An Agency + MSR Mortgage REIT

Second Quarter 2021 Earnings Call

AUGUST 5, 2021

TWO HARBORS
Investment Corp.

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, 2020, 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; 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 the ongoing litigation with PRCM Advisers related to such termination; 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

Overall Performance Driven by Spread Widening in High Coupon RMBS

Quarterly Summary

- Reported book value of $6.42 per common share, representing a (9.6)% quarterly return on book value[1]
- Generated Comprehensive Loss of $194.6 million, representing an annualized return on average common equity of (40.7)%
- Reported Core Earnings of $51.5 million, or $0.19 per weighted average basic common share[2]
- Declared a second quarter common stock dividend of $0.17 per share
- Continued to grow mortgage servicing rights (MSR) portfolio
  - Settled $16.4 billion unpaid principal balance (UPB) generated through flow-sale program
  - Closed on $6.5 billion UPB through bulk transactions

Post-Quarter End Update

- Issued 40 million shares of common stock through an underwritten offering for net proceeds of approximately $256.5 million
- Expect to settle on outstanding commitments of $17.5 billion UPB of MSR through bulk transactions

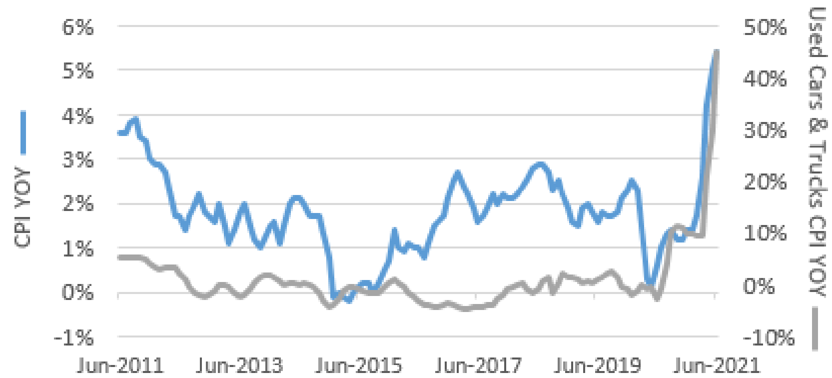
(1) Return on book value is defined as the increase (decrease) in book value per common share from the beginning to the end of the given period, plus dividends declared in the period, divided by book value as of the beginning of the period.
(2) Core Earnings is a non-GAAP measure. Please see Appendix slide 19 for a definition of Core Earnings and a reconciliation of GAAP to non-GAAP financial information.

Second Quarter Key Market Highlights

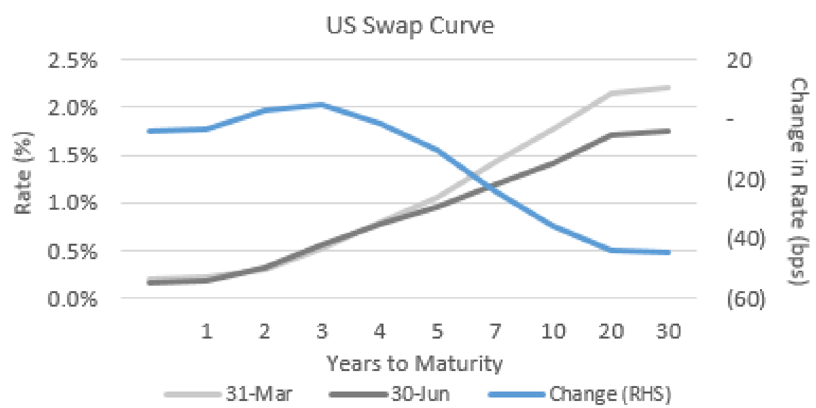
CURRENT COUPON SPREADS REMAIN UNATTRACTIVE AS RATES DECLINE AND YIELD CURVE FLATTENS

- Inflationary pressures are evident in many parts of the US economy
- The Fed believes inflation pressures are transitory, citing supply chain shortages in sectors such as cars and trucks
- Despite high inflation, rates rallied and the curve bull flattened as the market priced in faster hikes from the Fed
- Current coupon OAS remains in negative territory, implying low return potential and significant risk of widening

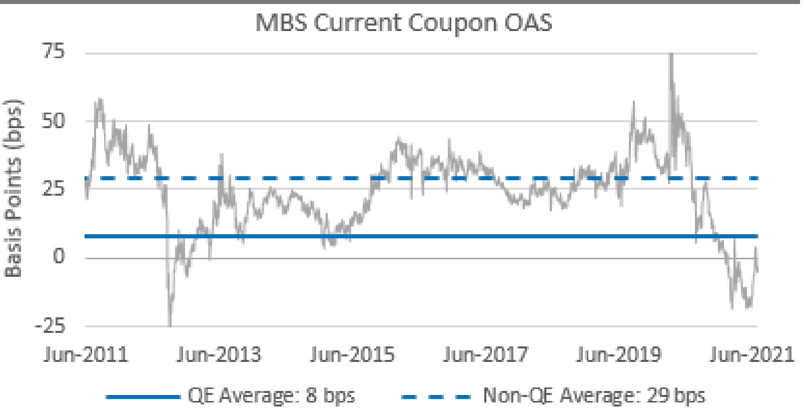
I. RISING INFLATIONARY PRESSURE[1]



II. LOWER RATES AND FLATTER YIELD CURVE[2]



III. NEGATIVE CURRENT COUPON SPREADS[3]



(1) U.S. Bureau of Labor Statistics.
(2) Bloomberg.
(3) JPM DataQuery current coupon OAS.

Special Topic: Key Policy-Related Announcements

POLICY AND REGULATORY LANDSCAPE CONTINUES TO EVOLVE

- Implementation of policies which are supportive of borrowers, broaden the credit box, and increase oversight

FEDERAL HOUSING FINANCE AGENCY

- Sandra L. Thompson appointed as Acting Director of the Federal Housing Finance Agency (FHFA), replacing former Director, Mark Calabria
- GSE Implementation of the Amended Preferred Stock Purchase Agreement (PSPA)
  - Limits sales of investment property and second home mortgages to the GSEs
  - Eliminates the GSE Patch through Final QM Rule
- Launched GSE programs (RefiNow and Refi Possible) to encourage low-income (less than 80% of the area median income) borrowers to refinance
- Ended the GSE foreclosure moratorium in line with guidance by CFPB effective August 1st
- Relaxed GSE eligibility requirements for borrowers to obtain Flex Modifications
- Expired certain underwriting flexibilities implemented during the pandemic to address COVID-19 concerns
- Removed the Adverse Market Fee imposed by the GSEs for refinanced loans

CONSUMER FINANCIAL PROTECTIONS BUREAU

- Acting Director Dave Uejio nominated to serve as Assistant Secretary of the Department of Housing and Urban Development (HUD)
- Revised General Qualified Mortgage Rule based on debt-to-income to spread on prevailing rate
- Proposed rules regarding foreclosures in light of forbearances due to COVID-19 pandemic
- Proposed delay to Final Rule regarding Fair Debt Collection Procedures Act (FDCPA)

Book Value Summary

(Dollars in millions, except per share data)	Q2-2021 Book Value	Q2-2021 Book Value per share	YTD-2021 Book Value	YTD-2021 Book Value per share
Beginning common stockholders' equity	**$ 1,994.4**	**$ 7.29**	**$ 2,087.7**	**$ 7.63**
Core Earnings, net of tax[1]	65.2		128.2	
Dividend declaration - preferred	(13.7)		(30.9)	
Core Earnings attributable to common stockholders, net of tax[1]	51.5		97.3	
Realized and unrealized gains and losses, net of tax	(183.2)		(6.1)	
Other comprehensive loss, net of tax	(62.9)		(334.3)	
Comprehensive loss	(194.6)		(243.1)	
Common stock dividends declared	(46.7)		(93.3)	
Other	4.6		6.3	
Issuance of common stock, net of offering costs	0.1		0.2	
Ending common stockholders' equity	$ 1,757.8	**$ 6.42**	$ 1,757.8	**$ 6.42**
Total preferred stock liquidation preference	726.3		$ 726.3	
Ending total equity	**$ 2,484.1**		**$ 2,484.1**	

- Book value of $6.42 per common share, resulting in a (9.6)% total economic return on book value[2]
- Book value decrease reflects spread widening in high coupon RMBS
- Generated Comprehensive Loss of $194.6 million, representing an annualized return on average common equity of (40.7)%

(1) Core Earnings is a non-GAAP measure. Please see Appendix slide 19 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.

Core Earnings[1] and Portfolio Yield

($ in millions, except per share data)	Q1-2021	Q2-2021	Variance ($)
Interest income	$ 56.1	$ 43.4	$ (12.7)
Interest expense	22.7	24.4	(1.7)
Net interest income	33.4	19.0	(14.4)
Servicing income, net of amortization on MSR	43.8	47.4	3.6
Gain on swaps and swaptions	1.7	2.4	0.7
Gain on other derivatives	18.9	26.6	7.7
Other	0.1	—	(0.1)
Total other income	64.5	76.4	11.9
Expenses	36.2	31.0	5.2
Benefit for income taxes	(1.3)	(0.8)	(0.5)
Core Earnings[1]	**$ 63.0**	**$ 65.2**	**$ 2.2**
Dividends on preferred stock	17.2	13.7	3.5
Core Earnings attributable to common stockholders[1]	**$ 45.8**	**$ 51.5**	**$ 5.7**
Basic weighted average Core EPS	**$ 0.17**	**$ 0.19**	
Core Earnings annualized return on average common equity	**8.8 %**	**10.8 %**	
Operating expenses, excluding non-cash LTIP amortization and nonrecurring expenses, as a percentage of average equity	1.6 %	1.9 %	

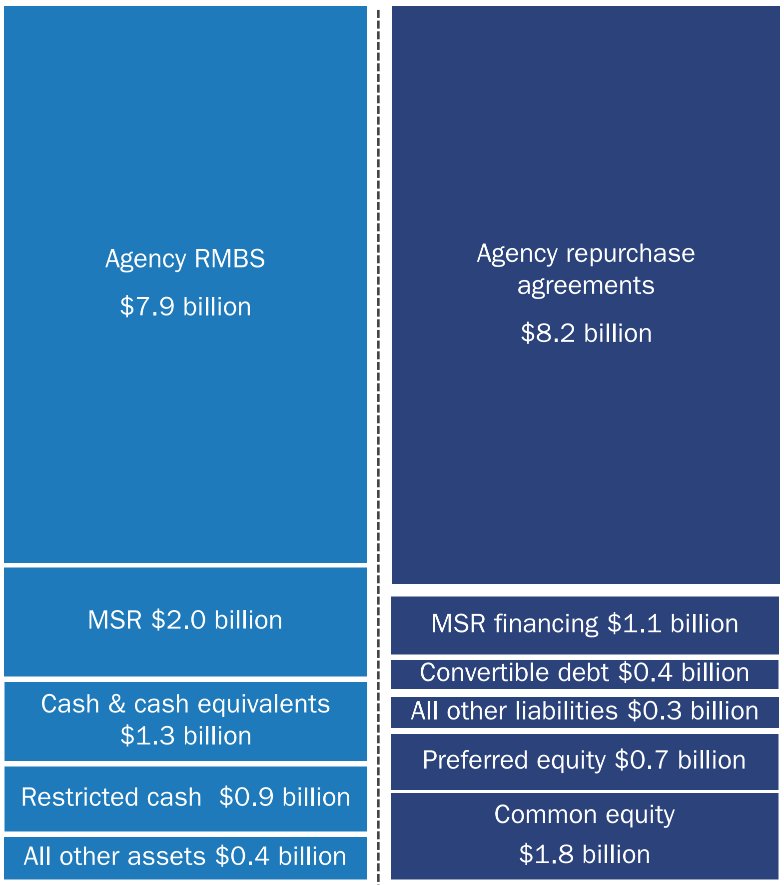
- Second quarter Core Earnings results impacted by:
  - Decline in interest income as average RMBS balances decreased due to sales and non-reinvestment of paydowns
  - Higher interest expense driven by increase in MSR financing and convertible debt, which more than offset reduced repo expense
  - Increased gain on other derivatives reflecting a larger TBA dollar roll position as well as roll specialness
  - Higher servicing income due to lower prepayments speeds, higher balance, and lower delinquencies/ forbearance
  - Reduction in servicing expenses, mainly driven by one-time items
  - Lower preferred stock dividends reflecting a full-quarter benefit from the redemption of Series D and Series E preferred shares completed in Q1-2021
- Annualized portfolio yield increased to 2.72% and net spreads widened by 28bps

PORTFOLIO YIELD	Q1-2021	Q2-2021	As of Jun. 30, 2021[2]
Annualized portfolio yield[3]	2.25 %	2.72 %	2.87 %
Annualized cost of funds[4]	0.60 %	0.79 %	0.75 %
Annualized net spread for aggregate portfolio	1.65 %	1.93 %	2.12 %

(1) Core Earnings is a non-GAAP measure. Please see Appendix slide 19 for a definition of Core Earnings and a reconciliation of GAAP to non-GAAP financial information.
(2) Represents yields on the portfolio held as of June 30, 2021 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 due to excluding portfolio reinvestment.
(3) Includes interest income on RMBS and servicing income net of servicing expenses and amortization on MSR.
(4) Cost of funds includes interest spread income/expense associated with the portfolio's interest rate swaps and caps.

Financing Profile

BALANCE SHEET AS OF JUNE 30, 2021



Total Assets: $12.5 billion

CONSERVATIVE LEVERAGE FOR AGENCY + MSR STRATEGY

- Strong capital and liquidity position
- $1.3 billion of unrestricted cash
- Economic debt-to-equity of 6.5x at June 30, 2021, compared to 6.4x at March 31, 2021[(1)]
- Average economic debt-to-equity of 6.5x in the second quarter, unchanged from the first quarter[(1)]

DIVERSE FINANCING PROFILE

AGENCY RMBS

- Outstanding repurchase agreements of $8.2 billion with 15 counterparties
- Repo funding remains attractive (flat term structure, low rates)

MORTGAGE SERVICING RIGHTS

- $636 million of outstanding borrowings under bilateral MSR asset financing facilities
- $400 million of outstanding 5-year MSR term notes[(2)]
- $304 million of unused, committed MSR asset financing capacity
- $23 million outstanding borrowings and $177 million of unused, committed capacity for servicing advance receivables

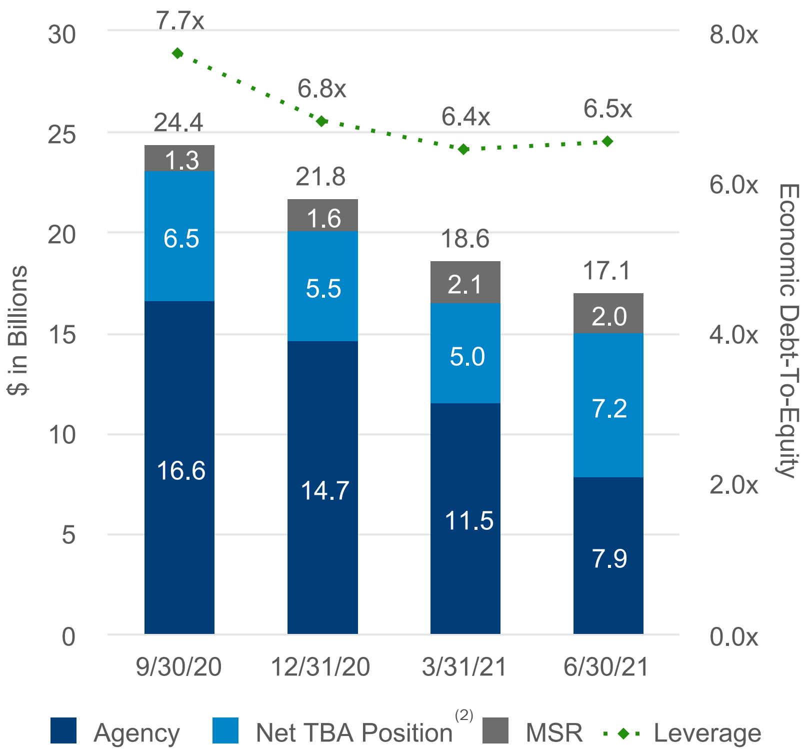
(1) Defined as total borrowings to fund RMBS, MSR and Agency Derivatives, plus the implied debt on net TBA positions, divided by total equity.
(2) Excludes deferred debt issuance costs.

Quarterly Activity and Portfolio Composition

PORTFOLIO COMPOSITION[1]

At June 30, 2021, $17.1 billion portfolio

Includes $9.9 billion settled positions



PORTFOLIO ACTIVITY

- Executed on MSR strategy and maintained cautious positioning in RMBS
- Reduced specified pool portfolio to $7.3 billion through a combination of asset sales and paydowns
  - Sold $1.4 billion 2.5% pools and $0.7 billion 3.0% pools, adding a similar notional of 2.5% TBA
  - Experienced $1 billion in runoff that was not reinvested
- Increased net TBA position to $7.2 billion by adding current coupon to capture continued roll specialness
- Grew MSR portfolio by $3.5 billion UPB[3]. Growth combined with reduction in prices due to lower rates resulted in a decline in value of $0.1 billion

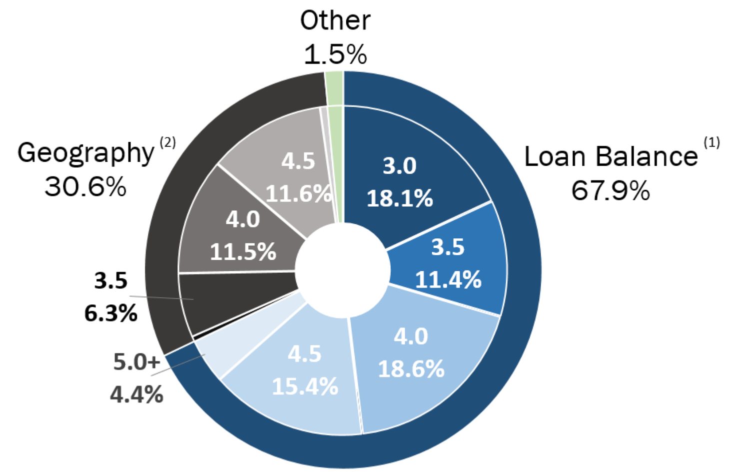
(1) For additional detail on the portfolio, see Appendix slides 20-22.
(2) Represents bond equivalent value of TBA position. Bond equivalent value is defined as notional amount multiplied by market price. Accounted for as derivative instruments in accordance with GAAP.
(3) Based on the loans underlying the MSR reported by subservicers on a month lag, adjusted for current month purchases.

Specified Pools

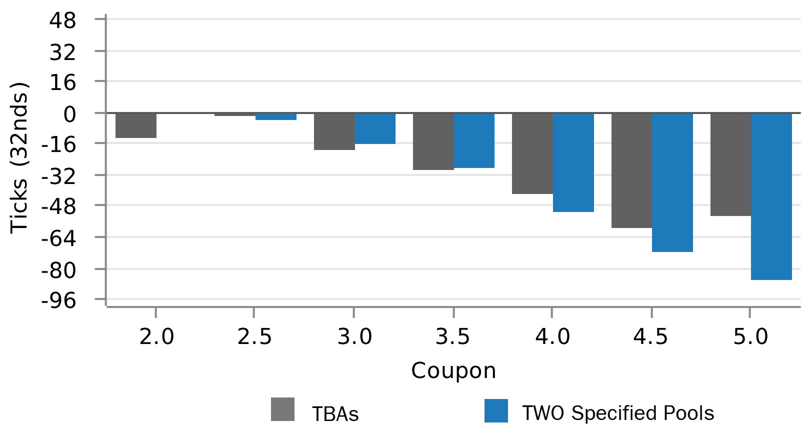
SPECIFIED POOL PERFORMANCE

- High coupon specified pools underperformed during the quarter by 1 point to more than 2 points, depending on coupon
- Some market participants pointed to the new FHFA refi program announcements and stubbornly fast speeds as causes for high coupon underperformance
- Prices have adjusted to reflect faster speeds and are at attractive levels
- We are seeing the beginning signs of burnout and think speeds have the potential to come in slower than expectations

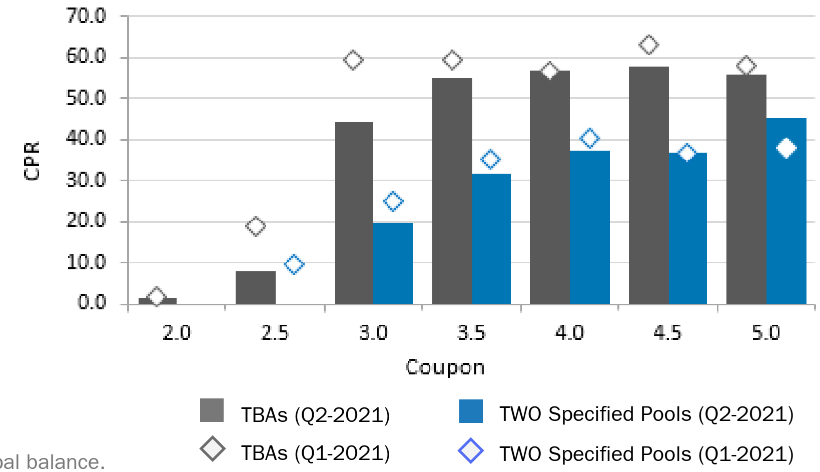
I. SPECIFIED POOL PORTFOLIO



II. QUARTERLY PERFORMANCE[3]



III. SPECIFIED POOL PREPAYMENT SPEEDS[4]



(1) Securities collateralized by loans less than or equal to $200 thousand of initial principal balance.
(2) Securities collateralized by loans from certain geographic concentrations.
(3) Two Harbors internal data.
(4) Three month prepayment speeds of delivered TBA contracts, average of J.P. Morgan, Credit Suisse, and Citi data.

Mortgage Servicing Rights

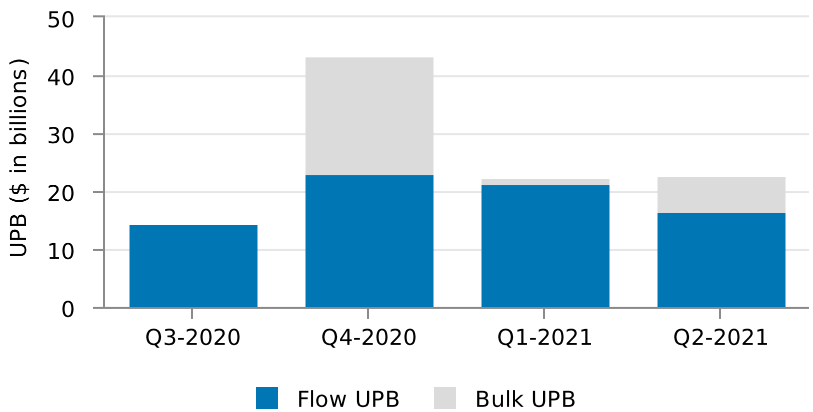
MSR PORTFOLIO PERFORMANCE

- Grew portfolio UPB despite fast prepayment speeds
  - Settled $16.4 billion UPB through flow-sale arrangements and $6.5 billion UPB through bulk purchases
  - Expect to settle $17.5 billion UPB from bulk transactions subsequent to quarter-end
- MSR price multiple decreased by 5.0%, reflecting decline in rates and flatter yield curve
- Forbearance rates continued to decline to 2.2% of our MSR portfolio by loan count. At quarter-end, loans in forbearance largely represent our current delinquencies

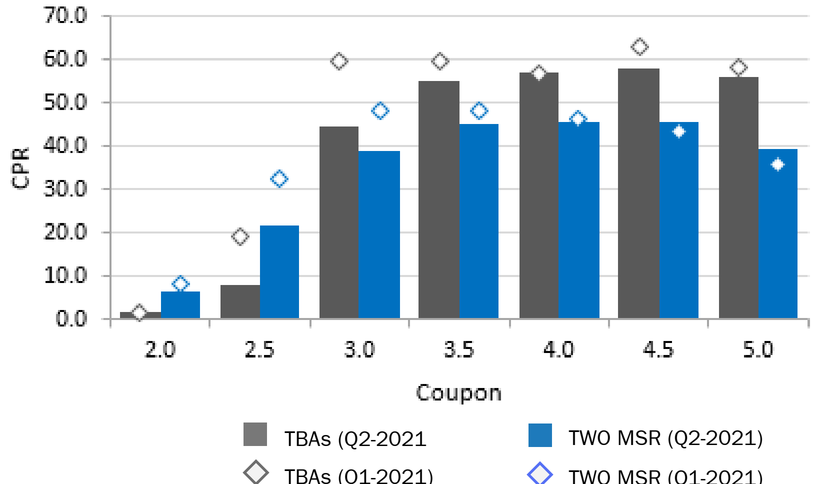
I. MSR PORTFOLIO(1)

	Mar. 31, 2021	Jun. 30, 2021
Fair value ($ millions)	$2,092	$2,020
Price Multiple	4.2x	4.0x
UPB ($ millions)	$187,069	$190,620
Gross weighted average coupon rate	3.6%	3.5%
Weighted average original FICO(2)	757	758
Weighted average original LTV	73%	72%
60+ day delinquencies	2.9%	2.3%
Net servicing fee (basis points)	26.6	26.5
Weighted average loan age (months)	30	28
% Fannie Mae	62%	61%

II. MSR SETTLEMENT ACTIVITY



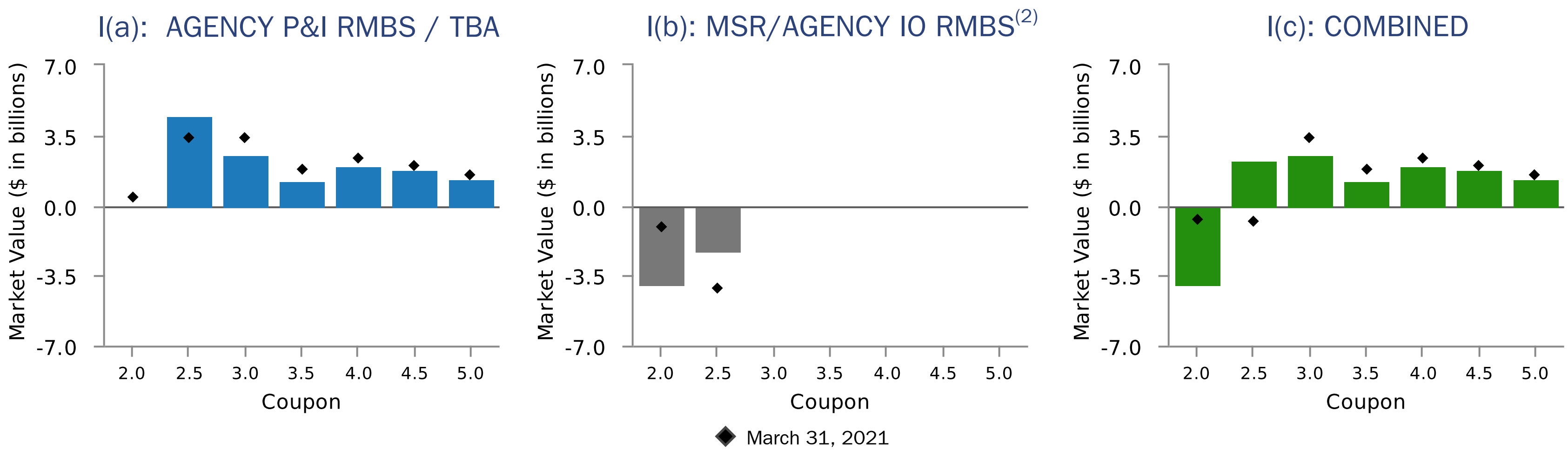
III. MSR PREPAYMENT SPEEDS(3)



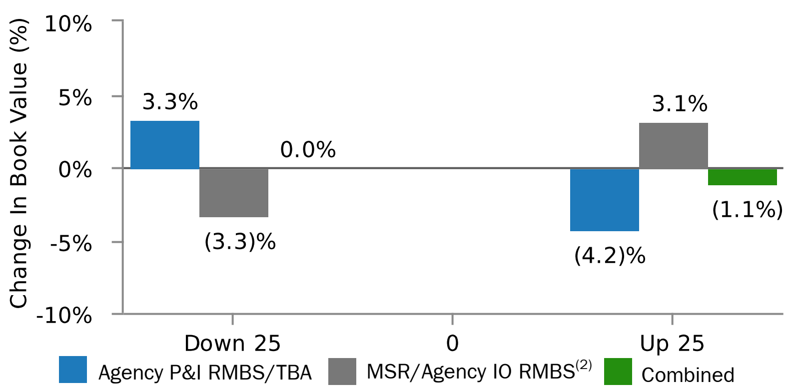
(1) Based on the loans underlying the MSR reported by subservicers on a month lag, adjusted for current month purchases.
(2) FICO represents a mortgage industry accepted credit score of a borrower.
(3) Three month prepayment speeds of delivered TBA contracts, average of J.P. Morgan, Credit Suisse, and Citi data.

Agency + MSR Advantage

I. EFFECTIVE COUPON POSITIONING[1]



II. BOOK VALUE EXPOSURE TO CURRENT COUPON SPREAD[3]



MSR REDUCES CURRENT COUPON MORTGAGE SPREAD RISK

- Rally in rates shifted the implied short position from the MSR/IO from mostly 2.5%s down to 2.0%s
- Investments and growth in the MSR has helped achieve a portfolio that is well insulated against a widening of current coupon spreads
- In a 25 basis point current coupon spread widening scenario, estimated book value decrease of 1.1%

Note: Sensitivity data as of June 30, 2021. 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) 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, 2021.

(2) Includes the effect of unsettled MSR.

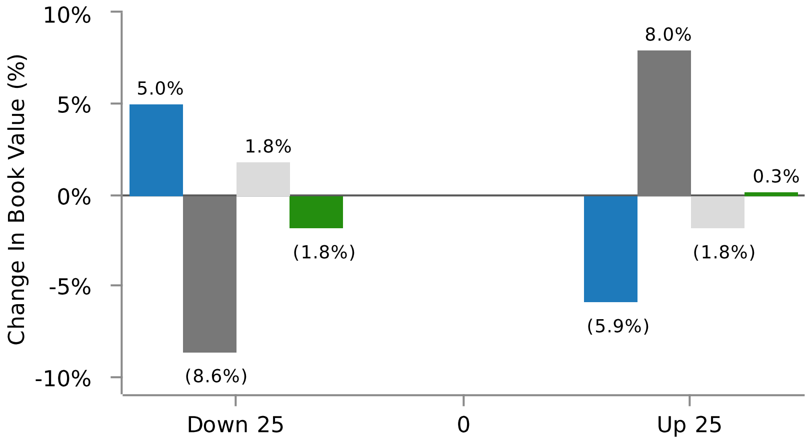
(3) Represents estimated change in common book value for theoretical parallel shifts in spreads.

Risk Positioning

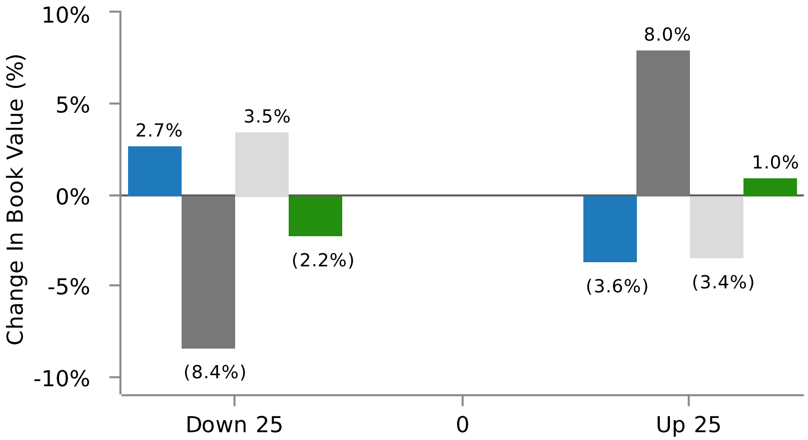
AGENCY + MSR DELIVERS BOOK VALUE STABILITY

- Interest rate and curve exposure remains low and in line with historical positioning
- Duration exposure of MSR/IO is greater than the exposure of RMBS and TBA positions
- Duration of the portfolio is actively managed; slight bias to higher rates was largely hedged early in Q3-2021

I. BOOK VALUE EXPOSURE TO CHANGES IN RATES[(1)]



II. BOOK VALUE EXPOSURE TO CHANGES IN YIELD CURVE[(2)]



Agency P&I RMBS/TBA MSR/Agency IO RMBS[(3)] Other[(4)] Combined

Note: Sensitivity data as of June 30, 2021. The above scenarios are provided for illustration purposes only and is not necessarily indicative of Two Harbors' financial condition and operating results, nor are they 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) Represents estimated change in common book value for theoretical non-parallel shifts in the yield curve. Analysis uses a +/- 25 basis point shift in 10 year rates while holding near term rates constant.

(3) Includes the effect of unsettled MSR.

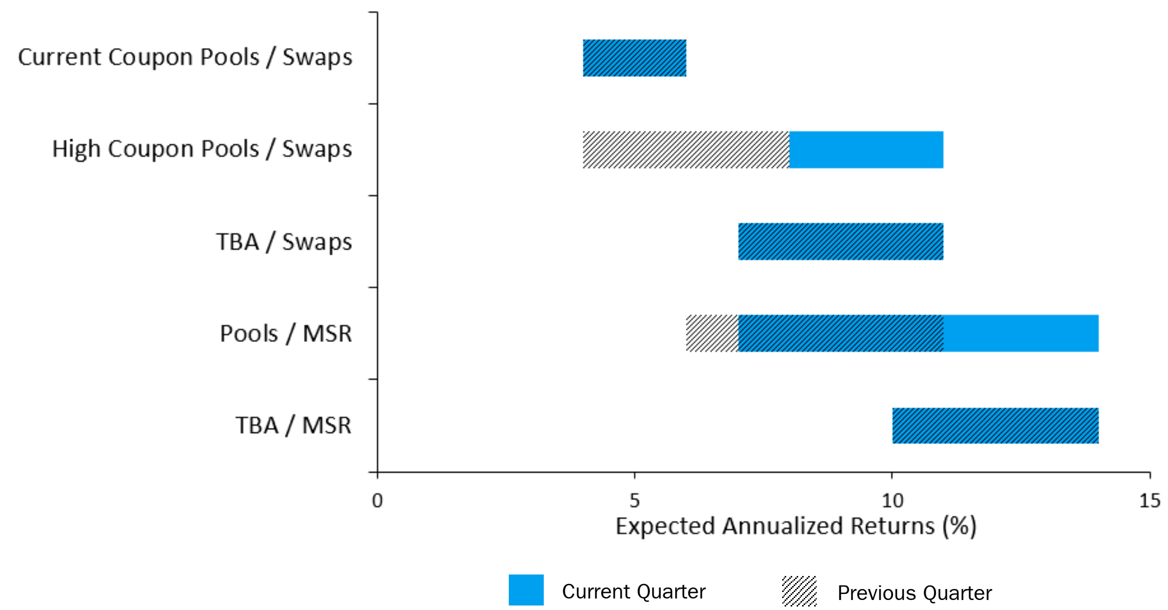
(4) Other includes all other derivative assets and liabilities and borrowings. Other excludes TBAs, which are included in the Agency P&I RMBS/TBA category.

Two Harbors Outlook

OPPORTUNITY SET IN OUR TARGET ASSETS REMAINS ATTRACTIVE TODAY

- Estimate returns for:
  - Current Coupon Pools / Swaps in the mid-single digits, unchanged from last quarter
  - High Coupon Pools / Swaps in the high-single to low-double digits after this quarter's spread widening
  - TBA / Swaps returns in the mid-single digits to low teens, depending on how long roll specialness is assumed to last
  - Pools / MSR in the mid-high-single digits to low-mid teens, depending on coupon and story if related to pools, and depending on roll specialness if related to TBA

STATIC RETURN OUTLOOK FOR TARGET ASSETS(1)

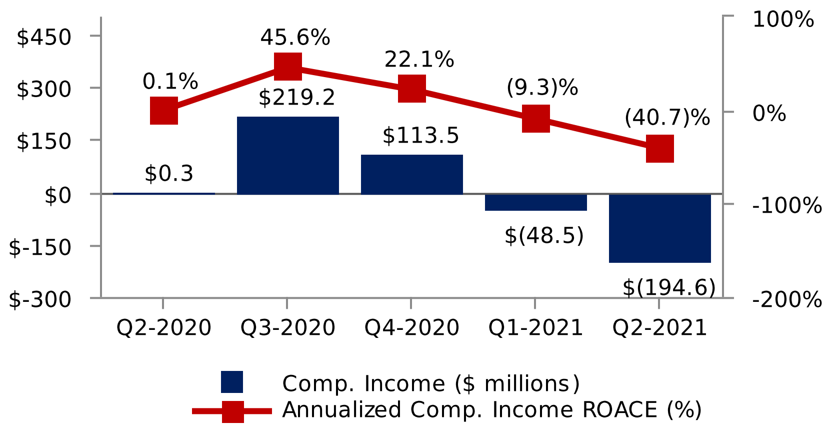


(1) Source: Company's indicative estimates based on portfolio assumptions and market conditions, for illustrative purposes only.

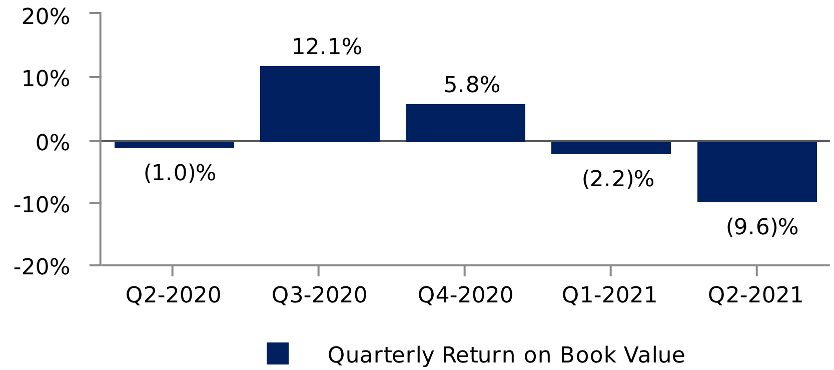
Appendix

Financial Performance

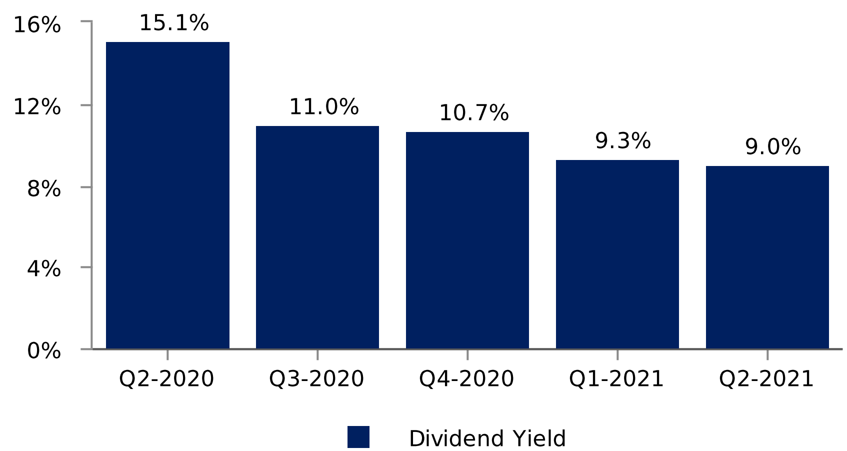
COMPREHENSIVE INCOME (LOSS)



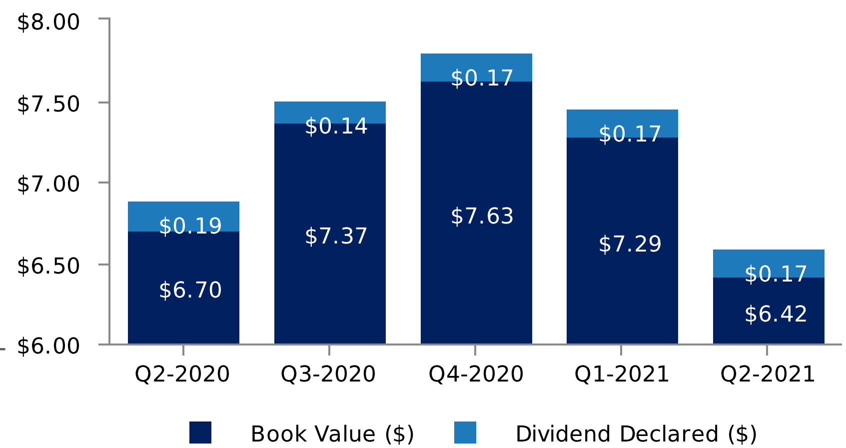
QUARTERLY RETURN ON BOOK VALUE[1]



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.

Q2-2021 Operating Performance

	Q2-2021			
(In millions, except for per common share data)	Core Earnings[1]	Realized Gains (Losses)	Unrealized MTM	Total
Interest income	$ 43.4	$ —	$ —	$ 43.4
Interest expense	24.4	—	—	24.4
Net interest income	19.0	—	—	19.0
Gain (loss) on investment securities	—	8.1	(49.6)	(41.5)
Servicing income	112.8	—	—	112.8
Loss on servicing asset	(65.4)	—	(202.6)	(268.0)
Gain on interest rate swaps and swaptions	2.4	8.7	13.6	24.7
Gain (loss) on other derivative instruments	26.6	33.6	(8.9)	51.3
Other income	—	—	—	—
Total other income (loss)	76.4	50.4	(247.5)	(120.7)
Expenses	31.0	6.2	—	37.2
Net income (loss) before income taxes	64.4	44.2	(247.5)	(138.9)
(Benefit from) provision for income taxes	(0.8)	1.6	(21.7)	(20.9)
Net income (loss)	**65.2**	**42.6**	**(225.8)**	**(18.0)**
Dividends on preferred stock	13.7	—	—	13.7
Net income (loss) attributable to common stockholders	**$ 51.5**	**$ 42.6**	**$ (225.8)**	**$ (131.7)**
Weighted average earnings (loss) per basic common share	$ 0.19	$ 0.15	$ (0.82)	$ (0.48)

(1) Core Earnings is a non-GAAP measure. Please see Appendix slide 19 of this presentation for a definition of Core Earnings and a reconciliation of GAAP to non-GAAP financial information.

Q1-2021 Operating Performance

(In millions, except for per common share data)	Q1-2021 Core Earnings[1]	Q1-2021 Realized Gains (Losses)	Q1-2021 Unrealized MTM	Q1-2021 Total
Interest income	$ 56.1	$ —	$ —	$ 56.1
Interest expense	22.7	—	—	22.7
Net interest income	33.4	—	—	33.4
Gain on investment securities	—	70.3	62.5	132.8
Servicing income	107.1	—	—	107.1
(Loss) gain on servicing asset	(63.3)	—	390.7	327.4
Gain (loss) on interest rate swaps and swaptions	1.7	(6.3)	(10.9)	(15.5)
Gain (loss) on other derivative instruments	18.9	(234.4)	(60.6)	(276.1)
Other income (loss)	0.1	(5.8)	—	(5.7)
Total other income (loss)	64.5	(176.2)	381.7	270.0
Expenses	36.2	4.4	—	40.6
Net income (loss) before income taxes	61.7	(180.6)	381.7	262.8
(Benefit from) provision for Income taxes	(1.3)	(12.8)	36.8	22.7
Net income (loss)	**63.0**	**(167.8)**	**344.9**	**240.1**
Dividends on preferred stock	17.2	—	—	17.2
Net income (loss) attributable to common stockholders	**$ 45.8**	**$ (167.8)**	**$ 344.9**	**$ 222.9**
Weighted average earnings (loss) per basic common share	$ 0.17	$ (0.62)	$ 1.26	$ 0.81

(1) Core Earnings is a non-GAAP measure. Please see Appendix slide 19 of this presentation for a definition of Core Earnings and a reconciliation of GAAP to non-GAAP financial information.

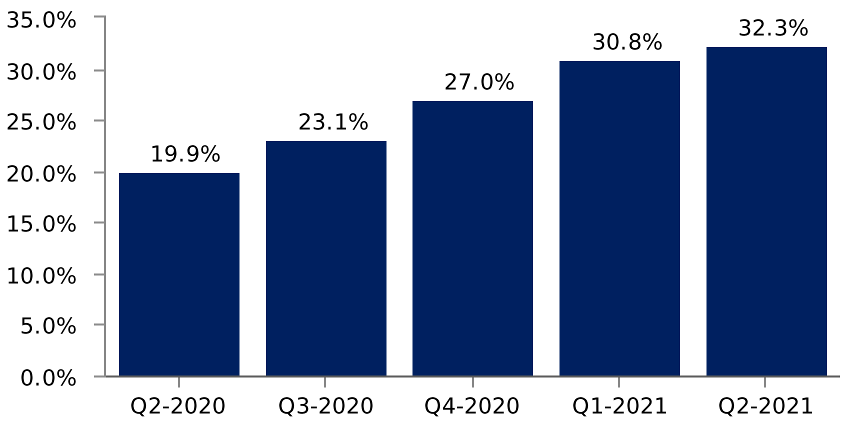
GAAP to Core Earnings Reconciliation[1]

Reconciliation of GAAP to non-GAAP Information (In thousands, except for per common share data)	Three Months Ended March 31, 2021	Three Months Ended June 30, 2021
Reconciliation of Comprehensive loss to Core Earnings:		
Comprehensive loss attributable to common stockholders	**$ (48,512)**	**$ (194,606)**
Adjustment for other comprehensive loss attributable to common stockholders:		
Unrealized loss on available-for-sale securities	271,453	62,899
Net income (loss) attributable to common stockholders	**$ 222,941**	**$ (131,707)**
Adjustments for non-core earnings:		
Realized gain on securities	(69,194)	(15,493)
Unrealized (gain) loss on securities	(62,539)	49,620
(Reversal of) provision for credit losses	(1,135)	7,392
Realized and unrealized (gain) loss on mortgage servicing rights	(390,704)	202,651
Realized loss (gain) on termination or expiration of swaps and swaptions	6,350	(8,642)
Unrealized loss (gain) on interest rate swaps, caps and swaptions	10,899	(13,607)
Loss (gain) on other derivative instruments	294,952	(24,721)
Other loss	5,817	—
Change in servicing reserves	661	163
Non-cash equity compensation expense	1,790	4,611
Other nonrecurring expenses	1,971	1,397
Net provision for (benefit from) income taxes on non-Core Earnings	24,021	(20,145)
Core Earnings attributable to common stockholders[1]	$ 45,830	$ 51,519
Weighted average basic common shares	273,710,765	273,718,561
Core Earnings per weighted average basic common share	$ 0.17	$ 0.19

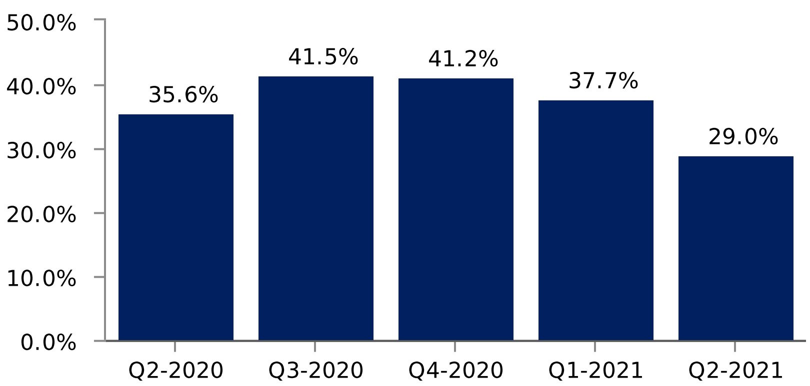
(1) Core Earnings is a non-U.S. GAAP measure that we define as comprehensive (loss) income attributable to common stockholders, excluding "realized and unrealized gains and losses" (impairment losses, provision for credit losses, realized and unrealized gains and losses on the aggregate portfolio, reserve expense for representation and warranty obligations on MSR, non-cash compensation expense related to restricted common stock, other nonrecurring expenses 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

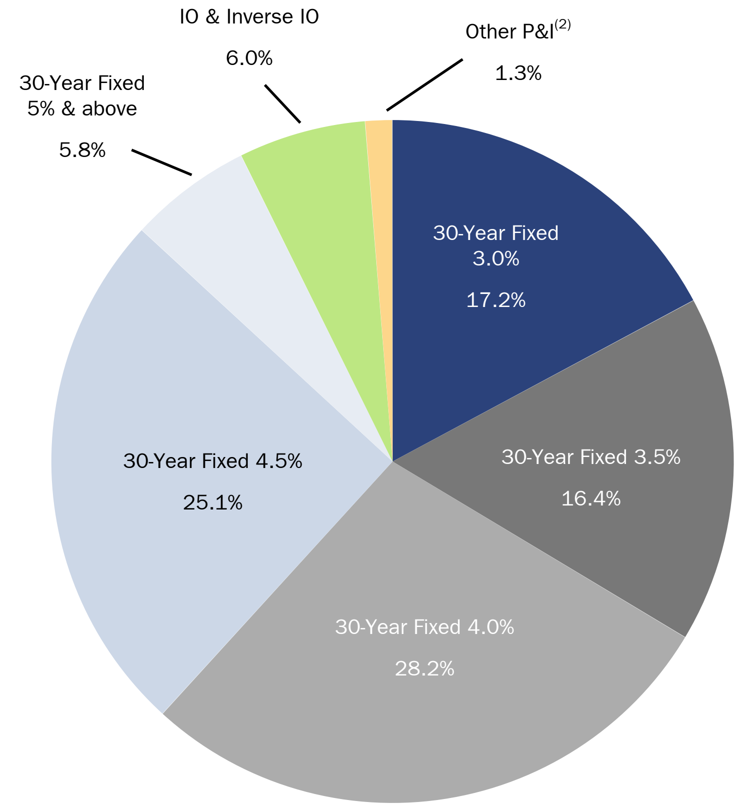
AGENCY RMBS CPR[1]



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

	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	$ —	$ —	— %	— %	$ —	— %	—
3.0%	1,278	1,357	19.4 %	100.0 %	1,316	3.7 %	20
3.5%	1,206	1,295	31.8 %	100.0 %	1,261	4.3 %	24
4.0%	2,036	2,219	37.3 %	100.0 %	2,119	4.6 %	42
4.5%	1,793	1,977	36.7 %	100.0 %	1,889	5.0 %	42
≥ 5.0%	410	460	38.7 %	98.2 %	434	5.9 %	74
	6,723	7,308	33.1 %	99.9 %	7,019	4.6 %	37
Other P&I[2]	90	101	33.4 %	— %	99	6.6 %	232
IOs and IIOs[3]	4,556	476	17.6 %	— %	459	3.9 %	55
Total Agency RMBS	$ 11,369	$ 7,885		92.6 %	$ 7,577		

	Notional Amount ($ millions)	Bond Equivalent Value ($ millions)[4]	Through-the-Box Speeds[5]
TBA Positions			
2.5% & below	$ 4,495	$ 4,649	7.9 %
3.0%	1,309	1,365	44.4 %
3.5%	—	—	55.1 %
4.0%	—	—	57.1 %
4.5%	—	—	58.0 %
5.0%	1,050	1,151	55.9 %
Net TBA position	$ 6,854	$ 7,165	

(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 $425.3 million of IOs and $50.5 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) Three month prepayment speeds of delivered TBA contracts, average of J.P. Morgan, Credit Suisse, and Citi data

Mortgage Servicing Rights Portfolio(1)

	Number of Loans	Unpaid Principal Balance ($ in millions)	% 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										
≤ 3.25%	161,009	$ 54,155	50%	2.9%	7	768	71%	0.3%	7.5%	25.6
3.25% - 3.75%	154,486	40,599	63%	3.4%	28	759	74%	1.2%	27.7%	26.3
3.75% - 4.25%	149,732	32,450	64%	3.9%	49	755	76%	3.3%	41.2%	27.5
4.25% - 4.75%	100,082	18,907	66%	4.4%	51	739	78%	5.7%	45.8%	26.5
4.75% - 5.25%	50,197	8,590	67%	4.9%	45	724	79%	7.7%	46.3%	27.6
> 5.25%	20,400	2,959	70%	5.5%	44	706	79%	10.4%	44.3%	30.6
	635,906	157,660	59%	3.6%	29	756	74%	2.4%	30.0%	26.5
15-Year Fixed										
≤ 2.25%	10,336	3,544	91%	2.0%	4	778	59%	0.1%	4.9%	25.0
2.25% - 2.75%	32,964	8,400	67%	2.4%	9	776	59%	0.2%	12.9%	25.5
2.75% - 3.25%	47,013	8,038	70%	2.9%	38	769	62%	0.7%	25.5%	26.1
3.25% - 3.75%	31,530	4,180	71%	3.4%	51	758	65%	1.8%	31.5%	27.5
3.75% - 4.25%	15,066	1,697	65%	3.9%	49	744	65%	2.7%	31.9%	29.0
> 4.25%	7,651	735	63%	4.5%	40	729	66%	3.2%	35.3%	31.1
	144,560	26,594	72%	2.8%	27	768	61%	0.8%	22.0%	26.3
Total ARMs	3,868	956	63%	3.1%	49	762	68%	3.6%	41.4%	25.2
Total Portfolio	784,334	$ 185,210	61%	3.5%	29	758	72%	2.2%	29.0%	26.5

(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][3]	Repurchase Agreements	Revolving Credit Facilities	Term Notes Payable	Convertible Notes	Total Outstanding Borrowings	Percent (%)
Within 30 days	$ 2,098.6	$ —	$ —	$ —	$ 2,098.6	21.6 %
30 to 59 days	1,318.3	—	—	—	1,318.3	13.6 %
60 to 89 days	2,319.0	—	—	—	2,319.0	23.9 %
90 to 119 days	1,356.6	—	—	—	1,356.6	14.0 %
120 to 364 days	1,258.1	388.7	—	143.4	1,790.2	18.4 %
One to three years	—	144.8	396.2	—	541.0	5.6 %
Three to five years	—	—	—	280.4	280.4	2.9 %
	$ 8,350.6	$ 533.5	$ 396.2	$ 423.8	$ 9,704.1	100.0 %

Collateral Pledged for Borrowings[3]	Repurchase Agreements	Revolving Credit Facilities[2]	Term Notes Payable	Convertible Notes	Total Collateral Pledged	Percent (%)
Available-for-sale securities, at fair value	$ 7,830.1	$ —	$ —	n/a	$ 7,830.1	80.6 %
Derivative assets, at fair value	50.4	—	—	n/a	50.4	0.5 %
Mortgage servicing rights, at fair value	295.1	904.4	603.7	n/a	1,803.2	18.6 %
Other assets (includes servicing advances)	—	29.2	—	n/a	29.2	0.3 %
	$ 8,175.6	$ 933.6	$ 603.7	n/a	$ 9,712.9	100.0 %

(1) Weighted average of 6.1 months to maturity.
(2) Revolving credit facilities secured by MSR and other assets may be over-collateralized due to operational considerations.

Interest Rate Swaps and Swaptions

INTEREST RATE SWAPS

Maturities	Notional Amounts ($B)	Average Fixed Pay Rate	Average Receive Rate	Years
Payers				
2021	$ —	— %	— %	—
2022	7.4	0.042 %	0.080 %	1.2
2023	2.3	0.023 %	0.080 %	2.0
2024	—	— %	— %	—
2025 and after	1.5	0.257 %	0.080 %	6.0
	$ 11.2	0.067 %	0.080 %	2.0

Maturities	Notional Amounts ($B)	Average Pay Rate	Rate	(Years)
Receivers				
2021	$ —	— %	— %	—
2022	—	— %	— %	—
2023	2.2	0.080 %	0.118 %	1.7
2024	—	— %	— %	—
2025 and after	$ 2.2	0.086 %	0.817 %	9.3
	$ 4.4	0.083 %	0.468 %	5.5

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	$ 11.3	$ 6.9	11.3	$ 886.0	2.26 %	3M LIBOR	10.0
Sale Contracts:								
Receiver	≥6 Months	$ (10.6)	$ (12.8)	11.1	$ (1,087.0)	3M LIBOR	1.26 %	10.0


TWO HARBORS
Investment Corp.