Second Quarter 2020
Earnings Call

AUGUST 6, 2020

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, 2019, 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; the ongoing impact of the COVID-19 pandemic, and the actions taken by federal and state governmental authorities and GSEs in response, on the U.S. economy, financial markets and our target assets; 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 decision to terminate our management agreement with PRCM Advisers LLC and our ability to successfully transition to a self-managed company; 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.

Readers are cautioned not to place undue reliance upon any forward-looking statements, which speak only as of the date made. Two Harbors does not undertake or accept any obligation to release publicly any updates or revisions to any forward-looking statement to reflect any change in its expectations or any change in events, conditions or circumstances on which any such statement is based. Additional information concerning these and other risk factors is contained in Two Harbors’ most recent filings with the Securities and Exchange Commission (SEC). All subsequent written and oral forward-looking statements concerning Two Harbors or matters attributable to Two Harbors or any person acting on its behalf are expressly qualified in their entirety by the cautionary statements above.

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Readers are advised that the financial information in this presentation is based on company data available at the time of this presentation and, in certain circumstances, may not have been audited by the company’s independent auditors.

Executive Overview

Strong Quarterly Performance Resulting From Market Recovery

Quarterly Summary

- Reported book value of $6.70 per common share, representing a (1.0%) quarterly return on book value[1]. Excluding $0.54 of previously anticipated one-time costs associated with terminating the management agreement, book value would have been $7.24, representing a 6.8% quarterly return on book value.[1]
- Generated Comprehensive Income of $279.0 thousand, representing an annualized return on average common equity of 0.1%.
- Reported Core Earnings of ($14.5) million, or ($0.05) per weighted average basic common share.[2]
- Declared an interim common stock dividend of $0.05 on April 6, 2020. Declared a second quarter common stock dividend of $0.14 per share. Continue to believe our portfolio is capable of generating future gross returns in the mid-double digits as we deploy additional capital, increase leverage and reduce expenses following the transition to self-management.
- Resumed MSR flow-sale program with all sellers; added $4.1 billion unpaid principal balance (UPB) of MSR through these arrangements.
- At June 30, 2020, 6.5% of our MSR portfolio by loan count was in forbearance, of which 37.4% of borrowers had made their June payment.
- Liquidity position remains strong with $1.6 billion in unrestricted cash at June 30, 2020.

Company Update

- Estimate total return on book value for July 2020 of approximately (1.0%).
- Expect meaningful increase in Core Earnings in the third quarter; anticipated range of $0.22 to $0.26 per weighted average basic common share.
- At July 28, 2020, approximately 5.8% of our MSR portfolio by loan count was in forbearance, of which approximately 32.2% of borrowers had made their July payment.
- Added approximately $4.5 billion UPB of MSR flow commitments in July.
- In final stages of closing one servicing advance-only facility and working sequentially on another combined MSR asset and advance facility.
- Announced on July 21, 2020 that the Board of Directors terminated the management agreement "for cause," which carries with it no termination payment.

(1) Return on book value is defined as the increase (decrease) in book value per common share from the beginning to the end of the given period, plus dividends declared in the period, divided by book value as of the beginning of the period.

(2) Core Earnings is a non-GAAP measure. Please see Appendix slide 23 for a definition of Core Earnings and a reconciliation of GAAP to non-GAAP financial information.

Two Harbors Today

STRATEGY FOCUSED ON AGENCY RMBS PAIRED WITH MSR

- Agency-only mortgage REIT
- Portfolio constructed almost entirely of Agency RMBS paired with MSR
- Continue to believe that this strategy has a higher return potential with lower mortgage spread risk
- Expect to continue to grow MSR holdings through strategic partnerships with servicers and originators

KEY PILLARS OF TWO HARBORS SUCCESS

- ✓ Unique strategy of pairing MSR with Agency RMBS
- ✓ Robust and sophisticated risk management practices
- ✓ Committed to highest standards of corporate governance
- ✓ Dedicated to stockholder engagement and transparency

Book Value Summary

(Dollars in millions, except per share data)	Q2-2020 Book Value	Q2-2020 Book Value per share	YTD-2020 Book Value	YTD-2020 Book Value per share
Beginning common stockholders' equity	**$ 1,902.8**	**$ 6.96**	**$ 3,969.2**	**$ 14.54**
GAAP Net Loss:				
Core Earnings, net of tax[1]	4.5		91.1	
Dividend declaration - preferred	(19.0)		(38.0)	
Core Earnings attributable to common stockholders, net of tax[1]	(14.5)		53.1	
Realized and unrealized gains and losses, net of tax	(178.0)		(2,134.2)	
Other comprehensive income (loss), net of tax	192.8		(5.3)	
Preferred stock dividends in arrears	—		19.0	
Preferred stock dividends in arrears subsequently declared	(19.0)		(19.0)	
Common stock dividends declared	(51.9)		(51.9)	
Other	2.3		4.6	
Repurchases of common stock	—		(1.1)	
Issuance of common stock, net of offering costs	0.1		0.2	
Ending common stockholders' equity	$ 1,834.6	$6.70	$ 1,834.6	$6.70
Total preferred stock liquidation preference	1,001.3		1,001.3	
Ending total equity	**$ 2,835.9**		**$ 2,835.9**	

- Book value of $6.70 per common share, represented a (1.0%) quarterly return on book value[2]. Excluding $0.54 of previously anticipated one-time costs associated with terminating the management agreement, book value would have been $7.24, representing a 6.8% quarterly return on book value.[2]

(1) Core Earnings is a non-GAAP measure. Please see Appendix slide 23 for a definition of Core Earnings and a reconciliation of GAAP to non-GAAP financial information.
(2) Return on book value is defined as the increase (decrease) in book value per common share from the beginning to the end of the given period, plus dividends declared in the period, divided by book value as of the beginning of the period.

Swap Book Re-strike

- Historical swap position transacted in higher rate environment; due to portfolio re-positioning and margining requirements, significant changes in swap positions were executed in late March when 3-month LIBOR was extremely stressed
- Re-striking swap position in June materially reduced annualized swaps costs from $344 million in net swap interest spread expense to $1 million in net swap interest spread income(1)
- Expected to positively impact our net interest margin, Core Earnings and taxable income

SWAP POSITION AT MAY 31, 2020

Swap Position	Number of Open Positions	Current Notional Amounts ($ billions)	Weighted Avg. Pay Rate	Weighted Avg. Receive Rate	Annualized Net (Pay)/Receive Spread ($ in thousands)	DV01(2) ($ in thousands)	Weighted Avg. Years to Maturity
Payer	76	$ 32.6	1.809 %	0.778 %	$ (336,717)	$ (9,893)	3.11
Receiver	30	24.7	0.968 %	0.940 %	(6,905)	9,616	3.80
Total	106	$ 57.3	1.447 %	0.848 %	$ (343,622)	$ (277)	3.40

SWAP POSITION AT JUNE 30, 2020

Swap Position	Number of Open Positions	Current Notional Amounts ($ billions)	Weighted Avg. Pay Rate	Weighted Avg. Receive Rate	Annualized Net (Pay)/Receive Spread ($ in thousands)	DV01(2) ($ in thousands)	Weighted Avg. Years to Maturity
Payer	3	$ 3.8	0.116 %	0.080 %	$ (1,360)	$ (1,752)	4.57
Receiver	1	0.7	0.080 %	0.419 %	2,373	688	9.76
Total	4	$ 4.5	0.110 %	0.133 %	$ 1,013	$ (1,064)	5.38

(1) Annualized swap costs at May 31, 2020 use the rates on that date over a 12-month period.
(2) DV01 stands for abbreviation for "dollar value per 01," which refers to the dollar duration which measures the dollar change in a bonds value to a change in the market interest rate. The dollar duration is used to approximate a portfolio's interest rate risk.

Core Earnings Review[1]

($ in millions, except per share data)	Q1-2020	Q2-2020	Variance ($)
Interest income	$ 255.5	$ 107.3	$ (148.2)
Interest expense	167.3	62.1	105.2
Net interest income	88.2	45.2	(43.0)
Servicing income, net of amortization on MSR	55.2	51.0	(4.2)
Gain (loss) on swaps and swaptions	(12.6)	(56.3)	(43.7)
Gain on other derivatives	5.3	11.9	6.6
Other	0.1	0.1	—
Total other income	48.0	6.7	(41.3)
Expenses	47.0	46.8	0.2
Provision for income taxes	2.6	0.6	2.0
Core Earnings[1]	**86.6**	**4.5**	**(82.1)**
Dividends on preferred stock	19.0	19.0	—
Core Earnings attributable to common stockholders[1]	**$ 67.6**	**$ (14.5)**	**$ (82.1)**
Basic weighted average Core EPS	**$ 0.25**	**$ (0.05)**	
Core Earnings annualized return on average common equity	**7.3 %**	**(3.1)%**	

- Second quarter Core Earnings results impacted by:
  - Lower net interest income due to sale of legacy non-Agencies and higher coupon Agencies in Q1
  - Lower LIBOR on payer swaps before termination
  - Increase in servicing costs from loan forbearances offset by lower management fee and other operating expenses

- Third quarter 2020 Core Earnings outlook
  - Anticipate $0.22-$0.26 per weighted average basic common share, driven by restriking our swap portfolio

(1) Core Earnings is a non-GAAP measure. Please see Appendix slide 23 for a definition of Core Earnings and a reconciliation of GAAP to non-GAAP financial information.

Performance Summary

EXPECT ONGOING PORTFOLIO EARNINGS POWER TO BE IN LINE WITH CURRENT DIVIDEND LEVEL

- Lower portfolio yield driven by: (1) sale of non-Agencies and higher coupon Agencies in Q1; and (2) elevated swap costs due to high fixed rate payer position and falling LIBOR
- June 30 as-of yield dramatically improved due to:
  - Swap re-striking late in the second quarter at current market rates
  - Repo rolls at favorable terms
- Core Earnings and portfolio yields could exceed expected returns on portfolio

	Realized Q1-2020	As of March 31, 2020(1)	Realized Q2-2020	As of June 30, 2020(1)
Annualized portfolio yield(2)	3.52 %	3.42 %	2.84 %	3.09 %
Annualized cost of funds(3)	2.39 %	3.23 %	2.61 %	0.86 %
Annualized net yield for aggregate portfolio	1.13 %	0.19 %	0.23 %	2.24 %

(1) Represents those on the portfolio held as of March 31, 2020 and June 30, 2020, respectively, and projected over the remaining life of the investments. Assumes a static portfolio and, as a result, does not represent a projection of future yields.
(2) Includes interest income on RMBS and servicing income net of servicing expenses and amortization on MSR.
(3) Cost of funds includes interest spread income/expense associated with the portfolio's interest rate swaps and caps.

Financing Profile

ECONOMIC DEBT-TO-EQUITY[1]

- 7.4x at June 30, 2020, compared to 7.0x at March 31, 2020
- Average leverage of 6.8x in the second quarter

DIVERSE FINANCING PROFILE

AGENCY RMBS

- Outstanding repurchase agreements of $17.0 billion with 20 counterparties
- Repo markets have been stable and term markets have redeveloped

MORTGAGE SERVICING RIGHTS

- Outstanding borrowings of $267.2 million under bilateral MSR financing facilities
- $400 million of outstanding 5-year MSR term notes[2]
- Committed total capacity of $750 million under MSR financing alternatives

POST QUARTER-END

- Closed $100 million MSR financing facility
- In final stages of closing one servicing advance-only facility and working sequentially on another facility that finances both MSR assets and servicing advances

(1) Defined as total borrowings to fund RMBS, MSR and Agency Derivatives, plus the implied debt on net TBA positions, divided by total equity.
(2) Excludes deferred debt issuance costs.

Special Topic: Taxable Income

2020 TAXABLE INCOME CONSIDERATIONS

- RMBS sales resulted in a net capital loss of $1.4 billion; may be utilized over the next 5 years
- Termination of swaps designated as debt hedges resulted in net ordinary losses of $0.7 billion; may be utilized in future years subject to certain limitations, and does not expire
- REIT is anticipated to generate a net operating loss for the year and distributions to common stockholders are likely to be treated as return of capital for tax characterization purposes

"CONSTRUCTIVE" RETURN OF CAPITAL

- Return of capital is a tax concept, not an economic concept
- Tax characterization of the dividend tells little about whether distributions are supported by Core Earnings or economic returns due to differences in income recognition rules
- Return of capital distributions can be "constructive" to stockholders, as they are not subject to current tax and create the potential advantage of deferring tax until sale at long-term capital gains rates
- Tax characterization of distributions in future years may result in return of capital to stockholders; the characterization is determined based on the REIT's future earnings and profits, which takes into consideration taxable income and utilization of prior year losses based on complex tax rules

COMMON STOCK DIVIDEND CONSIDERATIONS

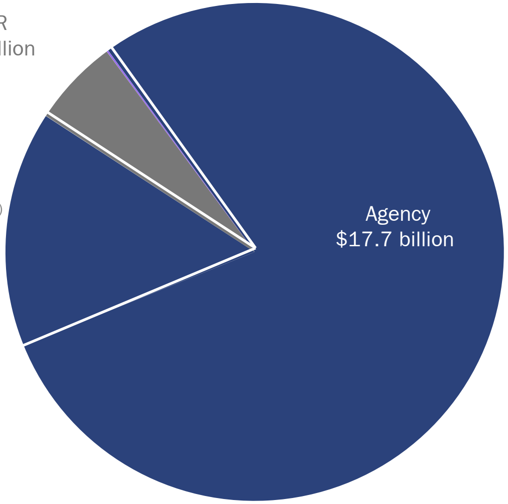
- Function of several factors including sustainability, earnings power of the portfolio, taxable income/REIT distribution requirements and market conditions
- Expect Q3 and Q4 dividends will be sustainable at current level before giving effect to expense savings we anticipate in Q4 from our transition to self-management, subject to the discretion and approval of our Board of Directors and market conditions

Quarterly Activity and Portfolio Composition

Q2-2020 PORTFOLIO COMPOSITION(1)

$22.4 billion portfolio as of June 30, 2020

Includes $19.0 billion settled positions



PERFORMANCE COMMENTARY

- Return on book value of 6.8%(3) excluding the previously anticipated one-time costs associated with terminating the management agreement
- Net of TBA spread widening in 3% through 4.5% coupons, gross returns from pool and TBA performance was approximately 13%(4)
- MSR contributed negatively by approximately 4%(4), as higher servicing costs and faster prepayments impacted pricing
- Expenses and other items amounted to (2%)(4)

PORTFOLIO ACTIVITY

- Added $1.5 billion in current coupon TBAs as our confidence increased in our liquidity position
- Purchased approximately $2.1 billion of low coupon specified pools and sold approximately $1.4 billion of high coupon specified pools
- Added $4.1 billion in MSR through flow-sale arrangements

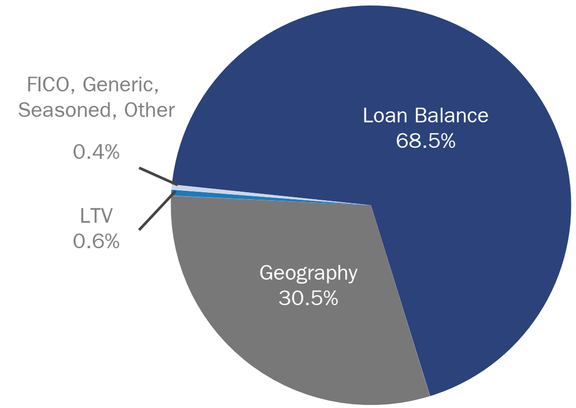
(1) For additional detail on the portfolio, see Appendix slides 24-26.
(2) Represents bond equivalent value of TBA position. Bond equivalent value is defined as notional amount multiplied by market price. Accounted for as derivative instruments in accordance with GAAP.
(3) Return on book value is defined as the increase (decrease) in book value per common share from the beginning to the end of the given period, plus dividends declared in the period, divided by book value as of the beginning of the period.
(4) Represents estimated book value impact by asset class. Attribution is based on results with inputs from our internal investment professionals.

Specified Pools

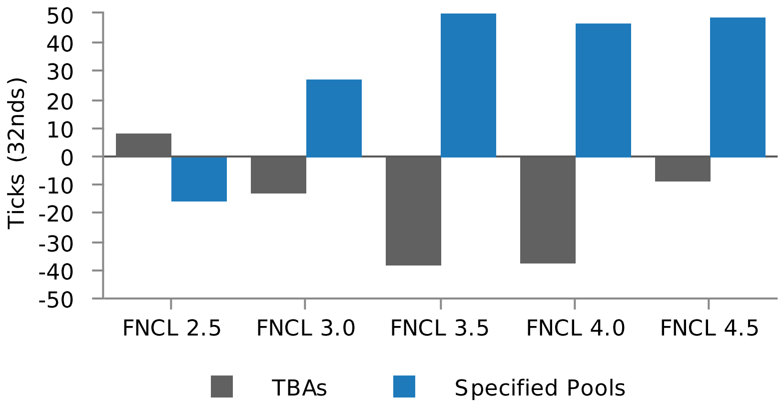
SPECIFIED POOL PERFORMANCE

- Despite TBA underperformance in the belly coupons, specified performance was significant and overwhelmed TBA performance
- Drivers of specified pool performance included the Fed's large intervention in the RMBS market, the recovery of the repo market and general improvement in price stability in Q2
- Specified pool prepayment speeds continue to be slower and more stable than TBA speeds
- Expect that while prepayments will rise in specified pools; increases will be modest compared to generic collateral

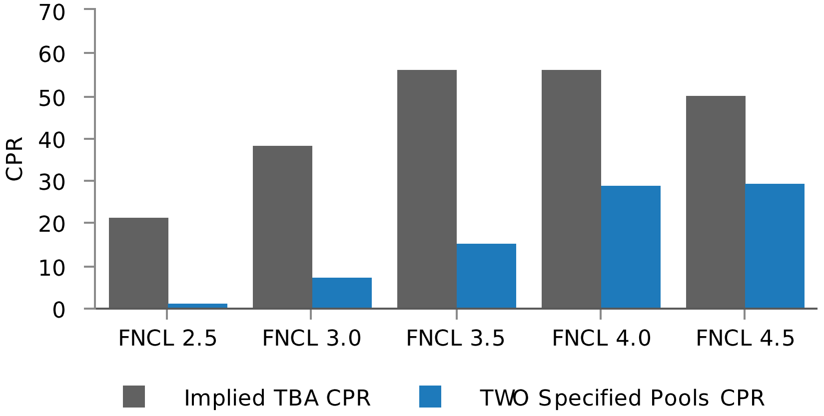
SPECIFIED POOLS AS OF 6/30/2020



QUARTERLY PERFORMANCE[1]



SPECIFIED POOL PREPAYMENT SPEEDS[2]



(1) J.P. Morgan data query, as of June 30, 2020.
(2) Non-specified pool speeds from J.P. Morgan Data Query, as of June 30, 2020.

Mortgage Servicing Rights

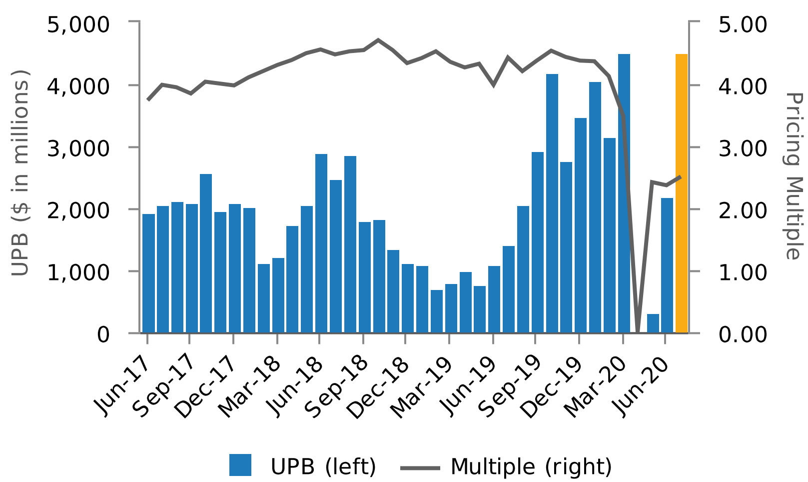
MSR PORTFOLIO ACTIVITY

- Resumed MSR flow-sale program with all sellers
- Added $4.1 billion UPB through MSR flow-sale arrangements during the quarter
  - Added approximately $4.5 billion UPB of MSR flow commitments in July
- Our MSR speeds are somewhat slower than generic speeds because a majority of our portfolio has some form of seasoning or prepayment protection

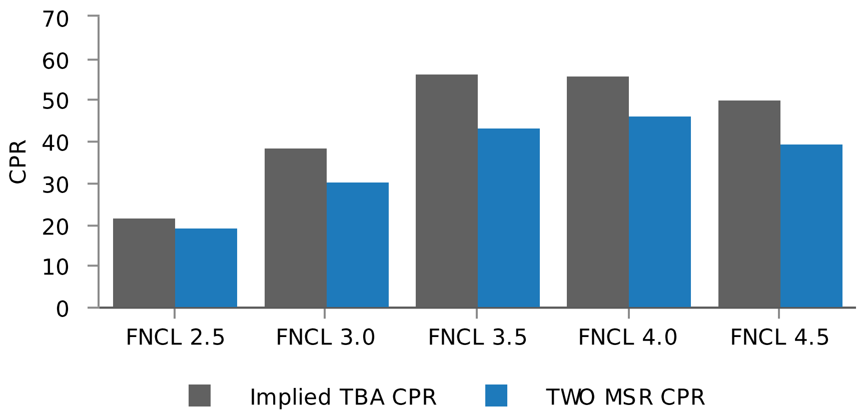
MSR PORTFOLIO AS OF 6/30/2020

	As of June 30, 2020
Fair value ($ millions)	$ 1,279.2
UPB ($ millions)	$ 163,493.6
Gross weighted average coupon rate	4.0 %
Weighted average original FICO[1]	754
Weighted average original loan-to-value (LTV)	75 %
60+ day delinquencies	3.9 %
Net servicing fee (basis points)	27.3
Weighted average loan age (months)	39
% Fannie Mae	67 %

FLOW PROGRAM ACTIVITY[2]



MSR PREPAYMENT SPEEDS[3]



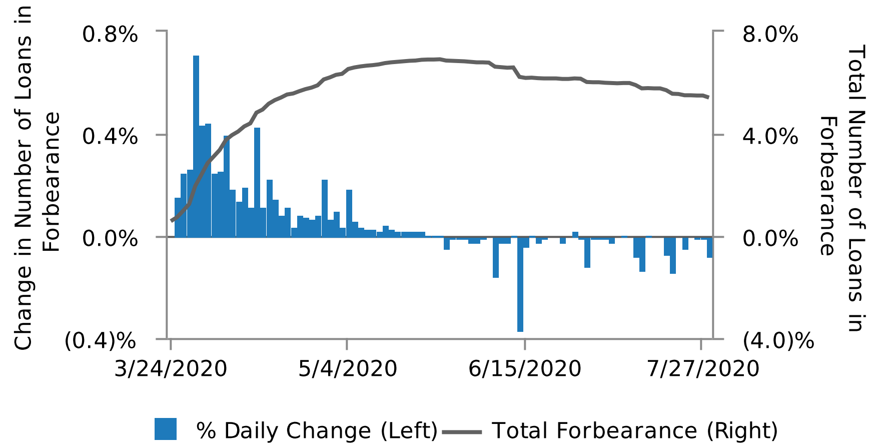
(1) FICO represents a mortgage industry accepted credit score of a borrower.
(2) As of July 31, 2020.
(3) Two Harbors portfolio and J.P. Morgan Data Query, as of June 30, 2020.

Special Topic: MSR Forbearance and Liquidity(1)

FORBEARANCE COMMENTARY

- Forbearance rates peaked on June 1, 2020 at approximately 7.2% of borrowers by loan count
- As of July 28, 2020, approximately 5.8% of loan count in forbearance
- As of July 28, 2020, approximately 4.0% of loan count was both in forbearance and not making payments
- More borrowers exiting than entering forbearance

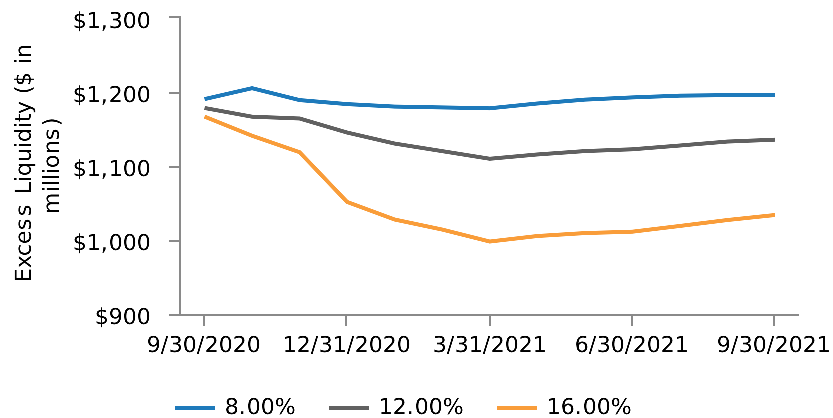
CURRENT FORBEARANCE EXPERIENCE



LIQUIDITY COMMENTARY

- Despite delinquent forbearant loans at approximately 4.0% as of July 28, 2020, we show 8%, 12% and 16% forbearance scenarios
- Liquidity projection includes impact of the use of anticipated funding facilities, excludes expected future capital deployment and assumes no payment for the termination of the management contract
- Expect to deploy capital in coming quarters; likely to reduce these projected amounts by approximately $200 to $300 million

LIQUIDITY PROJECTION

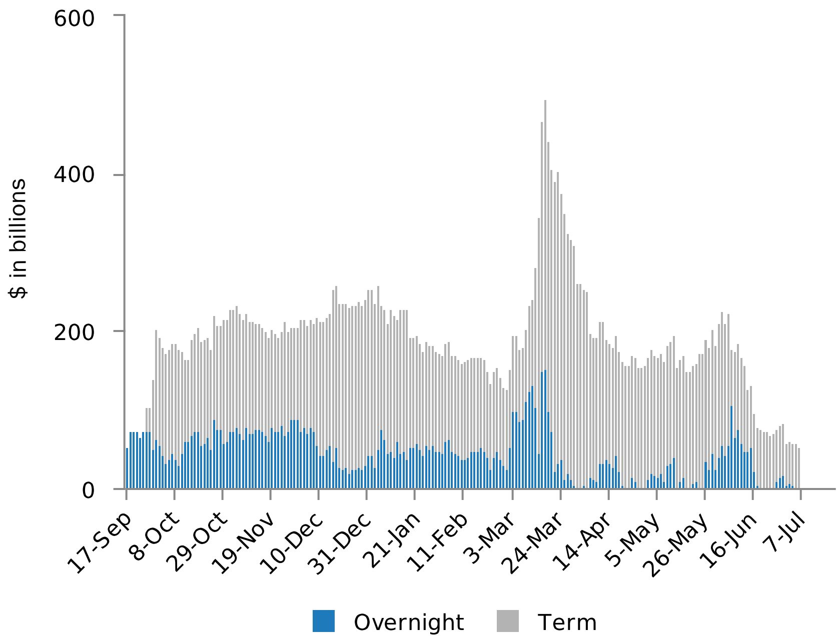


(1) The above forbearance and liquidity projections are provided for illustration purposes only and are not necessarily indicative of Two Harbors' financial condition and operating results, nor are these projections necessarily indicative of the financial condition or results of operations that may be expected for any future period or date. These scenarios include as assumptions: prepay speeds start at 25 CPR and ramp down to 10 CPR over 4 months; P&I advancing stops after 4 months, and is reimbursed at loan resolution, assumed to be 15 months from now; interim T&I reimbursement for Fannie. Based on model assumptions as of July 30, 2020.

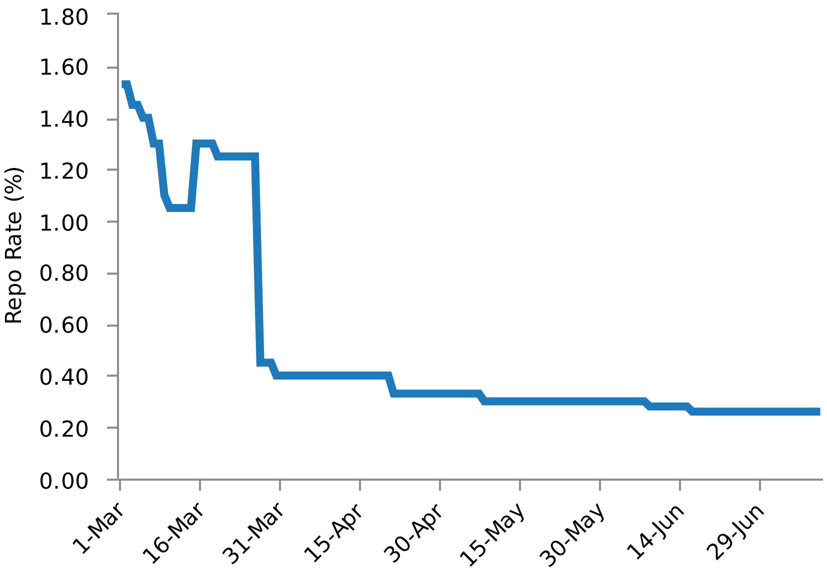
Special Topic: Repo Markets

- Over the course of Q2, Fed purchases in overnight and term repo markets fell close to zero
- Repo rates have settled in to much lower levels since spiking in March
- Recent data presents picture of healthier funding environment and a free-standing market without support of the Federal Reserve

FED HISTORICAL PURCHASES(1)



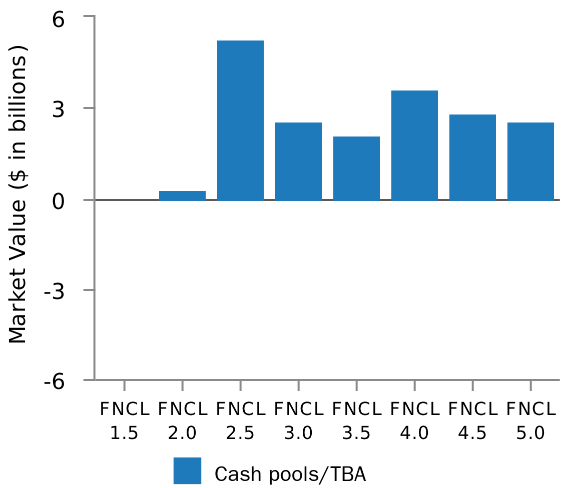
REPO RATES(2)

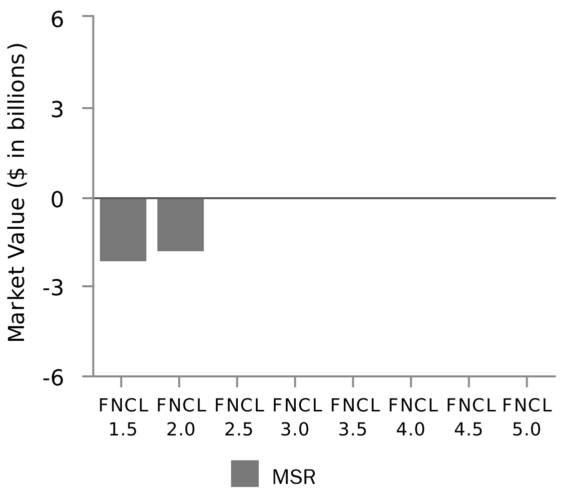


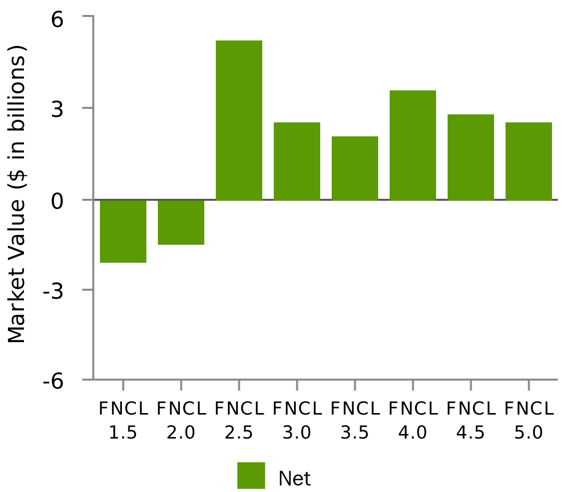
(1) Wrightson ICAP data and data from the Federal Reserve, as of July 21, 2020.
(2) Two Harbors internally-sourced data, as of July 10, 2020.

Effective Coupon Positioning

EFFECTIVE COUPON POSITIONING[1]







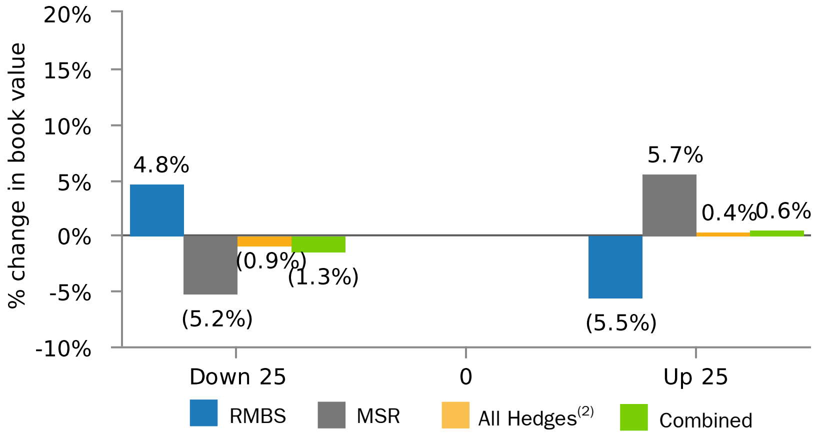
COMMENTARY

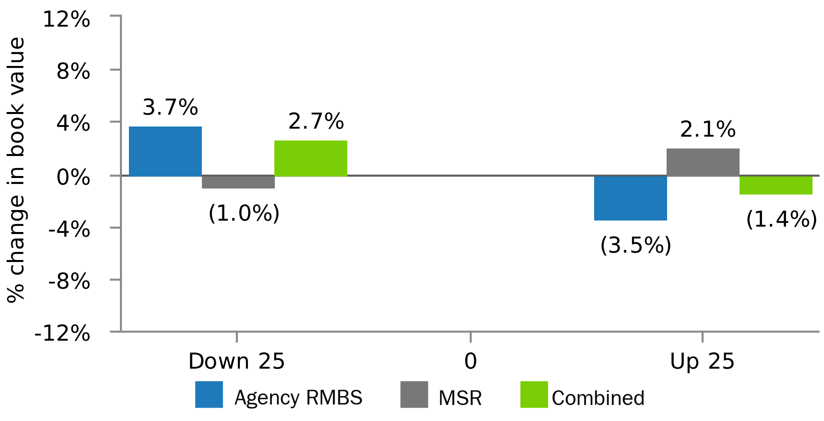
- Today, MSR has similar risks to a short position in 1.5% and 2.0% coupons
- Long 2.5% though 5.0% coupons
- Subsequent to quarter-end, rotating down in coupon and outright adding to FNCL 2.0 coupon

(1) The effective coupon positioning for MSR is an internally calculated exposure that represents the current coupon equivalents of our MSR assets. Data as of June 30, 2020.

Risk Positioning

COMMON BV EXPOSURE TO CHANGES IN RATES[1]	COMMON BV EXPOSURE TO CHANGES IN SPREADS[3]





COMMENTARY

- Exposure to both rates and spreads remains low, in line with historical positioning
- In a 25 basis point parallel shift up in rates, potential book value increase of 0.6%
  - MSR position has more negative duration than RMBS position
- In a 25 basis point spread widening, potential book value decrease of (1.4%)
  - MSR position provides significant spread hedging benefits, reducing overall exposure by ~70%

Note: Sensitivity data as of June 30, 2020. The above spread 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 common book value for theoretical parallel shift in interest rates.
(2) All hedges includes derivative assets and liabilities and all borrowings. All Hedges excludes Agency derivatives, which are included in the RMBS category.
(3) The information presented in this chart projects the potential impact on common book value of instantaneous changes in current coupon 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.

Outlook - Return Expectations

OPPORTUNITY SET IN OUR TARGET ASSETS REMAINS ATTRACTIVE TODAY

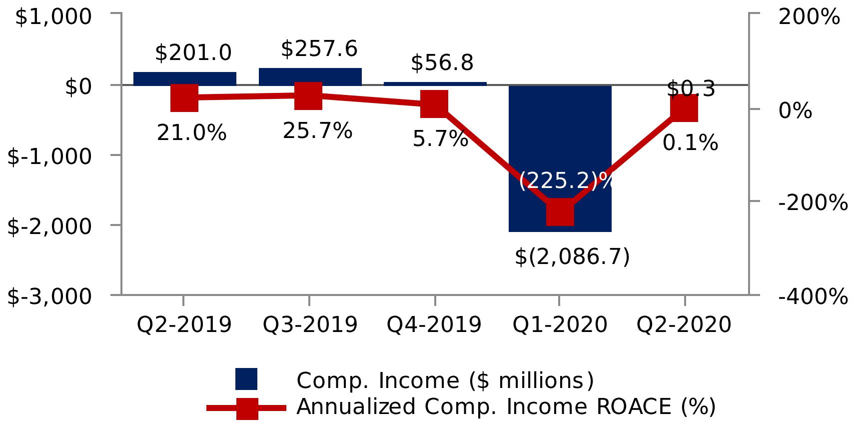
- Estimate returns for Agency RMBS/swaps in high-single to low-double digits
- Estimate returns for Agency RMBS / flow MSR in low-to-mid double digits
- Advancing obligations from forbearances have turned out to be very manageable
- Liquidity profile strong with $1.6 billion in unrestricted cash as of June 30, 2020
- Intend to prudently deploy additional capital in the coming quarters
- Anticipate increasing leverage in second half of 2020 in the 8-9x range

Appendix

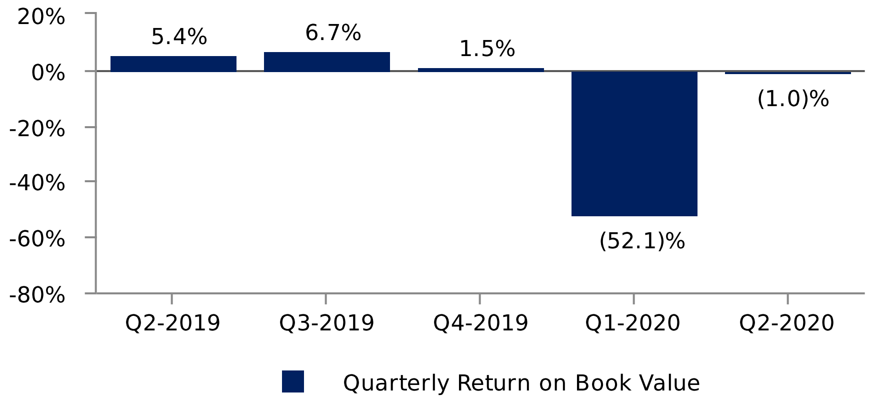
TWO HARBORS Investment Corp.
A Pine River Capital Managed Company

Financial Performance

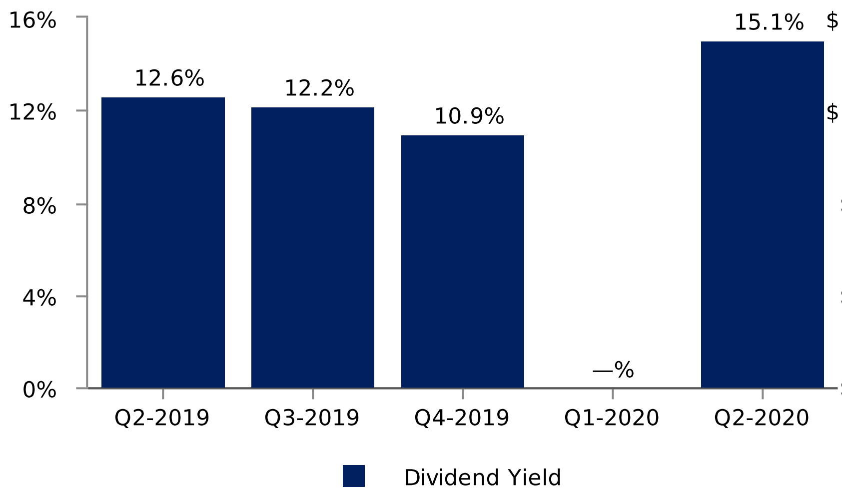
COMPREHENSIVE INCOME (LOSS)



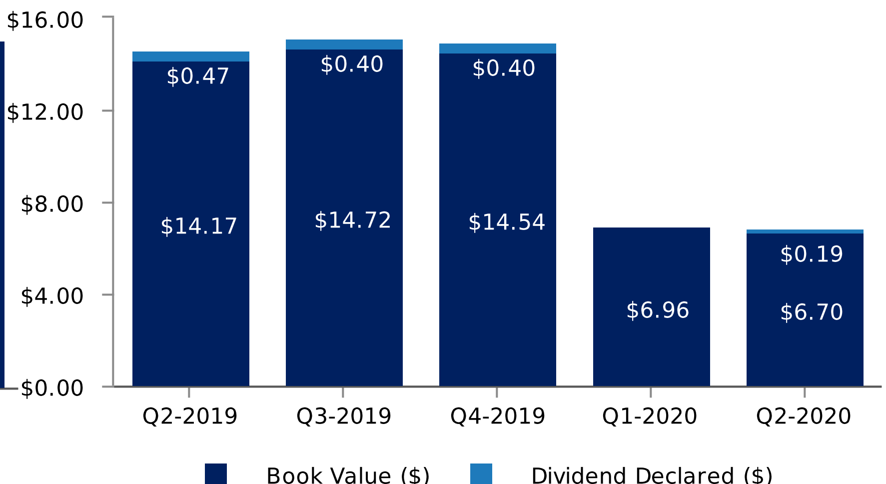
QUARTERLY RETURN ON BOOK VALUE[1]



DIVIDEND YIELD[2]



BOOK VALUE AND DIVIDEND PER COMMON SHARE[2]



(1) Return on book value is defined as the increase (decrease) in book value per common share from the beginning to the end of the given period, plus dividends declared in the period, divided by the book value as of the beginning of the period.

(2) 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.

Q2-2020 Operating Performance

	Q2-2020			
(In millions, except for per common share data)	Core Earnings[1]	Realized Gains (Losses)	Unrealized MTM	Total
Interest income	$ 107.3	$ —	$ —	$ 107.3
Interest expense	62.1	—	—	62.1
Net interest income	45.2	—	—	45.2
(Gain) loss on investment securities	—	53.6	(0.1)	53.5
Servicing income	112.9	—	—	112.9
Loss on servicing asset	(61.9)	(0.9)	(176.0)	(238.8)
(Loss) gain on interest rate swaps and swaptions	(56.3)	(747.1)	756.5	(46.9)
Gain (loss) on other derivative instruments	11.9	(34.2)	98.9	76.6
Other income	0.1	—	—	0.1
Total other income (loss)	6.7	(728.6)	679.3	(42.6)
Management fees & other expenses	46.8	147.5	—	194.3
Net income (loss) before income taxes	5.1	(876.1)	679.3	(191.7)
Income tax expense (benefit)	0.6	(0.1)	(18.7)	(18.2)
Net income (loss)	**4.5**	**(876.0)**	**698.0**	**(173.5)**
Dividends on preferred stock	19.0	—	—	19.0
Net (loss) income attributable to common stockholders	**$ (14.5)**	**$ (876.0)**	**$ 698.0**	**$ (192.5)**
Weighted average (loss) earnings per basic common share	$ (0.05)	$ (3.20)	$ 2.55	$ (0.70)

(1) Core Earnings is a non-GAAP measure. Please see Appendix slide 23 of this presentation for a definition of Core Earnings and a reconciliation of GAAP to non-GAAP financial information.

Q1-2020 Operating Performance

	Q1-2020			
(In millions, except for per common share data)	Core Earnings[1]	Realized Gains (Losses)	Unrealized MTM	Total
Interest income	$ 255.5	$ —	$ —	$ 255.5
Interest expense	167.3	—	—	167.3
Net interest income	88.2	—	—	88.2
Loss on investment securities	—	(1,080.7)	(0.9)	(1,081.6)
Servicing income	130.8	—	—	130.8
Loss on servicing asset	(75.6)	(3.4)	(507.6)	(586.6)
(Loss) gain on interest rate swaps and swaptions	(12.6)	361.8	(599.8)	(250.6)
Gain (loss) on other derivative instruments	5.3	(70.7)	(68.1)	(133.5)
Other income	0.1	0.1	0.6	0.8
Total other income (loss)	48.0	(792.9)	(1,175.8)	(1,920.7)
Management fees & other expenses	47.0	3.3	—	50.3
Net income (loss) before income taxes	89.2	(796.2)	(1,175.8)	(1,882.8)
Income tax expense (benefit)	2.6	85.4	(101.2)	(13.2)
Net income (loss)	**86.6**	**(881.6)**	**(1,074.6)**	**(1,869.6)**
Dividends on preferred stock	19.0	—	—	19.0
Net income (loss) attributable to common stockholders	**$ 67.6**	**$ (881.6)**	**$ (1,074.6)**	**$ (1,888.6)**
Weighted average earnings (loss) per basic common share	$ 0.25	$ (3.22)	$ (3.94)	$ (6.91)

(1) Core Earnings is a non-GAAP measure. Please see Appendix slide 23 of this presentation for a definition of Core Earnings and a reconciliation of GAAP to non-GAAP financial information.

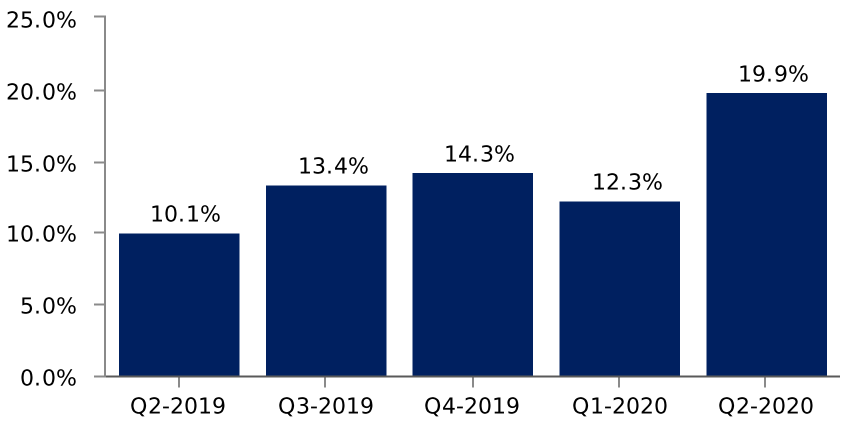
GAAP to Core Earnings Reconciliation[1]

Reconciliation of GAAP to non-GAAP Information (In thousands, except for per common share data)	Three Months Ended March 31, 2020	Three Months Ended June 30, 2020
Reconciliation of Comprehensive income (loss) to Core Earnings:		
Comprehensive (loss) income attributable to common stockholders	**$ (2,086,676)**	**$ 279**
Adjustment for other comprehensive loss (income) attributable to common stockholders:		
Unrealized loss (gain) on available-for-sale securities	198,070	(192,794)
Net loss attributable to common stockholders	**$ (1,888,606)**	**$ (192,515)**
Adjustments for non-core earnings:		
Realized loss (gain) on securities	1,035,038	(54,795)
Unrealized loss on securities	931	110
Provision for credit losses	45,638	1,193
Realized and unrealized loss on mortgage servicing rights	511,059	176,916
Realized (gain) loss on termination or expiration of swaps and swaptions	(361,853)	747,055
Unrealized loss (gain) on interest rate swaps, caps and swaptions	599,834	(756,464)
Loss (gain) on other derivative instruments	138,819	(64,744)
Other (income) loss	(735)	61
Change in servicing reserves	232	39
Non-cash equity compensation expense	2,315	2,398
Restructuring charges	719	145,069
Net benefit from income taxes on non-Core Earnings	(15,774)	(18,814)
Core Earnings attributable to common stockholders[1]	**$ 67,617**	**$ (14,491)**
Weighted average basic common shares	273,392,615	273,604,079
Core Earnings per weighted average basic common share	0.25	(0.05)

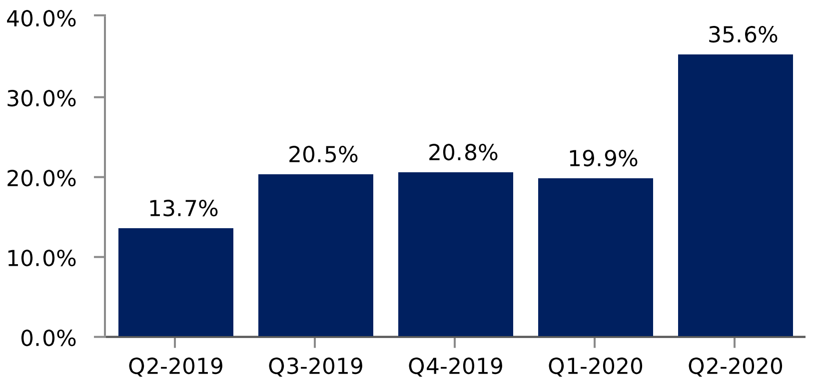
(1) Core Earnings is a non-U.S. GAAP measure that we define as comprehensive income (loss) attributable to common stockholders, excluding "realized and unrealized gains and losses" (impairment losses, provision for credit losses, realized and unrealized gains and losses on the aggregate portfolio, reserve expense for representation and warranty obligations on MSR, non-cash compensation expense related to restricted common stock and restructuring charges). As defined, Core Earnings includes net interest income, accrual and settlement of interest on derivatives, dollar roll income on TBAs, servicing income, net of estimated amortization on MSR, management fees and recurring cash related operating expenses. Dollar roll income is the economic equivalent to holding and financing Agency RMBS using short-term repurchase agreements. Core Earnings provides supplemental information to assist investors in analyzing the Company's results of operations and helps facilitate comparisons to industry peers.

Portfolio Metrics

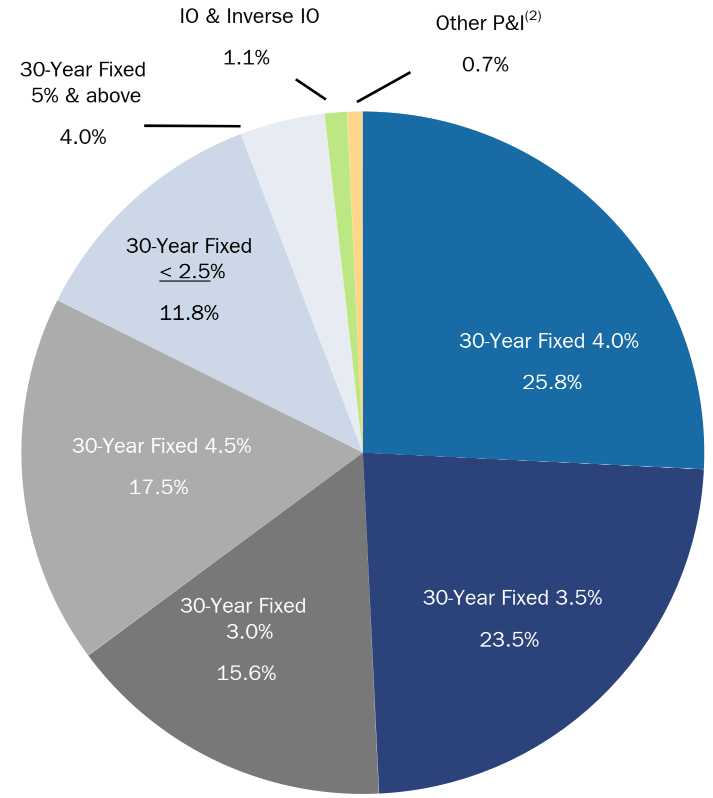
AGENCY RMBS CPR[1]



MSR CPR



AGENCY PORTFOLIO COMPOSITION



(1) Agency weighted average 3-month Constant Prepayment Rate (CPR) includes IIOs (or Agency Derivatives).
(2) Includes 15-year fixed, Hybrid ARMs, CMO and DUS pools.

Agency RMBS Portfolio

As of June 30, 2020	Par Value ($ millions)	Market Value ($ millions)	Weighted Average CPR	% Prepay Protected[1]	Amortized Cost Basis ($ millions)	Gross Weighted Average Coupon	Weighted Average Age (Months)
30-Year fixed							
2.5% & below	$ 1,980	$ 2,092	1.3 %	91.1 %	$ 2,079	2.5 %	2
3.0%	2,585	2,769	7.8 %	100.0 %	2,667	3.0 %	8
3.5%	3,833	4,164	15.9 %	100.0 %	4,017	3.5 %	11
4.0%	4,162	4,560	29.7 %	100.0 %	4,336	4.0 %	31
4.5%	2,797	3,107	30.2 %	100.0 %	2,949	4.5 %	29
≥ 5.0%	634	713	27.5 %	98.6 %	673	5.2 %	56
	15,991	17,405	20.0 %	98.9 %	16,721	3.7 %	20
Other P&I[2]	110	127	11.6 %	— %	122	6.4 %	219
IOs and IIOs[3]	2,706	190	13.4 %	— %	200	3.8 %	142
Total Agency RMBS	$ 18,807	$ 17,722		97.1 %	$ 17,043		

As of June 30, 2020	Notional Amount ($ millions)	Bond Equivalent Value ($ millions)[4]	Implied CPR[5]
TBA Positions			
2.5% & below	$ 3,589	$ 3,736	21.5 %
3.0%	—	—	38.5 %
3.5%	(1,753)	(1,844)	56.6 %
4.0%	(550)	(583)	56.2 %
4.5%	—	—	50.2 %
5.0%	1,950	2,130	46.3 %
Net TBA position	$ 3,236	$ 3,439	

(1) Includes securities with implicit or explicit protection including lower loan balances (securities collateralized by loans less than or equal to $200K 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) Includes 15-year fixed, Hybrid ARMs, CMO and DUS pools.
(3) Represents market value of $118.2 million of IOs and $72.2 million of Agency Derivatives.
(4) Bond equivalent value is defined as the notional amount multiplied by market price. Accounted for as derivative instruments in accordance with GAAP.
(5) Implied TBA speeds from J.P. Morgan Data Query.

Mortgage Servicing Rights Portfolio[1]

	Number of Loans	Unpaid Principal Balance	Fair Value	% Fannie Mae	Gross Weighted Average Coupon Rate	Weighted Average Loan Age (months)	Weighted Average Original FICO[2]	Weighted Average Original LTV	60+ Day Delinquencies	3-Month CPR	Net Servicing Fee (bps)
30-Year Fixed											
≤ 3.75%	118,222	$ 31,602	$ 254	69%	3.5%	41	770	71%	2.1%	24.3%	26.8
3.75% - 4.25%	233,205	56,231	440	64%	3.9%	41	759	76%	3.3%	33.9%	27.6
4.25% - 4.75%	167,803	35,786	278	65%	4.4%	39	744	79%	5.2%	45.3%	26.7
4.75% - 5.25%	80,401	15,606	129	66%	4.9%	32	730	80%	7.1%	46.3%	27.9
> 5.25%	30,831	5,044	43	70%	5.5%	30	708	80%	9.2%	37.7%	30.9
	630,462	144,269	1,144	66%	4.1%	39	753	76%	4.2%	37.0%	27.3
15-Year Fixed											
≤ 2.75%	2,527	511	3	78%	2.6%	43	777	60%	1.0%	11.1%	26.1
2.75% - 3.25%	41,423	7,290	50	76%	3.0%	45	772	62%	1.6%	15.4%	26.0
3.25% - 3.75%	39,688	6,122	44	72%	3.4%	41	760	65%	2.5%	23.4%	27.8
3.75% - 4.25%	20,075	2,686	20	63%	3.9%	36	746	66%	3.3%	80.8%	29.5
> 4.25%	10,689	1,227	10	62%	4.5%	28	733	66%	3.1%	33.1%	31.4
	114,402	17,836	127	72%	3.3%	41	761	64%	2.3%	22.0%	27.5
Total ARMs	5,539	1,388	8	67%	3.6%	48	762	66%	3.9%	45.4%	25.2
Total Portfolio	750,403	163,493	1,279	67%	4.0%	39	754	75%	3.9%	35.6%	27.3

(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.

Financing

$ in millions						
Outstanding Borrowings and Maturities[1]	Repurchase Agreements	Revolving Credit Facilities	Term Notes Payable	Convertible Notes	Total Outstanding Borrowings	Percent (%)
Within 30 days	$ 6,071.0	$ —	$ —	$ —	$ 6,071.0	33.8 %
30 to 59 days	5,022.9	—	—	—	5,022.9	28.0 %
60 to 89 days	4,424.9	—	—	—	4,424.9	24.7 %
90 to 119 days	—	—	—	—	—	— %
120 to 364 days	1,472.5	267.2	—	—	1,739.7	9.7 %
One to three years	—	—	—	285.5	285.5	1.6 %
Three to five years	—	—	395.0	—	395.0	2.2 %
	$ 16,991.3	$ 267.2	$ 395.0	$ 285.5	$ 17,939.0	100.0 %
Collateral Pledged for Borrowings	Repurchase Agreements[2]	Revolving Credit Facilities[2]	Term Notes Payable	Convertible Notes	Total Collateral Pledged	Percent (%)
Available-for-sale securities, at fair value	17,300.7	$ —	$ —	n/a	$ 17,300.7	93.3 %
Derivative assets, at fair value	72.1	—	—	n/a	72.1	0.4 %
Mortgage servicing rights, at fair value	151.6	392.1	621.6	n/a	1,165.3	6.3 %
	$ 17,524.4	$ 392.1	$ 621.6	n/a	$ 18,538.1	100.0 %

(1) Weighted average of 3.0 months to maturity.
(2) Repurchase agreements and/or revolving credit facilities secured by MSR may be over-collateralized due to operational considerations.

Interest Rate Swaps

INTEREST RATE SWAPS

Maturities	Notional Amounts ($B)	Average Fixed Pay Rate	Average Receive Rate	Average Maturity Years
Payers				
2023	$ 2.3	0.023 %	0.080 %	3.0
2024 and after	1.5	0.257 %	0.080 %	7.0
	$ 3.8	0.116 %	0.080 %	4.6
Maturities	**Notional Amounts ($B)**	**Average Pay Rate**	**Average Fixed Receive Rate**	**Average Maturity (Years)**
Receivers				
2024 and after	$ 0.7	0.080 %	0.419 %	9.8
	$ 0.7	0.080 %	0.419 %	9.8


TWO HARBORS
Investment Corp.
A Pine River Capital Managed Company