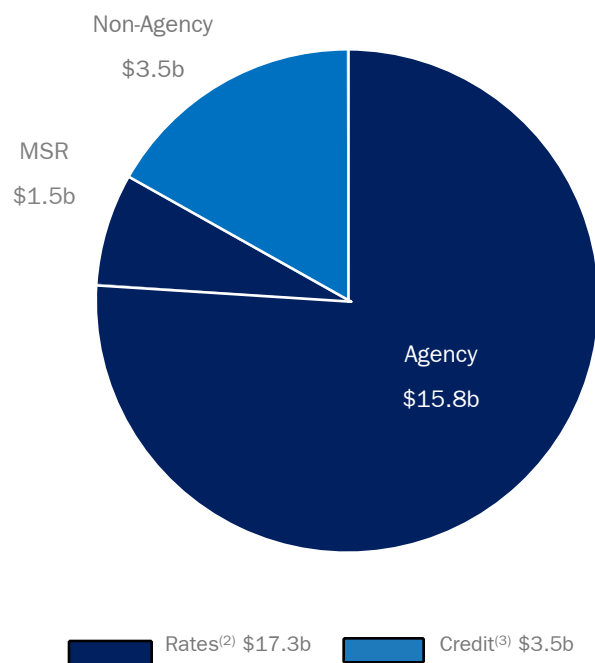
(2) Defined as total borrowings to fund RMBS, MSR and Agency Derivatives, plus net TBA position, divided by total equity.

Portfolio Composition



PORTFOLIO COMPOSITION⁽¹⁾

\$20.8 BILLION PORTFOLIO AS OF JUNE 30, 2018



HISTORICAL CAPITAL ALLOCATION

	June 30, 2017	March 31, 2018	June 30, 2018
Rates⁽²⁾	54%	69%	68%
Credit⁽³⁾	28%	31%	32%
Commercial⁽⁴⁾	18%	—%	—%

(1) For additional detail on the portfolio, see Appendix slides 21-25.

(2) Assets in "Rates" include Agency RMBS, MSR and other interest rate sensitive assets.

(3) Assets in "Credit" include non-Agency securities and other credit sensitive assets.

(4) Commercial consists of the consolidated financial results of Granite Point and its subsidiaries, which is now reflected in discontinued operations.

Portfolio Performance



DRIVING SUPERIOR PORTFOLIO PERFORMANCE

Q2-2018 PERFORMANCE SUMMARY

- Overall portfolio performance benefitted from floating-rate coupons on non-Agency securities, the LIBOR side of swaps and MSR float income

RATES

- Positive performance from hedges and MSR in rising rate environment
- Effect of flattening yield curve and variability in spreads had little impact on performance

CREDIT

- Residential credit benefitted from stable spreads and strong underlying credit performance, driving second quarter results

PORTFOLIO METRICS

Three Months Ended	March 31, 2018	June 30, 2018
Annualized portfolio yield during the quarter	3.77%	3.91%
Rates		
Agency RMBS, Agency Derivatives and MSR	3.2%	3.3%
Credit		
Non-Agency securities, Legacy ⁽¹⁾	7.5%	7.8%
Non-Agency securities, New issue ⁽¹⁾	10.9%	9.7%
Residential mortgage loans held-for-sale	4.7%	4.5%
Annualized cost of funds on average borrowings during the quarter⁽²⁾	1.84%	1.98%
Annualized interest rate spread for aggregate portfolio during the quarter	1.93%	1.93%

(1) "Legacy" non-Agency securities includes non-Agency bonds issued up to and including 2009. "New issue" non-Agency securities includes bonds issued after 2009.

(2) Cost of funds includes interest spread income/expense associated with the portfolio's interest rate swaps.



Rates Update

STRATEGY OF PAIRING MSR WITH AGENCY RMBS IS DISTINGUISHING FACTOR

AGENCY RMBS ACTIVITY

- Allocated capital from Agency pools into TBAs
- Continued to add exposure to Fannie Mae TBA 4.5's due to attractiveness of coupon
 - Roll for this coupon traded special most of the quarter, with implied financing costs about 30 basis points lower than repo
- Expect TBA position to fluctuate depending on availability and attractiveness of specified pools and any roll specialness⁽¹⁾

MSR ACTIVITY

- Increased capital allocation to MSR by adding \$10.5 billion UPB of MSR through one bulk purchase and our ongoing flow-sale arrangements
- Market for MSR bulk packages more active
- Pairing MSR with Agency RMBS results in a portfolio that has higher return potential with lower mortgage spread risk
 - Mitigates adverse impact to book value in spread widening scenario
- Low-to-mid double digit expected returns
- Addition of financing for MSR is beneficial to growing portfolio and enhancing returns

(1) Specialness means that implied financing costs are lower than traditional repurchase agreements.



Protecting Book Value and Income

- Active management of risk positioning leads to stability in returns through periods of market volatility

HEDGING ACROSS THE CURVE

Book value exposure to changes in rates ⁽¹⁾		Net income exposure to changes in rates ⁽²⁾	
+25 basis points	(0.7%)	+25 basis points	(0.1%)
+50 basis points	(2.2%)	+50 basis points	(0.3%)

BOOK VALUE SENSITIVITY TO MORTGAGE SPREADS⁽³⁾

Mortgage spreads	Change in Agency RMBS and mortgage derivatives	Change in MSR	Total overall Rates strategy change
25 basis points increase	(\$178)	\$55	(\$123) / (3.5%)
15 basis points increase	(\$107)	\$34	(\$73) / (2.1%)
15 basis points decrease	\$99	(\$38)	\$58 / 1.7%
25 basis points decrease	\$155	(\$64)	\$91 / 2.6%

Note: The above scenario is provided for illustration purposes only and is not necessarily indicative of Two Harbors' financial condition and operating results, nor is it necessarily indicative of the financial condition or results of operations that may be expected for any future period or date.

(1) Represents estimated change in equity value for theoretical parallel shift in interest rates.

(2) Represents estimated percentage change in net interest income for theoretical parallel shifts in interest rates.

(3) Dollars in millions. The information presented in this table projects the potential impact on book value of instantaneous changes in mortgage spreads. Spread sensitivity is based on results from third party models in conjunction with inputs from our internal investment professionals. Actual results could differ materially from these estimates.



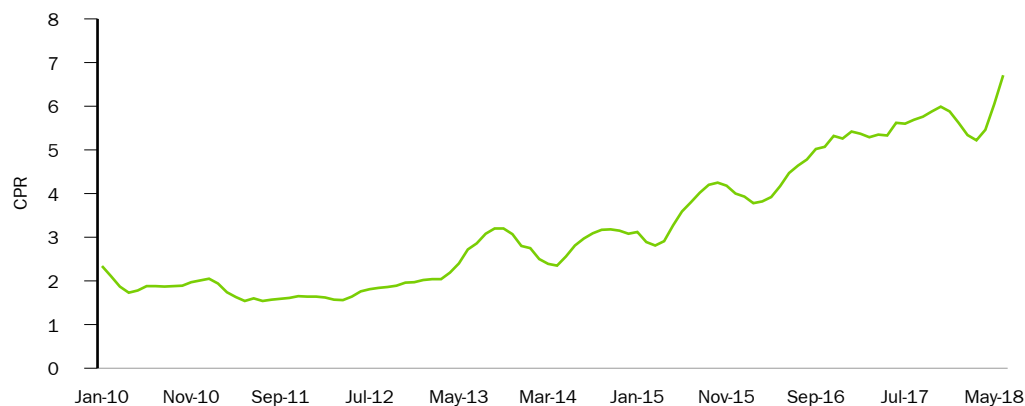
UNIQUE NON-AGENCY PORTFOLIO DRIVES ATTRACTIVE TOTAL RETURNS

- Non-Agency securities holdings of \$3.5 billion; primarily positioned in deeply discounted legacy subprime non-Agency RMBS with LIBOR floating rate coupons
- Increased holdings of low dollar priced legacy non-Agencies by approximately 18% quarter-over-quarter
- Average legacy market price of ~\$75 creates opportunity to capture additional upside⁽¹⁾

RESIDENTIAL CREDIT TAILWINDS

- Continued re-equipment has potential to result in strong performance for deeply discounted holdings
 - Drives increased prepayments, and lower loan-to-value ratios, delinquencies, defaults and severities

SUBPRIME CPR⁽²⁾



(1) Weighted average market price utilized current face for weighting purposes. Please see slide 25 in the Appendix for more information on our legacy non-Agency securities portfolio.

(2) Source: Nomura research, through June 30, 2018.

Portfolio Considerations for Acquisition of CYS Investments, Inc.



REDEPLOYING CAPITAL AND MAINTAINING LOW LEVEL OF RISK

- Redeploying capital from 100% Agency assets acquired in merger into our targeted asset mix
- Prior to acquisition, portfolio allocation of about 70% to Rates and 30% to Credit
- Expect allocation to Agencies to move downward over time in favor of MSR and non-Agency securities
- Maintaining low level of risk exposures, in line with current level of positioning



Appendix



TWO HARBORS
Investment Corp.

A Pine River Capital Managed Company



Return on Book Value

Return on common book value Q2-2018 (Per common share amounts, except for percentage)	
Book value at March 31, 2018	\$15.63
Book value at June 30, 2018	15.69
Increase in book value	0.06
Dividend declared in Q2-2018	0.47
Return on book value Q2-2018	\$0.53
Percent return on book value Q1-2018 ⁽¹⁾	3.4%
Return on common book value YTD-2018 (Per common share amounts, except for percentage)	
Book value at December 31, 2017	\$16.31
Book value at June 30, 2018	15.69
Decrease in book value	(0.62)
Dividends declared YTD-2018	0.94
Return on book value YTD-2018	\$0.32
Percent return on book value YTD-2018 ⁽²⁾	2.0%

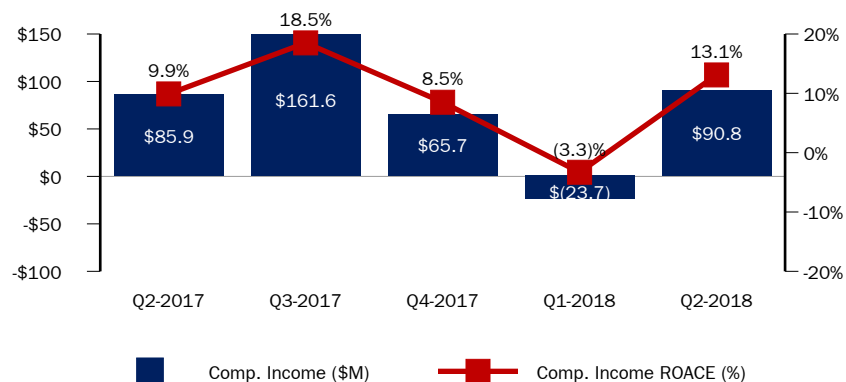
(1) Return on book value for the three-month period ended June 30, 2018 is defined as the increase in book value per common share from March 31, 2018 to June 30, 2018 of \$0.06 per common share, plus the dividend declared of \$0.47 per common share, divided by March 31, 2018 book value of \$15.63 per common share.

(2) Return on book value for the six-month period ended June 30, 2018 is defined as the decrease in book value per common share from December 31, 2017 to June 30, 2018 of (\$0.62) per common share, plus dividends declared of \$0.94 per common share, divided by December 31, 2017 book value of \$16.31 per common share.

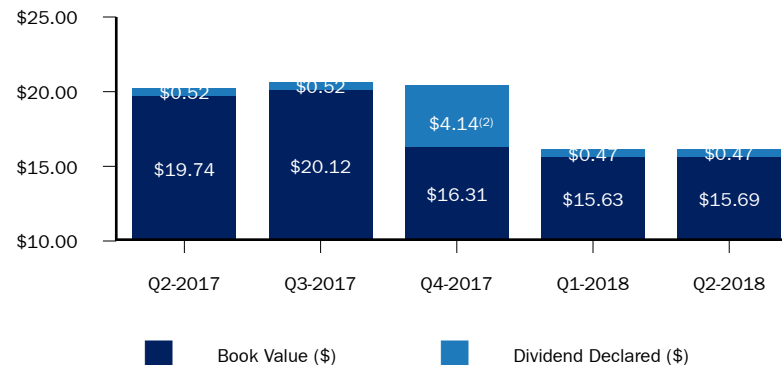
Financial Performance



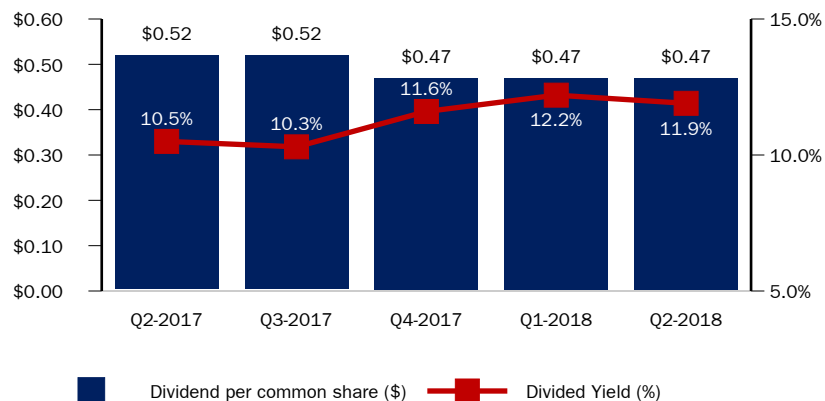
COMPREHENSIVE INCOME (LOSS)



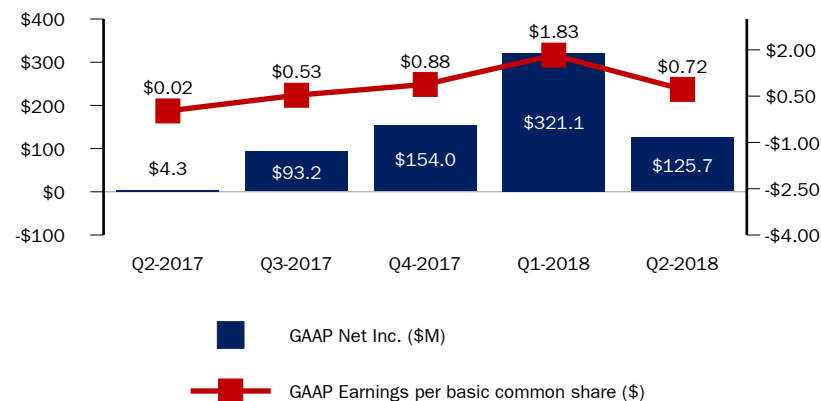
BOOK VALUE AND DIVIDEND PER COMMON SHARE⁽¹⁾



DIVIDENDS⁽¹⁾



GAAP NET INCOME



- (1) Historical dividends may not be indicative of future dividend distributions. The company ultimately distributes dividends based on its taxable income per common share, not GAAP earnings. The annualized dividend yield on the company's common stock is calculated based on the closing price of the last trading day of the relevant quarter.
- (2) Includes the special dividend of Granite Point common stock of \$3.67 per common share.

Q2-2018 Operating Performance



	Q2-2018			
(In millions, except for per common share data)	Core Earnings, including dollar roll income ⁽¹⁾	Realized Gains (Losses)	Unrealized MTM	Total
Interest income	\$187.3	\$—	\$—	\$187.3
Interest expense	108.4	—	—	108.4
Net interest income	78.9	—	—	78.9
Total other-than-temporary impairment losses	—	—	(0.2)	(0.2)
Gain (loss) on investment securities	0.7	(39.0)	6.4	(31.9)
Servicing income	77.7	—	—	77.7
(Loss) gain on servicing asset	(46.0)	0.1	55.7	9.8
Gain (loss) on interest rate swaps and swaptions	13.8	(20.5)	35.8	29.1
Gain (loss) on other derivative instruments	18.2	(13.6)	3.1	7.7
Other income	0.5	—	0.3	0.8
Total other income (loss)	64.9	(73.0)	101.3	93.2
Management fees & other operating expenses	35.1	3.4		38.5
Net income (loss) before income taxes	108.7	(76.4)	101.1	133.4
Income tax expense (benefit)	1.1	(9.1)	2.0	(6.0)
Net income (loss)	107.6	(67.3)	99.1	139.4
Dividends on preferred stock	13.7	—	—	13.7
Net income (loss) attributable to common stockholders	\$93.9	(\$67.3)	\$99.1	\$125.7
Weighted average earnings (loss) per basic common share	\$0.53	(\$0.38)	\$0.56	\$ 0.72

(1) Core Earnings and Core Earnings, including dollar roll income, are non-GAAP measures. Please see Appendix slide 20 of this presentation for a definition of Core Earnings and Core Earnings, including dollar roll income, and a reconciliation of GAAP to non-GAAP financial information.

Q1-2018 Operating Performance



	Q1-2018			
(In millions, except for per common share data)	Core Earnings, including dollar roll income ⁽¹⁾	Realized Gains (Losses)	Unrealized MTM	Total
Interest income	\$194.0	\$—	\$—	\$194.0
Interest expense	96.6	—	—	96.6
Net interest income	97.4	—	—	97.4
Total other-than-temporary impairment losses	—	—	(0.1)	(0.1)
Gain (loss) on investment securities	0.6	(19.6)	(1.7)	(20.7)
Servicing income	71.2	—	—	71.2
(Loss) gain on servicing asset	(42.9)	0.3	114.4	71.8
Gain on interest rate swaps and swaptions	3.8	92.5	54.3	150.6
Gain (loss) on other derivative instruments	5.9	47.4	(45.2)	8.1
Other income (loss)	0.7	(0.2)	0.5	1.0
Total other income	39.3	120.4	122.3	282.0
Management fees & other operating expenses	38.1	2.6	—	40.7
Net income before income taxes	98.6	117.8	122.2	338.6
Income tax expense (benefit)	1.1	9.5	(6.8)	3.8
Net income	97.5	108.3	129.0	334.8
Dividends on preferred stock	13.7	—	—	13.7
Net income attributable to common stockholders	\$83.8	\$108.3	\$129.0	\$321.1
Weighted average earnings per basic common share	\$0.48	\$0.62	\$0.73	\$ 1.83

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GAAP to Core Earnings Reconciliation⁽¹⁾

Reconciliation of GAAP to non-GAAP Information (In thousands, except for per common share data)	Three Months Ended March 31, 2018	Three Months Ended June 30, 2018
Reconciliation of Comprehensive income to Core Earnings:		
Comprehensive (loss) income attributable to common stockholders	(\$23,715)	\$90,856
Adjustment for other comprehensive loss attributable to common stockholders:		
Unrealized loss on available-for-sale securities attributable to common stockholders	344,777	34,887
Net income attributable to common stockholders	\$321,062	\$125,743
Adjustments for non-core earnings:		
Realized losses on securities and residential mortgage loans	19,731	39,040
Unrealized loss (gain) on securities and residential mortgage loans held-for-sale	1,253	(6,735)
Other-than-temporary impairment loss	94	174
Unrealized gains on interest rate swaps and swaptions hedging interest rate exposure (or duration)	(54,257)	(35,743)
Realized (gain) loss on termination or expiration of swaps and swaptions	(92,479)	20,450
Gains on other derivative instruments	(5,599)	(6,047)
Realized and unrealized gains on mortgage servicing rights	(114,692)	(55,793)
Change in servicing reserves	265	(154)
Non-cash equity compensation expense	2,341	3,530
Net provision for (benefit from) income taxes on non-Core Earnings	2,652	(7,139)
Core Earnings attributable to common stockholders⁽¹⁾	80,371	77,326
Dollar roll income	3,454	16,539
Core Earnings attributable to common stockholders, including dollar roll income⁽¹⁾	\$83,825	\$93,865
Weighted average basic common shares outstanding	175,145,964	175,451,989
Core Earnings per weighted average basic common share outstanding	\$0.46	\$0.44
Dollar roll income per weighted average basic common share outstanding	0.02	0.09
Core Earnings, including dollar roll income, per weighted average basic common share outstanding	\$0.48	\$0.53

(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 and losses on the aggregate portfolio, reserve expense for representation and warranty obligations on MSR and non-cash compensation expense related to restricted common stock). 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. Dollar roll income is the economic equivalent to holding and financing Agency RMBS using short-term repurchase agreements. We believe the presentation of Core Earnings including dollar roll income provides investors greater transparency into our period-over-period financial performance and facilitates comparisons to peer REITs.



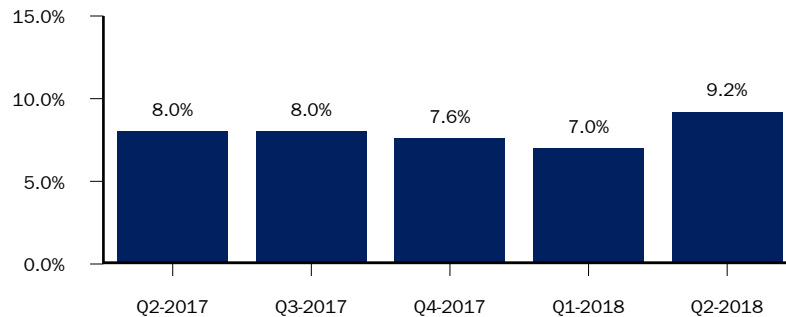
Rates: Agency RMBS Metrics

AGENCY PORTFOLIO YIELDS AND METRICS

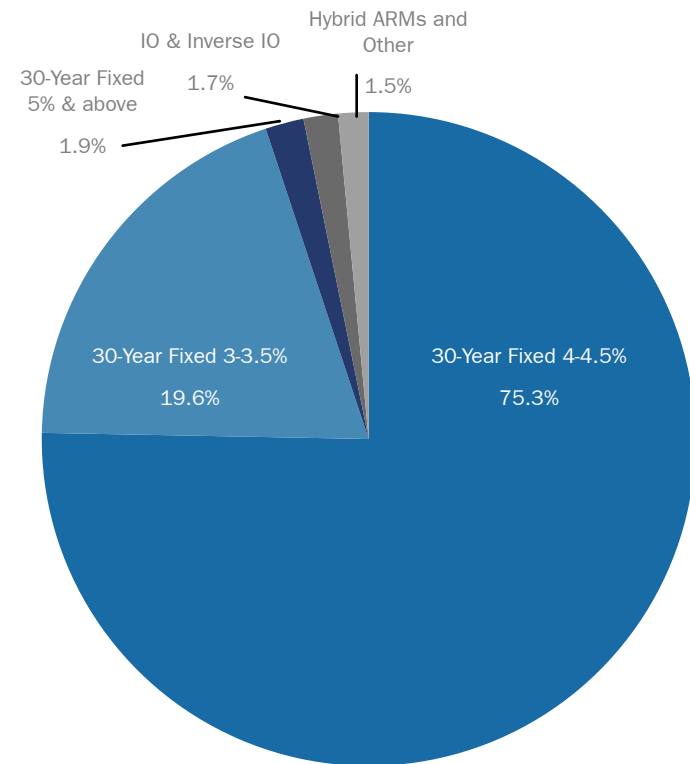
Portfolio Yield	Realized Q1-2018	At March 31, 2018	Realized Q2-2018	At June 30, 2018
Agency yield	3.1%	3.2%	3.0%	3.1%
Repo and FHLB costs	(1.7%)	(1.8%)	(2.0%)	(2.1%)
Swap costs	—%	—%	0.3%	0.3%
Net interest spread	1.4%	1.4%	1.3%	1.3%

Portfolio Metrics	Q1-2018	Q2-2018
Weighted average 3-month CPR ⁽¹⁾	7.0%	9.2%
Weighted average cost basis ⁽²⁾	\$106.4	\$106.7

AGENCY RMBS CPR⁽¹⁾



AGENCY PORTFOLIO COMPOSITION



(1) Agency weighted average 3-month Constant Prepayment Rate (CPR) includes IIOs (or Agency Derivatives).

(2) Weighted average cost basis includes RMBS principal and interest securities only. Average purchase price utilized carrying value for weighting purposes.



Rates: Agency RMBS

As of June 30, 2018	Par Value (\$M)	Market Value (\$M)	% Prepay Protected ⁽¹⁾	Amortized Cost Basis (\$M)	Weighted Average Coupon	Weighted Average Age (Months)
30-Year fixed						
3.0-3.5%	\$3,111	\$3,106	100.0%	\$3,265	3.5%	20
4.0-4.5%	11,548	11,949	100.0%	12,314	4.2%	22
≥ 5.0%	272	296	100.0%	292	5.7%	115
	14,931	15,351	100.0%	15,871	4.1%	24
Hybrid ARMs	19	21	—%	20	4.9%	172
Other	229	220	0.5%	224	4.9%	161
IOs and IIOs	3,907	271 ⁽²⁾	—%	307	2.6%	107
Total Agency holdings	\$19,086	\$15,863	96.8%	\$16,422		
Net TBA position		3,049				
Total		\$18,912				

(1) Includes securities with implicit or explicit protection including lower loan balances (securities collateralized by loans less than or equal to \$175K of initial principal balance), higher LTVs (securities collateralized by loans with greater than or equal to 80% LTV), certain geographic concentrations and lower FICO scores.

(2) Represents market value of \$197.3 million of IOs and \$73.7 million of Agency Derivatives.



Rates: Mortgage Servicing Rights⁽¹⁾

	As of March 31, 2018	As of June 30, 2018
Fair value (\$M)	\$1,301.0	\$1,450.3
Unpaid principal balance (\$M)	\$111,703.2	\$119,531.6
Weighted average coupon	4.0%	4.0%
Original FICO score⁽²⁾	752	752
Original LTV	74%	74%
60+ day delinquencies	0.5%	0.4%
Net servicing spread	25.5 basis points	25.5 basis points
Vintage:		
Pre-2009	0.3%	0.3%
2009-2012	11.5%	10.3%
Post 2012	88.2%	89.4%

(1) Excludes residential mortgage loans for which the company is the named servicing administrator.

(2) FICO represents a mortgage industry accepted credit score of a borrower.

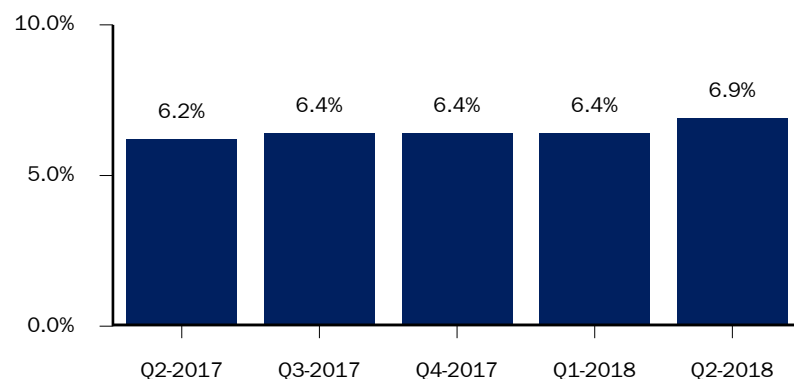


Credit: Non-Agency Securities Metrics

NON-AGENCY PORTFOLIO YIELDS AND METRICS

Portfolio Yield	Realized Q1-2018	At March 31, 2018	Realized Q2-2018	At June 30, 2018
Non-Agency yield	8.0%	7.6%	8.1%	7.5%
Repo and FHLB costs	(3.1%)	(3.2%)	(3.5%)	(3.6%)
Swap income	—%	0.1%	0.1%	0.3%
Net interest spread	4.9%	4.4%	4.7%	4.2%

LEGACY NON-AGENCY CPR



LEGACY NON-AGENCY PORTFOLIO COMPOSITION

Non-Agency: Loan Type	March 31, 2018	June 30, 2018
Sub-prime	80%	75%
Option-ARM	9%	11%
Prime	1%	1%
Alt-A	10%	13%
Portfolio Metrics	Q1-2018	Q2-2018
Weighted average 3-month CPR	5.7%	6.9%
Weighted average cost basis ⁽¹⁾	\$59.5	\$61.2

(1) Weighted average cost basis includes legacy non-Agency principal and interest securities only. Average purchase price utilized carrying value for weighting purposes. If current face were utilized for weighting purposes, total legacy non-Agency securities excluding the company's non-Agency interest-only portfolio would have been \$58.52 at June 30, 2018.

Credit: Legacy Non-Agency Securities



As of June 30, 2018	Senior Bonds	Mezzanine Bonds	Total P&I
Portfolio characteristics:			
Carrying value (\$M)	\$2,282.5	\$842.9	\$3,125.4
% of non-Agency portfolio	73.0%	27.0%	100.0%
Average purchase price ⁽¹⁾	\$59.62	\$65.28	\$61.15
Average coupon	3.1%	2.8%	3.0%
Weighted average market price ⁽²⁾	\$73.23	\$82.78	\$75.58
Collateral attributes:			
Average loan age (months)	142	151	145
Average loan size (\$K)	\$377	\$381	\$378
Average original Loan-to-Value	67.9%	67.7%	67.9%
Average original FICO ⁽³⁾	610	577	601
Current performance:			
60+ day delinquencies	21.0%	18.6%	20.3%
Average credit enhancement ⁽⁴⁾	6.4%	16.1%	9.0%
3-Month CPR ⁽⁵⁾	6.4%	8.0%	6.9%

(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 have been \$57.16, \$62.69 and \$58.52, respectively.

(2) Weighted average market price utilized current face for weighting purposes.

(3) FICO represents a mortgage industry accepted credit score of a borrower.

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

(5) 3-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.

Financing



\$ in millions						
Outstanding Borrowings and Maturities ⁽¹⁾	Repurchase Agreements	FHLB Advances	Revolving Credit Facilities	Convertible Notes	Total Outstanding Borrowings	Percent (%)
Within 30 days	\$ 2,852.2	\$ —	\$ —	\$ —	\$ 2,852.2	15.4%
30 to 59 days	3,614.2	—	—	—	3,614.2	19.5%
60 to 89 days	3,897.4	—	—	—	3,897.4	21.0%
90 to 119 days	2,736.1	—	—	—	2,736.1	14.8%
120 to 364 days	3,805.9	815.0	20.0	—	4,640.9	25.1%
One to three years	300.0	—	—	—	300.0	1.6%
Three to five years	—	—	—	283.3	283.3	1.5%
Five to ten years	—	—	150.0	—	150.0	0.8%
Ten years and over ⁽²⁾	—	50.0	—	—	50.0	0.3%
	\$ 17,205.8	\$ 865.0	\$ 170.0	\$ 283.3	\$ 18,524.1	100.0%
Collateral Pledged for Borrowings ⁽³⁾	Repurchase Agreements ⁽⁴⁾	FHLB Advances	Revolving Credit Facilities ⁽⁴⁾	Convertible Notes	Total Collateral Pledged	Percent (%)
Available-for-sale securities, at fair value	\$ 18,069.2	\$ 903.3	\$ —	n/a	\$ 18,972.5	93.4%
Derivative assets, at fair value	73.6	—	—	n/a	73.6	0.4%
Mortgage servicing rights, at fair value	726.2	—	541.1	n/a	1,267.3	6.2%
	\$ 18,869.0	\$ 903.3	\$ 541.1	n/a	\$ 20,313.4	100.0%

(1) Weighted average of 5.3 months to maturity.

(2) Includes FHLB advances of \$50 million with original maturities of 20 years.

(3) Excludes FHLB membership and activity stock totaling \$40.8 million.

(4) Repurchase agreements and/or revolving credit facilities secured by MSR may be over-collateralized due to operational considerations.



Interest Rate Swaps

Maturities	Notional Amounts (\$B) ⁽¹⁾	Average Fixed Pay Rate ⁽²⁾	Average Receive Rate ⁽²⁾	Average Maturity Years ⁽²⁾
Payers				
2018	\$2.0	1.289%	2.318%	0.4
2019	4.4	1.769%	2.358%	1.3
2020	2.9	1.785%	2.327%	2.3
2021	2.4	1.788%	2.339%	3.4
2022 and after	6.5	2.407%	2.345%	8.0
	\$18.2	1.926%	2.341%	3.8
Maturities	Notional Amounts (\$B)	Average Pay Rate	Average Fixed Receive Rate	Average Maturity (Years)
Receivers				
2020	\$0.5	1.984%	2.362%	1.8
2021	3.0	2.499%	2.362%	2.7
2022 and after	4.4	2.534%	2.333%	6.9
	\$7.9	2.489%	2.345%	5.0

(1) Notional amount includes \$0.9 billion in forward starting interest rate swaps as of June 30, 2018.

(2) Weighted averages exclude forward starting interest rate swaps. As of June 30, 2018, the weighted average fixed pay rate on interest rate swaps was 2.6%.

Interest Rate Swaptions



Option					Underlying Swap			
Swaption	Expiration	Cost (\$M)	Fair Value (\$M)	Average Months to Expiration	Notional Amount (\$M)	Average Pay Rate	Average Receive Rate	Average Term (Years)
Purchase Contracts:								
Payer	<6 Months	\$9.7	\$10.7	0.8	\$2,545	2.91%	3M LIBOR	5.9
Sale Contracts:								
Payer	≥6 Months	(\$6.8)	(\$4.8)	8.2	(\$280)	2.99%	3M LIBOR	10.0
Receiver	<6 Months	(\$9.7)	(\$3.2)	3.7	(\$2,723)	3M LIBOR	2.40%	5.9
Receiver	≥6 Months	(\$7.0)	(\$5.5)	8.2	(\$280)	3M LIBOR	2.99%	10.0



TWO HARBORS
Investment Corp.

A Pine River Capital Managed Company