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

FORM 8-K

Current Report
Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report: May 1, 2023

Two Harbors Investment Corp.
(Exact name of registrant as specified in its charter)

Maryland	**001-34506**	**27-0312904**
(State or other jurisdiction of incorporation or organization)	(Commission File Number)	(I.R.S. Employer Identification No.)
1601 Utica Avenue South, Suite 900	**St. Louis Park, MN**	**55416**
(Address of Principal Executive Offices)		(Zip Code)

(612) 453-4100
Registrant's telephone number, including area code

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

□ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

□ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

□ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities Registered Pursuant to Section 12(b) of the Act:

Title of Each Class:	Trading Symbol(s)	Name of Exchange on Which Registered:
Common Stock, par value $0.01 per share	TWO	New York Stock Exchange
8.125% Series A Cumulative Redeemable Preferred Stock	TWO PRA	New York Stock Exchange
7.625% Series B Cumulative Redeemable Preferred Stock	TWO PRB	New York Stock Exchange
7.25% Series C Cumulative Redeemable Preferred Stock	TWO PRC	New York Stock Exchange

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (17 CFR §230.405) or Rule 12b-2 of the Securities Exchange Act of 1934 (17 CFR §240.12b-2).

Emerging Growth Company □

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

□

Item 2.02 Results of Operations and Financial Condition.

On May 1, 2023, Two Harbors Investment Corp. issued a press release announcing its financial results for the fiscal quarter ended March 31, 2023. A copy of the press release and the 2023 First Quarter Earnings Call Presentation are attached hereto as Exhibits 99.1 and 99.2, respectively, and are incorporated herein by reference.

The information in Item 2.02 of this Current Report, including Exhibits 99.1 and 99.2 attached hereto, is furnished pursuant to Item 2.02 of Form 8-K and shall not be deemed to be "filed" for any other purpose, including for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that Section. The information in Item 2.02 of this Current Report, including Exhibits 99.1 and 99.2, shall not be deemed incorporated by reference into any filing of the registrant under the Securities Act of 1933 or the Exchange Act, whether made before or after the date hereof, regardless of any general incorporation language in such filings (unless the registrant specifically states that the information or exhibit in this Item 2.02 is incorporated by reference).

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit No.	Description
99.1	Press Release of Two Harbors Investment Corp., dated May 1, 2023.
99.2	2023 First Quarter Earnings Call Presentation.
104	Cover Page Interactive Data File, formatted in Inline XBRL.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

TWO HARBORS INVESTMENT CORP.

By: /s/ REBECCA B. SANDBERG
Rebecca B. Sandberg
General Counsel and Secretary

Date: May 1, 2023

Two Harbors Investment Corp. Reports First Quarter 2023 Financial Results

Attractive Opportunities Ahead From Wide RMBS Spreads and Slow MSR Prepayment Speeds

NEW YORK, May 1, 2023 - Two Harbors Investment Corp. (NYSE: TWO), an Agency RMBS + MSR real estate investment trust (REIT), today announced its financial results for the quarter ended March 31, 2023.

Quarterly Summary

- Reported book value of $16.48 per common share, and declared a first quarter common stock dividend of $0.60 per share, representing a (3.6)% quarterly economic return on book value.(1)
- Incurred a Comprehensive Loss of $63.2 million, or $(0.69) per weighted average basic common share.
- Reported Earnings Available for Distribution (EAD) of $8.3 million, or $0.09 per weighted average basic common share.(2)
- Generated Income Excluding Market-Driven Value Changes (IXM) of $0.59 per weighted average basic common share.(3)
- Issued 10 million shares of common stock through an underwritten offering for net proceeds of approximately $175.6 million, which were primarily used for the acquisition of MSR.
- Acquired $10.7 billion unpaid principal balance (UPB) of MSR through one bulk purchase and committed to purchase $14.7 billion UPB through three additional bulk purchases, for a total market value of approximately $290 million.

"In the first quarter, our book value declined as interest rate volatility increased hedging costs and spreads widened rapidly," stated Bill Greenberg, Two Harbors' President and Chief Executive Officer. "Importantly, funding for both RMBS and MSR remains stable and well supported, and we have more than ample liquidity. We are committed to and confident in our portfolio construction of Agency RMBS paired with MSR and believe that over time this strategy will deliver attractive long-term, risk-adjusted returns."

"RMBS spreads widened in the first quarter, and we believe they will likely stay wider than historical norms given the challenging supply/demand dynamics resulting from a pickup in organic supply coupled with sales of RMBS directed by the FDIC in an environment when many banks that would customarily be buyers are on the sidelines," stated Nick Letica, Two Harbors' Chief Investment Officer. "Additionally, prepayments on our MSR remain slow and we don't expect delinquencies to materially increase. Taken together, we believe that these dynamics are a benefit to our paired RMBS + MSR strategy."

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(1) Economic 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) Earnings Available for Distribution, or EAD, is a non-GAAP measure. Please see page 11 for a definition of EAD and a reconciliation of GAAP to non-GAAP financial information.
(3) Income Excluding Market-Driven Value Changes, or IXM, is a non-GAAP measure. Please see page 12 for a definition of IXM and a reconciliation of GAAP to non-GAAP financial information.

***Operating Performance*[1]**

The following table summarizes the company's GAAP and non-GAAP earnings measurements and key metrics for the first quarter of 2023 and fourth quarter of 2022:

Two Harbors Investment Corp. Operating Performance (unaudited)

(dollars in thousands, except per common share data)

	Three Months Ended March 31, 2023			Three Months Ended December 31, 2022		
Earnings attributable to common stockholders	**Earnings**	**Per weighted average basic common share**	**Annualized return on average common equity**	**Earnings**	**Per weighted average basic common share**	**Annualized return on average common equity**
Comprehensive (Loss) Income	$ (63,242)	$ (0.69)	(15.5)%	$ 160,233	$ 1.85	42.8 %
GAAP Net Loss	$ (189,173)	$ (2.05)	(46.3)%	$ (262,439)	$ (3.04)	(70.1)%
Earnings Available for Distribution[2]	$ 8,273	$ 0.09	2.0 %	$ 22,209	$ 0.26	5.9 %
Income Excluding Market-Driven Value Changes[3]	$ 54,393	$ 0.59	13.3 %	$ 63,328	$ 0.73	16.9 %
Operating Metrics						
Dividend per common share	$ 0.60			$ 0.60		
Annualized dividend yield[4]	16.3 %			15.2 %		
Book value per common share at period end	$ 16.48			$ 17.72		
Economic return on book value[5]	(3.6)%			11.6 %		
Operating expenses, excluding non-cash LTIP amortization and nonrecurring expenses[6]	$ 13,097			$ 10,462		
Operating expenses, excluding non-cash LTIP amortization and nonrecurring expenses, as a percentage of average equity[6]	2.3 %			1.9 %		

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(1) On November 1, 2022, the company completed a one-for-four reverse stock split of its outstanding shares of common stock. In accordance with generally accepted accounting principles, all common share and per common share amounts presented herein have been adjusted on a retroactive basis to reflect the reverse stock split.

(2) Earnings Available for Distribution, or EAD, is a non-GAAP measure. Please see page 11 for a definition of EAD and a reconciliation of GAAP to non-GAAP financial information.

(3) Income Excluding Market-Driven Value Changes, or IXM, is a non-GAAP measure first introduced in the fourth quarter of 2022. Please see page 12 for a definition of IXM and a reconciliation of GAAP to non-GAAP financial information.

(4) Dividend yield is calculated based on annualizing the dividends declared in the given period, divided by the closing share price as of the end of the period.

(5) Economic return on book value is defined as the (decrease) increase 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.

(6) Excludes non-cash equity compensation expense of $6.1 million for the first quarter of 2023 and $1.7 million for the fourth quarter of 2022 and nonrecurring expenses of $5.4 million for the first quarter of 2023 and $10.8 million for the fourth quarter of 2022.

Portfolio Summary

As of March 31, 2023, the company's portfolio was comprised of $12.1 billion of Agency RMBS, MSR and other investment securities as well as their associated notional debt hedges. Additionally, the company held $3.7 billion bond equivalent value of net long to-be-announced securities (TBAs).

The following tables summarize the company's investment portfolio as of March 31, 2023 and December 31, 2022:

Two Harbors Investment Corp. Portfolio
(dollars in thousands)

Portfolio Composition	As of March 31, 2023		As of December 31, 2022	
	(unaudited)		(unaudited)	
Agency RMBS	8,676,453	72.0 %	7,668,752	71.1 %
Mortgage servicing rights[(1)]	3,072,445	25.5 %	2,984,937	27.7 %
Other	300,126	2.5 %	125,158	1.2 %
Aggregate Portfolio	12,049,024		10,778,847	
Net TBA position[(2)]	3,692,956		3,900,395	
Total Portfolio	$ 15,741,980		$ 14,679,242	

Portfolio Metrics	Three Months Ended March 31, 2023	Three Months Ended December 31, 2022
	(unaudited)	(unaudited)
Average portfolio yield[(3)]	5.09 %	4.92 %
Average cost of financing[(4)]	4.57 %	3.95 %
Net spread	0.52 %	0.97 %

(1) Based on the loans underlying the MSR reported by subservicers on a month lag, adjusted for current month purchases.

(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) Average portfolio yield includes interest income on Agency and non-Agency investment securities, MSR servicing income, net of estimated amortization, and servicing expenses, and the implied asset yield portion of TBA dollar roll income on TBAs. MSR estimated amortization refers to the portion of change in fair value of MSR primarily attributed to the realization of expected cash flows (runoff) of the portfolio, which is deemed a non-GAAP measure due to the company's decision to account for MSR at fair value. TBA dollar roll income is the non-GAAP economic equivalent to holding and financing Agency RMBS using short-term repurchase agreements.

(4) Average cost of financing includes interest expense and amortization of deferred debt issuance costs on borrowings under repurchase agreements (excluding those collateralized by U.S. Treasuries), revolving credit facilities, term notes payable and convertible senior notes, interest spread income/expense and amortization of upfront payments made or received upon entering into interest rate swap agreements, U.S. Treasury futures income, and the implied financing benefit/cost portion of dollar roll income on TBAs. TBA dollar roll income is the non-GAAP economic equivalent to holding and financing Agency RMBS using short-term repurchase agreements. U.S. Treasury futures income is the economic equivalent to holding and financing a relevant cheapest-to-deliver U.S. Treasury note or bond using short-term repurchase agreements.

Portfolio Metrics Specific to Agency RMBS	As of March 31, 2023	As of December 31, 2022
	(unaudited)	(unaudited)
Weighted average cost basis[(1)]	$ 102.05	$ 102.26
Weighted average experienced three-month CPR	5.3 %	5.9 %
Gross weighted average coupon rate	5.7 %	5.3 %
Weighted average loan age (months)	19	21

(1) Weighted average cost basis includes Agency principal and interest RMBS only and utilizes carrying value for weighting purposes.

Portfolio Metrics Specific to MSR[1]	As of March 31, 2023	As of December 31, 2022
(dollars in thousands)	(unaudited)	(unaudited)
Unpaid principal balance	$ 212,444,503	$ 204,876,693
Gross coupon rate	3.4 %	3.3 %
Current loan size	$ 337	$ 334
Original FICO[2]	760	760
Original LTV	72 %	72 %
60+ day delinquencies	0.7 %	0.8 %
Net servicing fee	26.5 basis points	26.5 basis points
	Three Months Ended March 31, 2023	Three Months Ended December 31, 2022
	(unaudited)	(unaudited)
Fair value losses	$ (28,079)	$ (64,085)
Servicing income	$ 153,320	$ 160,926
Servicing expenses	$ 26,772	$ 24,542
Change in servicing reserves	$ 1,564	$ 713

Note: The company does not directly service mortgage loans, but instead contracts with appropriately licensed subservicers to handle substantially all servicing functions in the name of the subservicer for the loans underlying the company's MSR.

(1) Metrics exclude residential mortgage loans in securitization trusts for which the company is the named servicing administrator. Portfolio metrics, other than UPB, represent averages weighted by UPB.

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

Other Investments and Risk Management Metrics	As of March 31, 2023	As of December 31, 2022
(dollars in thousands)	(unaudited)	(unaudited)
Net long TBA notional amount[1]	$ 3,718,000	$ 3,826,000
Futures notional	$ (6,945,550)	$ (18,285,452)
Interest rate swaps notional	$ 8,404,872	$ —
Swaptions net notional	$ (200,000)	$ —

(1) Accounted for as derivative instruments in accordance with GAAP.

Financing Summary

The following tables summarize the company's financing metrics and outstanding repurchase agreements, revolving credit facilities, term notes and convertible senior notes as of March 31, 2023 and December 31, 2022:

March 31, 2023	Balance	Weighted Average Borrowing Rate	Weighted Average Months to Maturity	Number of Distinct Counterparties
(dollars in thousands, unaudited)				
Repurchase agreements collateralized by securities	$ 8,633,946	5.01 %	2.67	19
Repurchase agreements collateralized by MSR	250,000	8.43 %	8.98	1
Repurchase agreements collateralized by U.S. Treasuries[1]	200,766	4.68 %	0.10	2
Total repurchase agreements	9,084,712	5.11 %	2.84	20
Revolving credit facilities collateralized by MSR and related servicing advance obligations	1,292,831	8.09 %	18.35	4
Term notes payable collateralized by MSR	398,326	7.65 %	14.86	n/a
Unsecured convertible senior notes	282,840	6.25 %	33.57	n/a
Total borrowings	$ 11,058,709			

December 31, 2022	Balance	Weighted Average Borrowing Rate	Weighted Average Months to Maturity	Number of Distinct Counterparties
(dollars in thousands, unaudited)				
Repurchase agreements collateralized by securities	$ 7,405,716	3.81 %	1.56	20
Repurchase agreements collateralized by MSR	309,000	7.91 %	11.93	1
Repurchase agreements collateralized by U.S. Treasuries[1]	888,295	4.49 %	1.95	3
Total repurchase agreements	8,603,011	3.95 %	1.93	20
Revolving credit facilities collateralized by MSR and related servicing advance obligations	1,118,831	7.68 %	13.48	4
Term notes payable collateralized by MSR	398,011	7.19 %	17.82	n/a
Unsecured convertible senior notes	282,496	6.25 %	36.53	n/a
Total borrowings	$ 10,402,349			

Borrowings by Collateral Type[2]	As of March 31, 2023	As of December 31, 2022
(dollars in thousands)	(unaudited)	(unaudited)
Agency RMBS	$ 8,394,999	$ 7,334,907
Mortgage servicing rights and related servicing advance obligations	1,941,157	1,825,842
Other - secured	238,947	70,809
Other - unsecured[3]	282,840	282,496
Total	10,857,943	9,514,054
TBA cost basis	3,644,540	3,923,298
Net payable (receivable) for unsettled RMBS	—	342,964
Total, including TBAs and net payable (receivable) for unsettled RMBS	$ 14,502,483	$ 13,780,316
Debt-to-equity ratio at period-end[4]	4.8 :1.0	4.4 :1.0
Economic debt-to-equity ratio at period-end[5]	6.5 :1.0	6.3 :1.0

Cost of Financing by Collateral Type[2]	Three Months Ended March 31, 2023	Three Months Ended December 31, 2022
	(unaudited)	(unaudited)
Agency RMBS	4.49 %	3.56 %
Mortgage servicing rights and related servicing advance obligations[6]	8.28 %	7.71 %
Other - secured	5.02 %	5.40 %
Other - unsecured[3][6]	6.84 %	6.93 %
Annualized cost of financing	5.21 %	4.46 %
Interest rate swaps[7]	(0.13) %	— %
U.S. Treasury futures[8]	(0.01) %	0.25 %
TBAs[9]	3.23 %	2.03 %
Annualized cost of financing, including swaps, U.S. Treasury futures and TBAs	4.57 %	3.95 %

(1) U.S. Treasury securities effectively borrowed under reverse repurchase agreements.
(2) Excludes repurchase agreements collateralized by U.S. Treasuries.
(3) Unsecured convertible senior notes.
(4) Defined as total borrowings to fund Agency and non-Agency investment securities and MSR, divided by total equity.
(5) Defined as total borrowings to fund Agency and non-Agency investment securities and MSR, plus the implied debt on net TBA cost basis and net payable (receivable) for unsettled RMBS, divided by total equity. Effective as of December 31, 2022, net payable (receivable) on unsettled RMBS is now included in the calculation for economic debt-to-equity. Prior period metrics have been updated to conform to the current period methodology.
(6) Includes amortization of debt issuance costs.
(7) The cost of financing on interest rate swaps held to mitigate interest rate risk associated with the company's outstanding borrowings includes interest spread income/expense and amortization of upfront payments made or received upon entering into interest rate swap agreements and is calculated using average borrowings balance as the denominator.
(8) The cost of financing on U.S. Treasury futures held to mitigate interest rate risk associated with the company's outstanding borrowings is calculated using average borrowings balance as the denominator. U.S. Treasury futures income is the economic equivalent to holding and financing a relevant cheapest-to-deliver U.S. Treasury note or bond using short-term repurchase agreements.
(9) The implied financing benefit/cost of dollar roll income on TBAs is calculated using the average cost basis of TBAs as the denominator. TBA dollar roll income is the non-GAAP economic equivalent to holding and financing Agency RMBS using short-term repurchase agreements. TBAs are accounted for as derivative instruments in accordance with GAAP.

Conference Call

Two Harbors Investment Corp. will host a conference call on May 2, 2023 at 9:00 a.m. ET to discuss first quarter 2023 financial results and related information. The conference call will be webcast live and accessible in the Investors section of the company's website at www.twoharborsinvestment.com/investors. To participate in the teleconference, please call toll-free (877) 502-7185, approximately 10 minutes prior to the above start time. For those unable to attend, a telephone playback will be available beginning at 12:00 p.m. ET on May 2, 2023, through 12:00 p.m. ET on May 16, 2023. The playback can be accessed by calling (877) 660-6853, conference code 13737269. The call will also be archived on the company's website in the News & Events section.

Two Harbors Investment Corp.

Two Harbors Investment Corp., a Maryland corporation, is a real estate investment trust that invests in residential mortgage-backed securities, mortgage servicing rights and other financial assets. Two Harbors is headquartered in St. Louis Park, MN.

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, 2022, 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; 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 ability to recognize the benefits of our pending acquisition of RoundPoint Mortgage Servicing Corporation; our decision to terminate our management agreement with PRCM Advisers LLC and the ongoing litigation 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 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.

Non-GAAP Financial Measures

In addition to disclosing financial results calculated in accordance with United States generally accepted accounting principles (GAAP), this press release and the accompanying investor presentation present non-GAAP financial measures, such as income excluding market-driven value changes, earnings available for distribution and related per basic common share measures. The non-GAAP financial measures presented by the company provide supplemental information to assist investors in analyzing the company's results of operations and help facilitate comparisons to industry peers. However, because these measures are not calculated in accordance with GAAP, they should not be considered a substitute for, or superior to, the financial measures calculated in accordance with GAAP. The company's GAAP financial results and the reconciliations from these results should be carefully evaluated. See the GAAP to non-GAAP reconciliation tables on pages 11 and 12 of this release.

Additional Information

Stockholders of Two Harbors and other interested persons may find additional information regarding the company at www.twoharborsinvestment.com, at the Securities and Exchange Commission's Internet site at www.sec.gov or by directing requests to: Two Harbors Investment Corp., Attn: Investor Relations, 1601 Utica Avenue South, Suite 900, St. Louis Park, MN, 55416, telephone (612) 453-4100.

Contact

Margaret Karr, Head of Investor Relations, Two Harbors Investment Corp., (612) 453-4080, Margaret.Karr@twoharborsinvestment.com

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

	March 31, 2023	December 31, 2022
	(unaudited)	
ASSETS		
Available-for-sale securities, at fair value (amortized cost $9,126,349 and $8,114,627, respectively; allowance for credit losses $5,922 and $6,958, respectively)	$ 8,960,820	$ 7,778,734
Mortgage servicing rights, at fair value	3,072,445	2,984,937
Cash and cash equivalents	708,210	683,479
Restricted cash	117,351	443,026
Accrued interest receivable	40,826	36,018
Due from counterparties	317,905	253,374
Derivative assets, at fair value	66,013	26,438
Reverse repurchase agreements	483,916	1,066,935
Other assets	172,805	193,219
Total Assets	$ 13,940,291	$ 13,466,160
LIABILITIES AND STOCKHOLDERS' EQUITY		
Liabilities:		
Repurchase agreements	$ 9,084,712	$ 8,603,011
Revolving credit facilities	1,292,831	1,118,831
Term notes payable	398,326	398,011
Convertible senior notes	282,840	282,496
Derivative liabilities, at fair value	1,693	34,048
Due to counterparties	347,337	541,709
Dividends payable	70,746	64,504
Accrued interest payable	74,916	94,034
Other liabilities	141,207	145,991
Total Liabilities	11,694,608	11,282,635
Stockholders' Equity:		
Preferred stock, par value $0.01 per share; 100,000,000 shares authorized and 26,092,050 and 26,092,050 shares issued and outstanding, respectively ($652,301 and $652,301 liquidation preference, respectively)	630,999	630,999
Common stock, par value $0.01 per share; 175,000,000 shares authorized and 96,664,318 and 86,428,845 shares issued and outstanding, respectively	967	864
Additional paid-in capital	5,829,676	5,645,998
Accumulated other comprehensive loss	(152,780)	(278,711)
Cumulative earnings	1,276,563	1,453,371
Cumulative distributions to stockholders	(5,339,742)	(5,268,996)
Total Stockholders' Equity	2,245,683	2,183,525
Total Liabilities and Stockholders' Equity	$ 13,940,291	$ 13,466,160

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

Certain prior period amounts have been reclassified to conform to the current period presentation

	Three Months Ended March 31, 2023	Three Months Ended March 31, 2022
	(unaudited)	
Interest income:		
Available-for-sale securities	$ 97,038	$ 44,647
Other	19,555	199
Total interest income	116,593	44,846
Interest expense:		
Repurchase agreements	104,355	8,343
Revolving credit facilities	25,656	5,676
Term notes payable	7,643	3,256
Convertible senior notes	4,836	5,042
Total interest expense	142,490	22,317
Net interest (expense) income	(25,897)	22,529
Other (loss) income:		
Gain (loss) on investment securities	10,798	(52,342)
Servicing income	153,320	136,626
(Loss) gain on servicing asset	(28,079)	410,624
Loss on interest rate swap and swaption agreements	(82,154)	(38,041)
Loss on other derivative instruments	(155,771)	(101,762)
Other loss	—	(44)
Total other (loss) income	(101,886)	355,061
Expenses:		
Servicing expenses	28,366	24,704
Compensation and benefits	14,083	12,193
Other operating expenses	10,484	6,625
Total expenses	52,933	43,522
(Loss) income before income taxes	(180,716)	334,068
(Benefit from) provision for income taxes	(3,908)	48,798
Net (loss) income	(176,808)	285,270
Dividends on preferred stock	(12,365)	(13,747)
Net (loss) income attributable to common stockholders	$ (189,173)	$ 271,523
Basic (loss) earnings per weighted average common share	$ (2.05)	$ 3.14
Diluted (loss) earnings per weighted average common share	$ (2.05)	$ 2.86
Dividends declared per common share	$ 0.60	$ 0.68
Weighted average number of shares of common stock:		
Basic	92,575,840	85,999,628
Diluted	92,575,840	96,205,551

TWO HARBORS INVESTMENT CORP.

CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS, CONTINUED

(dollars in thousands)

Certain prior period amounts have been reclassified to conform to the current period presentation

	Three Months Ended March 31,	
	2023	**2022**
	(unaudited)	
Comprehensive loss:		
Net (loss) income	$ (176,808)	$ 285,270
Other comprehensive income (loss):		
Unrealized gain (loss) on available-for-sale securities	125,931	(331,845)
Other comprehensive income (loss)	125,931	(331,845)
Comprehensive loss	(50,877)	(46,575)
Dividends on preferred stock	(12,365)	(13,747)
Comprehensive loss attributable to common stockholders	$ (63,242)	$ (60,322)

TWO HARBORS INVESTMENT CORP.

RECONCILIATION OF GAAP TO NON-GAAP FINANCIAL INFORMATION

(dollars in thousands, except share data)

Certain prior period amounts have been reclassified to conform to the current period presentation

	Three Months Ended	
	March 31, 2023	**December 31, 2022**
	(unaudited)	(unaudited)
Reconciliation of Comprehensive (loss) income to Earnings Available for Distribution:		
Comprehensive (loss) income attributable to common stockholders	$ (63,242)	$ 160,233
Adjustment for other comprehensive income attributable to common stockholders:		
Unrealized gain on available-for-sale securities	(125,931)	(422,672)
Net loss attributable to common stockholders	$ (189,173)	$ (262,439)
Adjustments to exclude reported realized and unrealized (gains) losses:		
Realized loss on securities	31,909	341,316
Unrealized (gain) loss on securities	(42,565)	6,453
Reversal of provision for credit losses	(142)	(318)
Realized and unrealized loss on mortgage servicing rights	28,079	64,084
Realized loss on termination or expiration of interest rate swaps and swaptions	18,580	—
Unrealized loss on interest rate swaps and swaptions	67,184	—
Realized and unrealized loss (gain) on other derivative instruments	155,836	(53,226)
Gain on repurchase and retirement of preferred stock	—	(20,149)
Other realized and unrealized gains	—	(112)
Other adjustments:		
MSR amortization[(1)]	(76,558)	(83,190)
TBA dollar roll income[(2)]	6,341	16,193
U.S. Treasury futures income[(3)]	403	(6,408)
Change in servicing reserves	1,564	713
Non-cash equity compensation expense	6,052	1,653
Other nonrecurring expenses	5,418	10,836
Net (benefit from) provision for income taxes on non-EAD	(4,655)	6,803
Earnings available for distribution to common stockholders[(4)]	$ 8,273	$ 22,209
Weighted average basic common shares	92,575,840	86,391,405
Earnings available for distribution to common stockholders per weighted average basic common share	$ 0.09	$ 0.26

(1) MSR amortization refers to the portion of change in fair value of MSR primarily attributed to the realization of expected cash flows (runoff) of the portfolio, which is deemed a non-GAAP measure due to the company's decision to account for MSR at fair value.

(2) TBA dollar roll income is the economic equivalent to holding and financing Agency RMBS using short-term repurchase agreements.

(3) U.S. Treasury futures income is the economic equivalent to holding and financing a relevant cheapest-to-deliver U.S. Treasury note or bond using short-term repurchase agreements.

(4) EAD is a non-GAAP measure that we define as comprehensive (loss) income attributable to common stockholders, excluding realized and unrealized gains and losses on the aggregate portfolio, gains and losses on repurchases of preferred stock, provision for (reversal of) credit losses, reserve expense for representation and warranty obligations on MSR, non-cash compensation expense related to restricted common stock and other nonrecurring expenses. As defined, EAD includes net interest income, accrual and settlement of interest on derivatives, dollar roll income on TBAs, U.S. Treasury futures income, servicing income, net of estimated amortization on MSR and recurring cash related operating expenses. EAD provides supplemental information to assist investors in analyzing the Company's results of operations and helps facilitate comparisons to industry peers. EAD is one of several measures our board of directors considers to determine the amount of dividends to declare on our common stock and should not be considered an indication of our taxable income or as a proxy for the amount of dividends we may declare.

TWO HARBORS INVESTMENT CORP.

RECONCILIATION OF GAAP TO NON-GAAP FINANCIAL INFORMATION

(dollars in thousands, except share data)

Certain prior period amounts have been reclassified to conform to the current period presentation

	Three Months Ended	
	March 31, 2023	**December 31, 2022**
	(unaudited)	(unaudited)
Reconciliation of Comprehensive (loss) income to Income Excluding Market-Driven Value Changes:		
Comprehensive (loss) income attributable to common stockholders	$ (63,242)	$ 160,233
Adjustments to exclude market-driven value changes and nonrecurring operating expenses:		
RMBS and other Agency securities market-driven value changes(1)	(107,556)	(60,991)
MSR market-driven value changes(2)	(32,904)	3,330
Swap and swaption market-driven value changes(3)	82,174	—
TBA market-driven value changes(4)	33,764	(33,063)
Realized and unrealized losses (gains) on futures	140,087	(5,016)
Change in servicing reserves	1,564	713
Nonrecurring deboarding fees(5)	1,017	2,460
Other nonrecurring expenses	5,418	10,836
Gain on repurchase and retirement of preferred stock	—	(20,149)
Net (benefit from) provision for income taxes associated with market-driven value changes	(5,929)	4,975
Income Excluding Market-Driven Value Changes(6)(7)	$ 54,393	$ 63,328
Weighted average basic common shares	92,575,840	86,391,405
Income Excluding Market-Driven Value Changes per weighted average basic common share	$ 0.59	$ 0.73

(1) RMBS and other Agency securities market-driven value changes refers to the sum of interest income, realized and unrealized gains and losses on RMBS and other Agency securities, less the sum of the realization of RMBS and other Agency securities cash flows which incorporates actual prepayments, changes in RMBS and other Agency securities accrued interest, and modeled price changes. Modeled price changes are measured daily based on a "Realized Forwards" methodology, which includes the assumption that spreads, forward interest rates and volatility factored into the previous day ending fair value are unchanged. RMBS and other Agency securities includes inverse interest-only Agency RMBS which are accounted for as derivative instruments in accordance with GAAP.

(2) MSR market-driven value changes refers to the sum of servicing income, servicing expenses, realized and unrealized gains and losses on MSR, less the sum of the realization of MSR cash flows which incorporates actual prepayments, recurring servicing income and servicing expenses, and modeled price changes. Modeled price changes are measured daily based on a "Realized Forwards" methodology, which includes the assumption that spreads, forward interest rates and volatility factored into the previous day ending fair value are unchanged.

(3) Swap and swaption market-driven value changes refers to the net interest spread and realized and unrealized gains and losses on interest rate swap and swaption agreements, less the swaps daily IXM that is equal to the previous day ending fair value multiplied by the overnight SOFR and swaptions daily IXM that is equal to the previous day ending fair value multiplied by the realized forward rate.

(4) TBA market-driven value changes refers to the total realized and unrealized gains and losses, less the daily zero-volatility OAS less the implied repo spread, multiplied by the previous day ending fair value.

(5) Nonrecurring deboarding fees are associated with one-time transfers of MSR.

(6) Income Excluding Market-Driven Value Changes, or IXM, is a non-GAAP measure defined as total comprehensive income attributable to common stockholders, excluding market-driven value changes on the aggregate portfolio, provision for income taxes associated with market-driven value changes, nonrecurring operating expenses and gain on the repurchase and retirement of preferred stock. As defined, IXM includes the realization of portfolio cash flows which incorporates actual prepayments, changes in portfolio accrued interest, recurring servicing income and servicing expenses, and certain modeled price changes. These modeled price changes are measured daily based on a "Realized Forwards" methodology, which includes the assumption that spreads, forward interest rates and volatility factored into the previous day ending fair value are unchanged. Assumptions for spreads, forward interest rates, volatility and the previous day ending fair value include applicable market data, data from third-party brokers and pricing vendors and management's assessment. This applies to RMBS, MSR and derivatives, as applicable, and is net of all recurring operating expenses and provision for income taxes associated with IXM. IXM provides supplemental information to assist investors in analyzing the company's results of operations and helps facilitate comparisons to industry peers. IXM is one of several measures the company's board of directors considers to determine the amount of dividends to declare on the company's common stock and should not be considered an indication of taxable income or as a proxy for the amount of dividends the company may declare.

(7) The methodology for determining the modeled price changes may be computed based on either of two commonly assumed scenarios: Realized Forwards and an Unchanged Term Structure. The Unchanged Term Structure methodology assumes that the term structure of the yield curve is unchanged day over day. The Realized Forwards methodology assumes that the term structure of the yield curve on a certain day is given by the one-day forward rates determined from the term structure of the yield curve on the previous day. For the fourth quarter of 2022, IXM as originally reported using the Unchanged Term Structure methodology was $0.73 per weighted average basic common share. Starting with the first quarter of 2023, IXM is calculated using the Realized Forwards methodology, and fourth quarter 2022 comparative data presented herein has been updated to reflect this change. IXM as restated under the Realized Forwards methodology for the fourth quarter of 2022 was also $0.73 per weighted average basic common share.


An Agency + MSR Mortgage REIT
First Quarter 2023 Earnings Call
MAY 2, 2023
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, 2022, 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; 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 ability to recognize the benefits of our pending acquisition of RoundPoint Mortgage Servicing Corporation; our ability to recognize the benefits of our pending acquisition of RoundPoint Mortgage Servicing Corporation; our decision to terminate our management agreement with PRCM Advisers LLC and the ongoing litigation 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.

This presentation may include industry and market data obtained through research, surveys, and studies conducted by third parties and industry publications. We have not independently verified any such market and industry data from third-party sources. This presentation is provided for discussion purposes only and may not be relied upon as legal or investment advice, nor is it intended to be inclusive of all the risks and uncertainties that should be considered. This presentation does not constitute an offer to purchase or sell any securities, nor shall it be construed to be indicative of the terms of an offer that the parties or their respective affiliates would accept.

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.

Financials Overview

TWO HARBORS
Investment Corp.

Attractive Opportunities Ahead From Wide RMBS Spreads and Slow MSR Prepayment Speeds

Portfolio[1]
$15.8b

Book Value
$16.48

Common Stock Dividend
$0.60

Economic Return on Book Value[2]
(3.6)%

Quarter-end Economic Debt-to-Equity[3]
6.5x

Comprehensive Income
$(0.69)

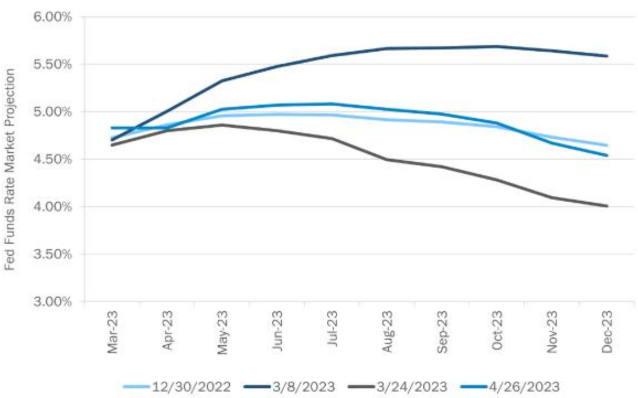
Income Excluding Market-Driven Value Changes (IXM)[4]
$0.59

Earnings Available for Distribution (EAD)[5]
$0.09

Note: Financial data throughout this presentation is as of or for the quarter ended March 31, 2023, unless otherwise noted. Per share metrics utilize basic common shares as the denominator. In accordance with generally accepted accounting principles, all common share and per common share amounts presented herein have been adjusted on a retroactive basis to reflect the one-for-four reverse stock split completed on November 1, 2022.
Note: The End Notes are an integral part of this presentation. See slides 30 through 36 at the back of this presentation for information related to certain financial metrics and defined terms used herein.

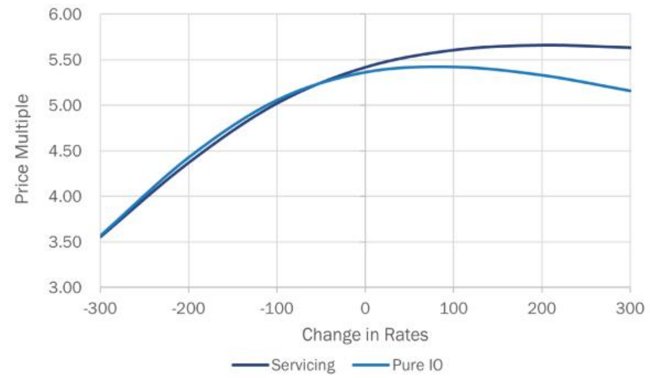
Key Market Highlights

I. FEDERAL RESERVE RATE EXPECTATIONS[1]



- Financial markets were roiled in early March by banking regulators' seizure of two regional banks, Silicon Valley Bank and Signature Bank
- 2-year rates declined by 109 basis points over a 3-day period, culminating in the largest ever 1-day move on March 13
- Market expectations for interest rate hikes spiked in early March, then came back down again sharply after March banking crisis, then leveled out in April to near-January level of terminal Fed Funds rate around 4.5%
- Reminder of why it's important that we keep our interest rate exposures low across the curve

II. IMPACT OF INTEREST RATE CHANGES TO MSR MULTIPLES[2]



- MSR cashflows are more complex than IO securities and consist of costs to service, float income, ancillary income and recapture
- IO securities increase in value as rates rise due to the extension of cashflows, but that effect goes away once cashflows fully extend
- MSR float income is uncapped; the higher interest rates go, the more cashflow is generated
- Float income adds about 80% to the negative duration of out-of-the-money MSR, and is now the primary reason MSR multiples could continue to rise in a further selloff

Book Value Summary

TWO HARBORS Investment Corp.

($ millions, except per share data)	Q1-2023 Book Value	Q1-2023 Book Value per share
Beginning common stockholders' equity	**$ 1,531.2**	**$ 17.72**
Earnings Available for Distribution, net of tax(1)	20.6	
Dividend declaration - preferred	(12.3)	
Earnings Available for Distribution to common stockholders, net of tax(1)	8.3	
Realized and unrealized gains and losses, net of tax	(197.4)	
Other comprehensive income, net of tax	125.9	
Comprehensive loss	(63.2)	
Common stock dividends declared	(58.4)	
Other	6.1	
Issuance of common stock, net of offering costs	177.7	
Ending common stockholders' equity	$ 1,593.4	**$ 16.48**
Total preferred stock liquidation preference	652.3	
Ending total equity	**$ 2,245.7**	

- Book value of $16.48 per common share, resulting in a (3.6)% quarterly economic return on book value(2)
  - Quarterly performance driven primarily by mortgage spread widening and increased hedging costs
- Generated Comprehensive Loss of $63.2 million, or $0.69 per weighted average common share

Results and Return Contributions

($ in thousands)	GAAP Net Income (Loss)	Other Comprehensive Income	Total Comprehensive Income	Market-Driven Value Changes and Nonrecurring Operating Expenses	Income Excluding Market-Driven Value Changes[1]
RMBS and other Agency securities[2]					
RMBS and other Agency securities (loss) income	$ 109,316	$ 125,931	$ 235,247	$ 107,556	$ 127,691
RMBS and other Agency securities funding expense	(98,759)		(98,759)	—	(98,759)
MSR					
MSR income	96,875		96,875	30,323	66,552
MSR funding expense	(38,895)		(38,895)	—	(38,895)
Derivatives and other					
Swaps and swaptions	(82,154)		(82,154)	(82,174)	20
TBAs	(17,164)		(17,164)	(33,764)	16,600
Futures	(140,087)		(140,087)	(140,087)	—
Interest on cash, reverse repurchase agreements and other	19,555		19,555	—	19,555
Expenses					
Convertible debt interest expense	(4,836)		(4,836)	—	(4,836)
Operating expenses	(24,567)		(24,567)	(5,418)	(19,149)
Tax expense	3,908		3,908	5,929	(2,021)
(Losses) earnings attributable to Two Harbors	(176,808)	125,931	(50,877)	(117,635)	66,758
Dividends on preferred stock	(12,365)		(12,365)	—	(12,365)
(Losses) earnings attributable to common stockholders	**$ (189,173)**	**$ 125,931**	**$ (63,242)**	**$ (117,635)**	**$ 54,393**
Annualized return on common equity					**13.3%**
Quarterly return per weighted average basic common share					**$ 0.59**

Comparison of GAAP and non-GAAP Measures

($ in thousands)	Comprehensive Income	Comprehensive Income, Excluding Realized, Unrealized and Nonrecurring Expenses	Earnings Available for Distribution (EAD)[1]	Income Excluding Market-Driven Value Changes (IXM)[2]	
RMBS and other Agency securities[3]					
Coupon income	$ 105,913	$ 105,913	$ 105,913	$ 105,913	
Amortization	(8,810)	(8,810)	(8,810)	21,777	(4)
Realized and unrealized, including reversal of provision for credit losses	138,144	—	—	—	
Funding expense	(98,759)	(98,759)	(98,759)	(98,759)	
MSR					
Servicing fee income	129,237	129,237	129,237	129,237	
Float, ancillary and other income	24,083	24,083	24,083	24,083	
Servicing expenses	(26,802)	(26,802)	(26,802)	(24,220)	(5)
Amortization	(47,661)	(47,661)	(76,558)	(62,547)	(6)
Realized and unrealized, including change in servicing reserves	18,018	—	—	—	
Funding expense	(38,895)	(38,895)	(38,895)	(38,895)	
Derivatives and other					
Swaps net interest spread	3,610	3,610	3,610	3,610	
Swaps and swaptions realized and unrealized	(85,764)	—	—	(3,590)	(7)
TBAs	(17,164)	—	6,341	16,600	(8)
U.S. Treasury futures	(127,215)	—	403	—	
Other futures	(12,872)	—	—	—	
Interest on cash, reverse repurchase agreements and other	19,555	19,555	19,555	19,555	
Expenses					
Convertible debt interest expense	(4,836)	(4,836)	(4,836)	(4,836)	
Operating expenses	(24,567)	(19,149)	(13,097)	(19,149)	(9)
Tax benefit (expense)[10]	3,908	(3,388)	(747)	(2,021)	
(Losses) earnings attributable to Two Harbors	(50,877)	34,098	20,638	66,758	
Dividends on preferred stock	(12,365)	(12,365)	(12,365)	(12,365)	
(Losses) earnings attributable to common stockholders	**$ (63,242)**	**$ 21,733**	**$ 8,273**	**$ 54,393**	
Annualized return on common equity	**(15.5)%**	**5.3%**	**2.0%**	**13.3%**	
Quarterly return per weighted average basic common share	**$ (0.69)**	**$ 0.23**	**$ 0.09**	**$ 0.59**	

Earnings Available for Distribution

($ millions, except per share data)	Q1-2023	Q4-2022	Variance
Interest income	$ 116.6	$ 99.3	$ 17.3
Interest expense	142.5	115.6	(26.9)
Net interest (expense) income	(25.9)	(16.3)	(9.6)
Servicing income	153.3	160.9	(7.6)
MSR amortization[1]	(76.5)	(83.2)	6.7
Interest spread income on interest rate swaps	3.6	—	3.6
TBA dollar roll income[2]	6.3	16.2	(9.9)
U.S. Treasury futures income[3]	0.4	(6.4)	6.8
Other derivatives income	0.1	0.1	—
Total other income	87.2	87.6	(0.4)
Servicing expenses	26.8	24.6	(2.2)
Operating expenses	13.1	10.4	(2.7)
Total expenses	39.9	35.0	(4.9)
Provision for income taxes	0.8	1.7	0.9
Earnings Available for Distribution[4]	**$ 20.6**	**$ 34.6**	**$ (14.0)**
Dividends on preferred stock	(12.3)	(12.4)	(0.1)
Earnings Available for Distribution available to common stockholders	**$ 8.3**	**$ 22.2**	**$ (13.9)**
Earnings Available for Distribution per weighted average basic common share	**$ 0.09**	**$ 0.26**	
Earnings Available for Disribution annualized return on average common equity	**2.0 %**	**5.9 %**	
Operating expenses, excluding non-cash LTIP amortization and nonrecurring expenses, as a percentage of average equity	2.3 %	1.9 %	

- First quarter EAD primarily driven by:
  - Increased interest income due to: (i) higher rates on cash and reverse repurchase agreements, (ii) increase in RMBS portfolio size, (iii) rotation to higher net yielding RMBS and (iv) slower prepayment speeds
  - Increased interest expense on higher financing rates and higher borrowing balances on RMBS, partly offset by lower borrowing balances on MSR financing
- EAD is expected to continue to diverge from ongoing earnings power[5]
  - EAD for assets utilizes concepts of amortized cost and yield-to-maturity at purchase (RMBS) or amortized cost and original pricing yield (MSR), as opposed to market value and expected return
  - EAD may not reflect total return of hedging derivatives, and impacts to EAD differ depending on the instrument utilized

Portfolio Yields and Financing Costs

TWO HARBORS Investment Corp.

- Portfolio yield increased 17 bps to 5.09% primarily due to sales of lower coupon Agency RMBS with high unamortized premium, purchases of higher coupon Agency RMBS with lower unamortized premium, lower experienced CPR on Agency RMBS and a higher proportion of the total portfolio amortized cost invested in higher yielding assets
- Net spread narrowed by 45 bps due to higher rates on financing

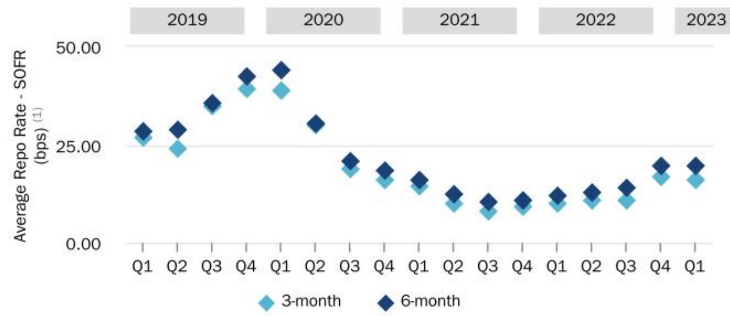
($ thousands)	Q1-2023			Q4-2022		
Portfolio Asset Type	Average Amortized Cost	Income[1]	Average Yield	Average Amortized Cost	Income[1]	Average Yield
Available-for-sale securities	$ 8,649,865	$ 97,038	4.49%	$ 8,118,269	$ 83,712	4.12%
Mortgage servicing rights[2]	1,900,434	50,004	10.52%	1,921,462	53,222	11.08%
Agency derivatives[3]	20,158	65	1.29%	21,463	74	1.38%
TBAs[4]	4,109,533	39,539	3.85%	4,066,675	36,852	3.62%
Total portfolio	$ 14,679,990	$ 186,646	5.09%	$ 14,127,869	$ 173,860	4.92%
Financing Collateral Type	Average Outstanding Balance	Expense[5]	Average Cost	Average Outstanding Balance	Expense[5]	Average Cost
Available-for-sale securities	$ 8,181,110	$ 92,023	4.50%	$ 7,664,204	$ 68,627	3.58%
Mortgage servicing rights and advances	1,878,322	38,895	8.28%	1,917,069	36,938	7.71%
Agency derivatives[3]	12,463	159	5.10%	14,618	155	4.24%
Other - unsecured[6]	282,729	4,836	6.84%	282,363	4,892	6.93%
Interest rate swaps[7]		(3,610)	(0.10)%		—	—%
U.S. Treasury futures[8]		(403)	(0.01)%		6,408	0.18%
TBAs[4]	4,109,533	33,198	3.23%	4,066,675	20,659	2.03%
Total financing	$ 14,464,157	$ 165,098	4.57%	$ 13,944,929	$ 137,679	3.95%
Net Spread			**0.52%**			**0.97%**

Strong Balance Sheet and Liquidity Position

BALANCE SHEET AS OF MARCH 31, 2023

AGENCY RMBS

- $8.6 billion of outstanding repurchase agreements with 19 counterparties
- Weighted average days to maturity of 81 days



MORTGAGE SERVICING RIGHTS

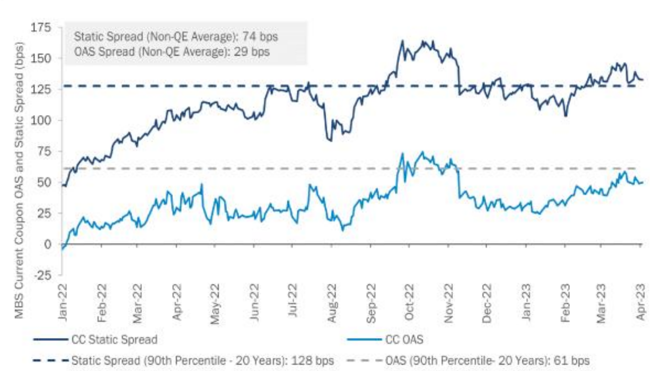
- $1.5 billion of outstanding borrowings under bilateral MSR asset financing facilities
- $400 million of outstanding 5-year MSR term notes[2]
- $606 million of unused MSR asset financing capacity; $165 million committed and $441 million uncommitted
- $49 million outstanding borrowings and $151 million of unused, committed capacity for servicing advance receivables

RMBS Market Conditions

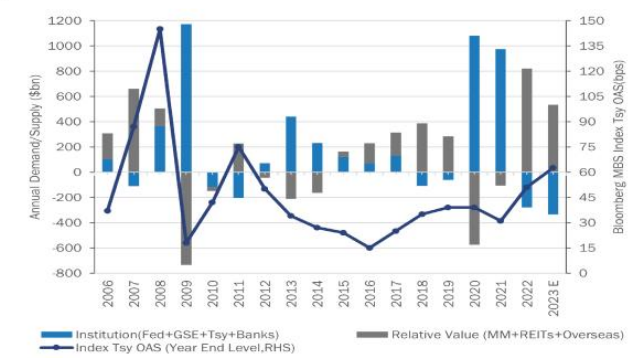
ANTICIPATE THAT SUPPLY AND DEMAND FOR RMBS WILL RESULT IN SPREADS BEING WIDER FOR LONGER

- Mortgage spreads narrowed early in the first quarter on lower volatility and higher demand for RMBS, but rapidly widened in March following the banking crisis, resulting in net underperformance for the quarter
- By quarter-end, both nominal and option-adjusted spreads were at the wide end of long-term history, but not as wide as October 2022 levels
- Including sales from the liquidation of seized bank assets and Fed paydowns, annual RMBS supply is expected to exceed $500 billion, with near-term pressure on deep discount passthroughs and CMOs
- Money managers, REITs and hedge funds are likely to absorb most of the supply, as banks remain sidelined and, historically, when this investor group becomes the marginal buyer, spreads widen; for this reason, we believe that spreads may stay wide to historical averages, and could potentially widen further from quarter-end levels

I. HISTORICAL RMBS SPREADS[1]



II. HISTORICAL SUPPLY AND DEMAND OF RMBS[2]

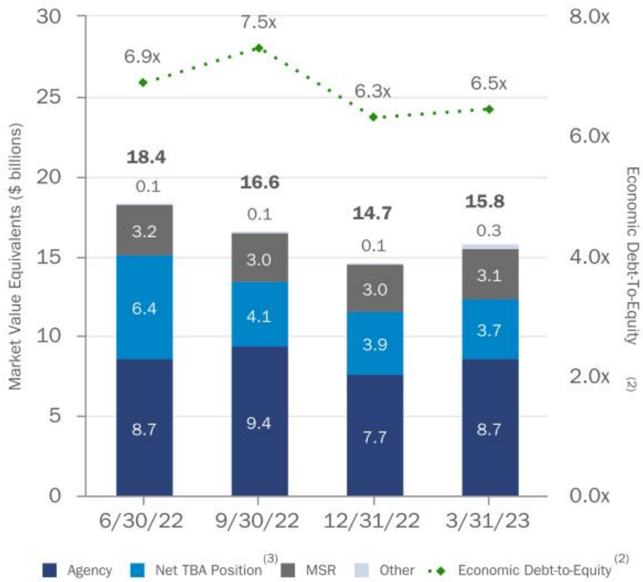


Quarterly Activity and Portfolio Composition

PORTFOLIO COMPOSITION(1)

At March 31, 2023, $15.8 billion portfolio

Includes $12.1 billion settled positions



LEVERAGE AND RISK POSITIONING

- Quarter-end economic debt-to-equity increased slightly to 6.5x from 6.3x(2)
  - Average economic debt-to-equity of 6.3x in the first quarter, compared to 6.5x in the fourth quarter(2)
  - Maintained a neutral leverage position, balancing the wide nominal spreads available in the market versus high degree of macroeconomic uncertainty
- Moved approximately 30% of our hedges from U.S. Treasury futures to swaps to take advantage of deeply negative swap spreads

PORTFOLIO ACTIVITY

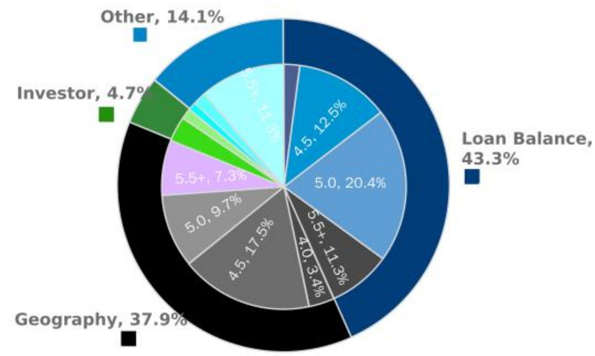
- Issued 10 million shares of common stock through an underwritten offering for net proceeds of $175.6 million
  - Settled $10.7 billion UPB of MSR through a bulk acquisition, paired with an additional $1.1 billion notional current coupon TBA(3)
- Moved $2.3 billion notional of higher coupon TBAs into specified pools with lower loan balances, higher LTVs, certain geographic concentrations and lower FICO scores, to capture relative spread pick-up and mitigate future prepayment risk(3)(4)
- Moved $1.0 billion in 4.0% to 4.5% "fully valued" specified pools to TBA position(3)(4)
- Covered short position in FNMA 2.0% TBAs after sharp underperformance of lower coupons during March banking crisis
- Settled $668.9 million UPB in MSR recapture and flow sale purchases

Specified Pools

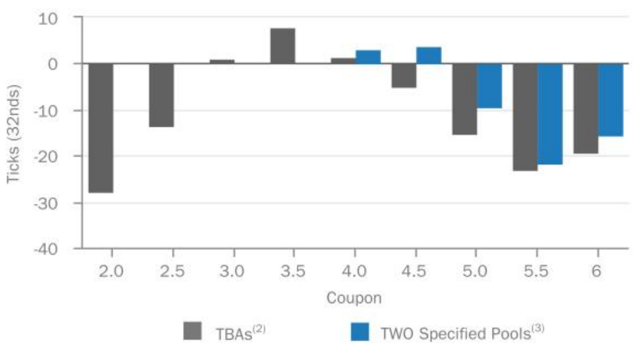
QUARTERLY HIGHLIGHTS

- Mortgage performance was mixed across the coupon stack
  - Low coupon 2.0% and 2.5% RMBS widened by around 5/8 of a point, driven primarily by supply concerns from the sale of assets from seized bank portfolios
  - Current coupon RMBS widened by a similar magnitude from persistent production supply
  - Without the supply pressures, the belly coupons of 3.0% through 4.5% were roughly on spread
- Specified pools modestly outperformed same coupon TBAs
- Weighted average specified pool portfolio speeds declined to 5.3% in the first quarter, from 5.9% in the fourth quarter

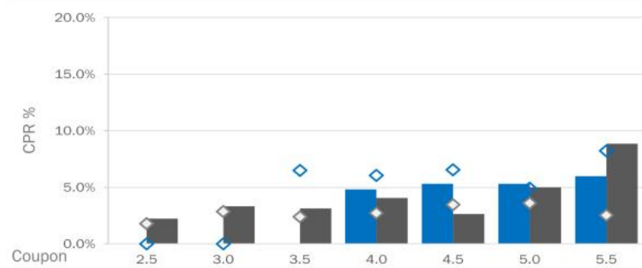
I. SPECIFIED POOL PORTFOLIO[1]



II. RMBS QUARTERLY PERFORMANCE



III. SPECIFIED POOL PREPAYMENT SPEEDS



Coupon	2.5	3.0	3.5	4.0	4.5	5.0	5.5
Market Value[4] ($ billions)	$—	$—	$—	$0.5	$2.9	$2.9	$2.3

TBAs (Q1-2023)[5]
TWO Specified Pools (Q1-2023)
TBAs (Q4-2022)[5]
TWO Specified Pools (Q4-2022)

Mortgage Servicing Rights

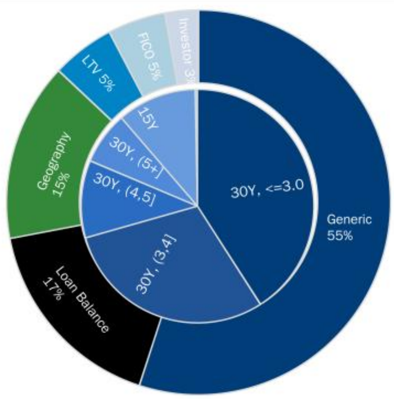
QUARTERLY HIGHLIGHTS

- $224 billion UPB of conventional MSR offered in the first quarter, compared to $166 billion UPB in the fourth quarter 2022
- Settled $10.7 billion UPB of MSR through a bulk purchase; committed to purchase an additional $14.7 billion UPB through three bulk purchases
- Flow channel purchases and recaptured MSR of $668.9 million offset much of the portfolio runoff experienced during the quarter
- MSR price multiple decreased slightly quarter-over-quarter to 5.4x from 5.5x
- MSR speeds declined again to 4.1% in the first quarter, from 4.6% in the fourth quarter

I. MSR PORTFOLIO CHARACTERISTICS[1]

	3/31/2023	12/31/2022
Fair value ($ millions)	$ 3,072	$ 2,985
Price multiple	5.4x	5.5x
UPB ($ millions)	$ 213,905	$ 206,143
Gross coupon rate	3.38%	3.27%
Current loan size ($ thousands)	$ 338	$ 334
Original FICO[2]	760	760
Original Loan-to-Value (LTV)	72%	72%
60+ day delinquencies	0.7%	0.7%
Net servicing fee (bps)	26.5	26.5
Loan age (months)	34	33
3-month CPR	4.1%	4.6%

II. MSR PORTFOLIO[3]



III. 30-YEAR MSR PREPAYMENT SPEEDS

Return Potential and Outlook

HISTORICALLY WIDE MORTGAGE SPREADS OFFER ATTRACTIVE OPPORTUNITIES BUT RISKS REMAIN

PROSPECTIVE MARKET RETURNS As of March 31, 2023	INVESTED CAPITAL ALLOCATED[1]	PORTFOLIO MARKET VALUE ($ millions)	STATIC MARKET RETURN ESTIMATE[2]
RMBS + MSR			
MSR		3,220	
TBA[3]		5,333	
Hedged MSR	**61%**	**8,553**	**14% - 17%**
RMBS + RATES			
Pools		8,655	
TBA[3]		(1,633)	
Other Securities		355	
Hedged Securities	**39%**	**7,377**	**12% - 14%**

PROSPECTIVE TWO HARBORS RETURNS As of March 31, 2023	INVESTED CAPITAL ($ millions)	STATIC TWO HARBORS RETURN ESTIMATE[4]
Total Portfolio Before Expenses		**13.1% - 15.9%**
Operating and Tax Expenses[5]		(2.8)% - (2.8)%
Total Portfolio After Expenses		**10.4% - 13.1%**
INVESTED CAPITAL		
Convertible Notes	288	6.3%
Preferred Equity	652	7.6%
Common Equity	**1,593**	**12.3% - 16.6%**
PROSPECTIVE QUARTERLY STATIC RETURN PER BASIC COMMON SHARE[6]:		**$0.50 - $0.69**

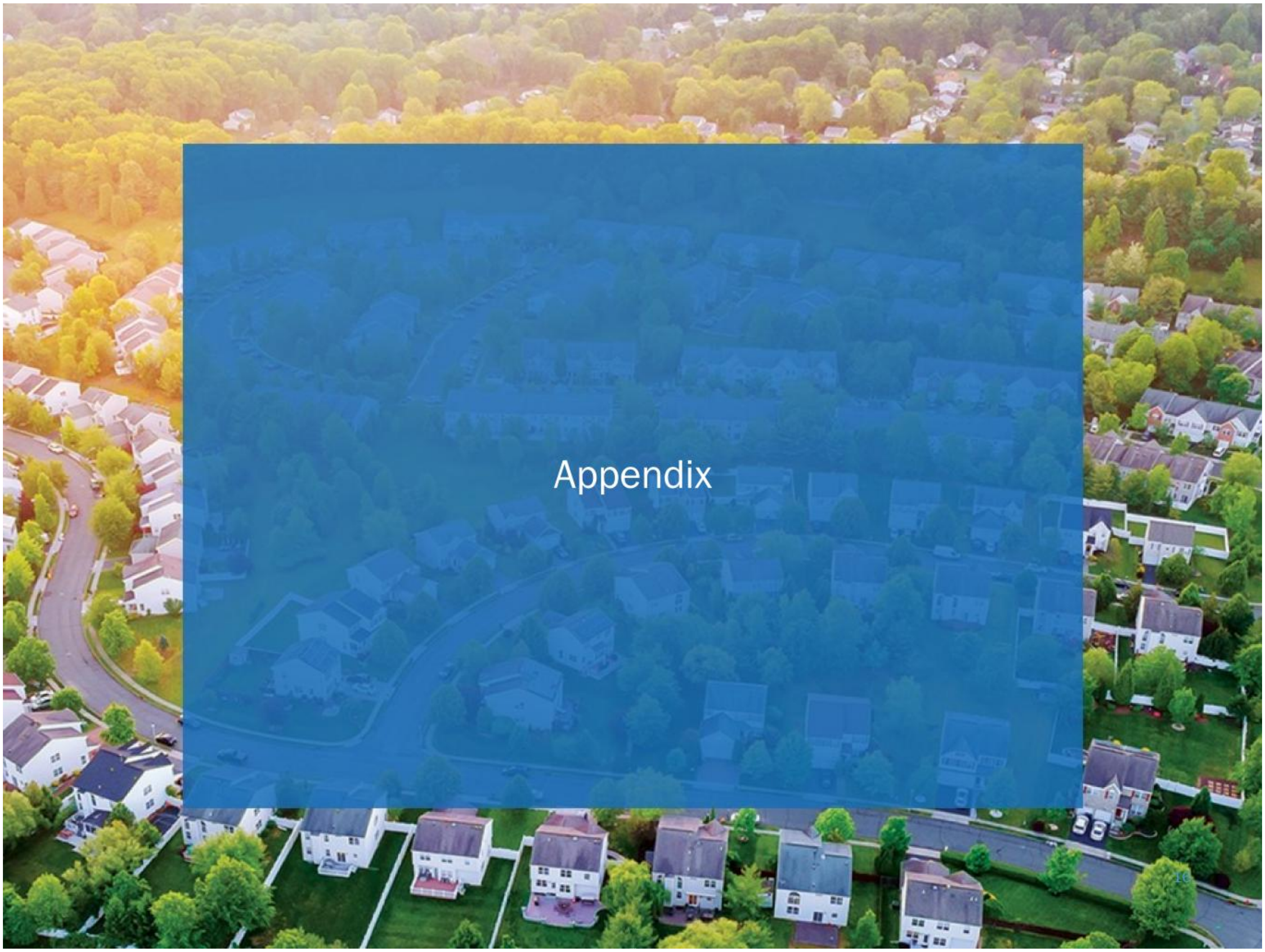
PROSPECTIVE MARKET RETURNS

- Market return estimates reflect static assumptions using quarter-end spreads and market data
- Both hedged MSR and RMBS offer gross return potential in the mid-teens

PROSPECTIVE TWO HARBORS RETURNS

- After including the effects of expenses, convertible notes and preferred equity, our prospective static return estimates are 12.3% to 16.6% on common equity
- Changes in market prices can cause realized returns to differ from these static estimates, sometimes meaningfully

Note: This slide presents estimates for illustrative purposes only, using Two Harbors' base case assumptions (e.g., spreads, prepayment speeds, financing costs and expenses), and does not contemplate market-driven value changes, active portfolio management, nonrecurring expenses or future impacts from the acquisition of RoundPoint Mortgage Servicing Corporation. Actual results may differ materially.



Appendix

Effective Coupon Positioning

Coupon (%)	TBA Market Price[(1)]	TBA Notional ($m)	Specified Pools Par Value ($m)[(2)]	MSR/Agency IO UPB ($m)[(3)]	Combined ($m)
2.0%	$ 82.60	$ —	$ —	$ —	$ —
2.5%	$ 86.18	—	—	—	—
3.0%	$ 89.64	—	—	—	—
3.5%	$ 92.84	—	—	—	—
4.0%	$ 95.58	353	535	—	888
4.5%	$ 97.92	564	2,957	(46)	3,475
5.0%	$ 99.69	2,352	2,846	(5,336)	(138)
5.5%	$ 101.00	99	1,437	—	1,536
6.0%	$ 102.06	350	826	—	1,176
Total		**$ 3,718**	**$ 8,601**	**$ (5,382)**	**$ 6,937**

Risk Positioning

TWO HARBORS
Investment Corp.

BOOK VALUE EXPOSURE TO CHANGES IN RATES

			% Change in Common Book Value			
2-Year Rate (basis points)	10-Year Rate (basis points)		Agency P&I RMBS/TBA	MSR/Agency IO RMBS[1]	Other[2]	Combined
-25	0	Bull Steepener[3]	2.7 %	0.6 %	(2.2)%	1.1 %
0	-25	Bull Flattener[4]	5.0 %	(3.8)%	(2.9)%	(1.7)%
-50	-50	Parallel Shift[5]	14.8 %	(7.1)%	(10.2)%	(2.5)%
-25	-25	Parallel Shift[5]	7.7 %	(3.3)%	(5.0)%	(0.6)%
0	0	Base	— %	— %	— %	— %
+25	+25	Parallel Shift[5]	(8.3)%	3.2 %	5.0 %	(0.1)%
+50	+50	Parallel Shift[5]	(17.3)%	5.6 %	9.9 %	(1.8)%
+25	0	Bear Flattener[3]	(2.6)%	— %	2.4 %	(0.2)%
0	+25	Bear Steepener[4]	(5.8)%	3.2 %	2.6 %	— %

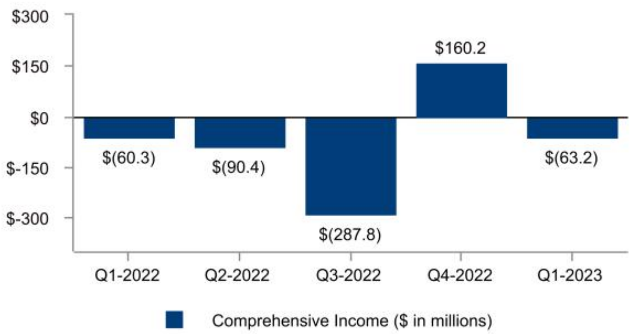
BOOK VALUE EXPOSURE TO CURRENT COUPON SPREAD[6]

	% Change in Common Book Value		
Parallel Shift in Spreads (basis points)	Agency P&I RMBS/TBA	MSR/Agency IO RMBS[1]	Combined
-25	6.7 %	(3.2)%	3.5 %
0	— %	— %	— %
+25	(7.3)%	2.9 %	(4.4)%

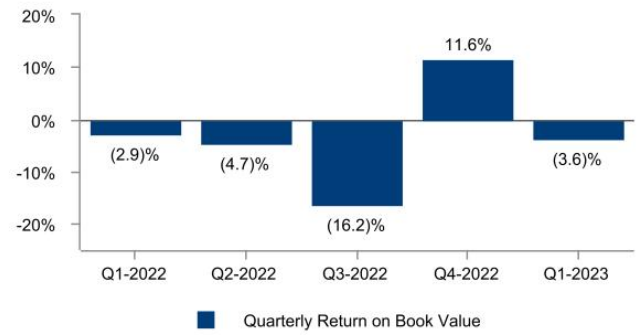
Note: Sensitivity data as of March 31, 2023. The above scenarios are provided for illustration purposes only and is not necessarily indicative of Two Harbors' financial condition and operating results, nor are they necessarily indicative of the financial condition or results of operations that may be expected for any future period or date.

Financial Performance

COMPREHENSIVE (LOSS) INCOME

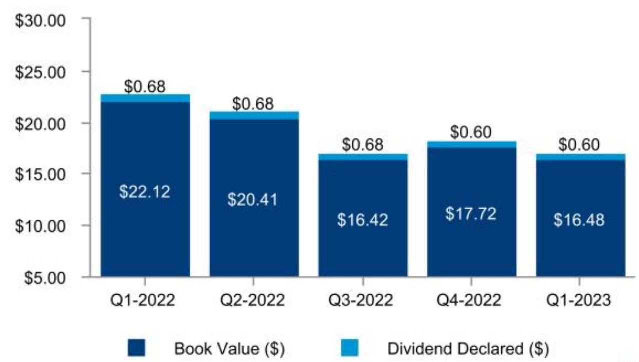


QUARTERLY ECONOMIC RETURN ON BOOK VALUE[1]



DIVIDEND YIELD[2]

BOOK VALUE AND DIVIDEND PER COMMON SHARE[2]



Q1-2023 Operating Performance

($ millions, except for per common share data)	Q1-2023			
	Earnings Available for Distribution[1]	Realized Gains (Losses)	Unrealized MTM	Total
Interest income	$ 116.6	$ —	$ —	$ 116.6
Interest expense	142.5	—	—	142.5
Net interest income	(25.9)	—	—	(25.9)
(Loss) gain on investment securities	—	(31.8)	42.6	10.8
Servicing income	153.3	—	—	153.3
(Loss) gain on servicing asset	(76.5)	0.5	47.9	(28.1)
Gain (loss) on interest rate swap and swaption agreements	3.6	(18.6)	(67.2)	(82.2)
Gain (loss) on other derivative instruments	6.8	(86.1)	(76.5)	(155.8)
Other income	—	—	—	—
Total other income (loss)	87.2	(136.0)	(53.2)	(102.0)
Servicing expenses	26.8	1.5	—	28.3
Operating expenses	13.1	11.5	—	24.6
Total expenses	39.9	13.0	—	52.9
Income (loss) before income taxes	21.4	(149.0)	(53.2)	(180.8)
Provision for (benefit from) income taxes	0.8	(2.2)	(2.5)	(3.9)
Net income (loss)	**20.6**	**(146.8)**	**(50.7)**	**(176.9)**
Dividends on preferred stock	(12.3)	—	—	(12.3)
Gain on repurchase and retirement of preferred stock	—	—	—	—
Net income (loss) attributable to common stockholders	**$ 8.3**	**$ (146.8)**	**$ (50.7)**	**$ (189.2)**
Earnings (loss) per weighted average basic common share	$ 0.09	$ (1.59)	$ (0.55)	$ (2.05)

Q4-2022 Operating Performance

($ millions, except for per common share data)	Q4-2022 Earnings Available for Distribution(1)	Realized Gains (Losses)	Unrealized MTM	Total
Interest income	$ 99.3	$ —	$ —	$ 99.3
Interest expense	115.6	—	—	115.6
Net interest income	(16.3)	—	—	(16.3)
Loss on investment securities	—	(341.0)	(6.4)	(347.4)
Servicing income	160.9	—	—	160.9
(Loss) gain on servicing asset	(83.2)	3.3	15.8	(64.1)
Gain on interest rate swap and swaption agreements	—	—	—	—
Gain (loss) on other derivative instruments	9.9	119.6	(76.2)	53.3
Other income	—	0.1	—	0.1
Total other income (loss)	87.6	(218.0)	(66.8)	(197.2)
Servicing expenses	24.6	0.7	—	25.3
Operating expenses	10.4	12.5	—	22.9
Total expenses	35.0	13.2	—	48.2
Income (loss) before income taxes	36.3	(231.2)	(66.8)	(261.7)
Provision for (benefit from) income taxes	1.7	(2.6)	9.4	8.5
Net income (loss)	**34.6**	**(228.6)**	**(76.2)**	**(270.2)**
Dividends on preferred stock	(12.4)	—	—	(12.4)
Gain on repurchase and retirement of preferred stock	—	20.1	—	20.1
Net income (loss) attributable to common stockholders	**$ 22.2**	**$ (208.5)**	**$ (76.2)**	**$ (262.5)**
Earnings (loss) per weighted average basic common share	$ 0.26	$ (2.42)	$ (0.88)	$ (3.04)

GAAP to EAD Reconciliation

Reconciliation of GAAP to non-GAAP Information ($ thousands, except for per common share data)	Three Months Ended March 31, 2023	Three Months Ended December 31, 2022
Comprehensive (loss) income attributable to common stockholders	**$ (63,242)**	**$ 160,233**
Adjustment for other comprehensive income attributable to common stockholders:		
Unrealized gain on available-for-sale securities	(125,931)	(422,672)
Net loss attributable to common stockholders	**$ (189,173)**	**$ (262,439)**
Adjustments to exclude reported realized and unrealized (gains) losses:		
Realized loss on securities	31,909	341,316
Unrealized (gain) loss on securities	(42,565)	6,453
Reversal of provision for credit losses	(142)	(318)
Realized and unrealized loss on mortgage servicing rights	28,079	64,084
Realized loss on termination or expiration of interest rate swaps and swaptions	18,580	—
Unrealized loss on interest rate swaps and swaptions	67,184	—
Realized and unrealized loss (gain) on other derivative instruments	155,836	(53,226)
Gain on repurchase and retirement of preferred stock	—	(20,149)
Other realized and unrealized gains	—	(112)
Other adjustments:		
MSR amortization[1]	(76,558)	(83,190)
TBA dollar roll income[2]	6,341	16,193
U.S. Treasury futures income[3]	403	(6,408)
Change in servicing reserves	1,564	713
Non-cash equity compensation expense	6,052	1,653
Other nonrecurring expenses	5,418	10,836
Net (benefit from) provision for income taxes on non-EAD	(4,655)	6,803
Earnings available for distribution to common stockholders	$ 8,273	$ 22,209
Weighted average basic common shares	92,575,840	86,391,405
Earnings available for distribution to common stockholders per weighted average basic common share	$ 0.09	$ 0.26

Note: Earnings Available for Distribution, or EAD, is a non-GAAP measure that we define as comprehensive (loss) income attributable to common stockholders, excluding realized and unrealized gains and losses on the aggregate portfolio, gains and losses on repurchases of preferred stock, provision for (reversal of) credit losses, reserve expense for representation and warranty obligations on MSR, non-cash compensation expense related to restricted common stock, and other nonrecurring expenses. As defined, EAD includes net interest income, accrual and settlement of interest on derivatives, dollar roll income on TBAs, U.S. Treasury futures income, servicing income, net of estimated amortization on MSR and recurring cash related operating expenses. EAD provides supplemental information to assist investors in analyzing the Company's results of operations and helps facilitate comparisons to industry peers. EAD is one of several measures our board of directors considers to determine the amount of dividends to declare on our common stock and should not be considered an indication of our taxable income or as a proxy for the amount of dividends we may declare.

GAAP to IXM Reconciliation

Reconciliation of GAAP to non-GAAP Information ($ thousands, except for per common share data)	Three Months Ended March 31, 2023	Three Months Ended December 31, 2022
Comprehensive (loss) income attributable to common stockholders	**$ (63,242)**	**$ 160,233**
Adjustments to exclude market-driven value changes and nonrecurring operating expenses:		
RMBS and other Agency securities market-driven value changes[(1)]	(107,556)	(60,991)
MSR market-driven value changes[(2)]	(32,904)	3,330
Swap and swaption market-driven value changes[(3)]	82,174	—
TBA market-driven value changes[(4)]	33,764	(33,063)
Realized and unrealized losses (gains) on futures	140,087	(5,016)
Change in servicing reserves	1,564	713
Nonrecurring deboarding fees[(5)]	1,017	2,460
Other nonrecurring expenses	5,418	10,836
Gain on repurchase and retirement of preferred stock	—	(20,149)
Net benefit from income taxes associated with market-driven value changes	(5,929)	4,975
Income Excluding Market-Driven Value Changes to common stockholders	$ 54,393	$ 63,328
Weighted average basic common shares	92,575,840	86,391,405
Income Excluding Market-Driven Value Changes per weighted average basic common share	$ 0.59	$ 0.73

Note: Income Excluding Market-Driven Value Changes, or IXM, is a non-GAAP measure defined as total comprehensive income attributable to common stockholders, excluding market-driven value changes on the aggregate portfolio, provision for income taxes associated with market-driven value changes, nonrecurring operating expenses and gain on the repurchase and retirement of preferred stock. As defined, IXM includes the realization of portfolio cash flows which incorporates actual prepayments, changes in portfolio accrued interest, recurring servicing income and servicing expenses, and certain modeled price changes. These modeled price changes are measured daily based on a "Realized Forwards" methodology, which includes the assumption that spreads, forward interest rates and volatility factored into the previous day ending fair value are unchanged. Assumptions for spreads, forward interest rates, volatility and the previous day ending fair value include applicable market data, data from third-party brokers and pricing vendors and management's assessment. This applies to RMBS, MSR and derivatives, as applicable, and is net of all recurring operating expenses and provision for income taxes associated with IXM. IXM provides supplemental information to assist investors in analyzing the company's results of operations and helps facilitate comparisons to industry peers. IXM is one of several measures the company's board of directors considers to determine the amount of dividends to declare on the company's common stock and should not be considered an indication of taxable income or as a proxy for the amount of dividends the company may declare.

The methodology for determining the modeled price changes may be computed based on either of two commonly assumed scenarios: Realized Forwards and an Unchanged Term Structure. The Unchanged Term Structure methodology assumes that the term structure of the yield curve is unchanged day over day. The Realized Forwards methodology assumes that the term structure of the yield curve on a certain day is given by the one-day forward rates determined from the term structure of the yield curve on the previous day. For the fourth quarter of 2022, IXM as originally reported using the Unchanged Term Structure methodology was $0.73 per weighted average basic common share. Starting with the first quarter of 2023, IXM is calculated using the Realized Forwards methodology, and fourth quarter 2022 comparative data presented herein has been updated to reflect this change. IXM as restated under the Realized Forwards methodology for the fourth quarter of 2022 was also $0.73 per weighted average basic common share.

Agency RMBS Portfolio

	Par Value ($ millions)	Market Value ($ millions)	Weighted Average CPR[(1)]	% Prepay Protected[(2)]	Amortized Cost Basis ($ millions)	Gross Weighted Average Coupon	Weighted Average Age (Months)
30-Year Fixed							
4.0%	$ 535	$ 516	4.1 %	100.0 %	$ 541	4.6 %	40
4.5%	2,957	2,921	6.7 %	100.0 %	3,019	5.2 %	28
5.0%	2,846	2,862	5.1 %	100.0 %	2,901	5.8 %	11
≥ 5.5%	2,273	2,320	7.2 %	99.8 %	2,310	6.6 %	10
	8,611	8,619	6.2 %	99.9 %	8,771	5.7 %	18
Other P&I[(3)]	7	7	3.4 %	— %	7	5.5 %	215
IOs and IIOs[(4)]	1,064	50	9.4 %	— %	62	4.7 %	142
Total Agency RMBS	$ 9,682	$ 8,676		99.3 %	$ 8,840		

	Notional Amount ($ millions)	Bond Equivalent Value ($ millions)[(5)]	Through-the-Box Speeds[(6)]
TBA Positions			
4.0%	$ 353	$ 337	1.9 %
4.5%	564	555	3.2 %
5.0%	2,352	2,345	3.8 %
≥ 5.5%	449	456	9.0 %
Net TBA Position	$ 3,718	$ 3,693	

Mortgage Servicing Rights Portfolio[1]

	Number of Loans	Unpaid Principal Balance ($ millions)	Gross Coupon Rate	Current Loan Size ($ thousands)	Loan Age (months)	Original FICO[2]	Original LTV	60+ Day Delinquencies	3-Month CPR	Net Servicing Fee (bps)
30-Year Fixed										
≤ 3.25%	296,930	$ 95,564	2.8%	$ 379	26	768	71%	0.4%	3.0%	25.8
3.25% - 3.75%	138,942	35,923	3.4%	325	41	754	74%	0.8%	4.1%	26.3
3.75% - 4.25%	106,613	22,128	3.9%	271	64	751	76%	1.1%	5.4%	27.3
4.25% - 4.75%	59,241	10,495	4.4%	248	66	736	77%	2.1%	6.4%	26.4
4.75% - 5.25%	42,431	9,945	4.9%	356	30	745	79%	1.4%	6.3%	26.8
> 5.25%	49,988	13,881	5.8%	383	12	745	81%	0.8%	5.6%	30.1
	694,145	187,936	3.5%	348	35	759	74%	0.7%	4.0%	26.5
15-Year Fixed										
≤ 2.25%	23,041	6,372	2.0%	325	23	777	59%	0.1%	2.7%	25.2
2.25% - 2.75%	38,540	8,550	2.4%	272	27	772	59%	0.2%	3.9%	25.9
2.75% - 3.25%	35,572	5,080	2.9%	198	55	766	61%	0.2%	6.2%	26.2
3.25% - 3.75%	20,845	2,193	3.4%	156	68	757	64%	0.6%	8.2%	26.9
3.75% - 4.25%	9,766	866	3.9%	144	64	742	65%	0.8%	8.4%	28.6
> 4.25%	6,521	785	4.8%	225	28	741	66%	0.9%	11.1%	32.0
	134,285	23,846	2.6%	254	37	769	60%	0.2%	4.8%	26.2
Total ARMs	2,598	663	3.7%	337	57	761	69%	1.1%	12.4%	25.5
Total Portfolio	831,028	$ 212,445	3.4%	$ 337	35	760	72%	0.7%	4.1%	26.5

Mortgage Servicing Rights UPB Roll-Forward

$ millions	Q1-2023	Q4-2022	Q3-2022	Q2-2022	Q1-2022
UPB at beginning of period	$ 204,877	$ 206,614	$ 227,074	$ 229,416	$ 193,771
Bulk purchases of mortgage servicing rights	10,713	—	—	—	37,197
Flow purchases of mortgage servicing rights	669	2,678	4,449	5,720	7,940
Sales of mortgage servicing rights	(143)	—	(19,807)	—	—
Scheduled payments	(1,527)	(1,538)	(1,565)	(1,697)	(1,573)
Prepaid	(2,120)	(2,440)	(3,709)	(6,027)	(8,250)
Other changes	(24)	(437)	172	(338)	331
UPB at end of period	$ 212,445	$ 204,877	$ 206,614	$ 227,074	$ 229,416

Financing

TWO HARBORS Investment Corp.

$ millions

Outstanding Borrowings and Maturities[1]	Repurchase Agreements	Revolving Credit Facilities	Term Notes Payable	Convertible Notes	Total Outstanding Borrowings	Percent (%)
Within 30 days	$ 1,713.3	$ —	$ —	$ —	$ 1,713.3	15.5 %
30 to 59 days	1,558.5	—	—	—	1,558.5	14.1 %
60 to 89 days	1,303.6	—	—	—	1,303.6	11.8 %
90 to 119 days	2,401.4	329.0	—	—	2,730.4	24.7 %
120 to 364 days	2,107.9	—	—	—	2,107.9	19.0 %
One to three years	—	963.8	398.3	—	1,362.1	12.3 %
Three to five years	—	—	—	282.9	282.9	2.6 %
	$ 9,084.7	$ 1,292.8	$ 398.3	$ 282.9	$ 11,058.7	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	$ 8,952.6	$ —	$ —	n/a	$ 8,952.6	73.0 %
Mortgage servicing rights, at fair value	430.8	2,009.9	500.0	n/a	2,940.7	24.0 %
Restricted cash	77.4	—	1.4	n/a	78.8	0.6 %
Due from counterparties	29.5	—	—	n/a	29.5	0.2 %
Derivative assets, at fair value	15.3	—	—	n/a	15.3	0.1 %
Other assets (includes servicing advances)	—	58.0	—	n/a	58.0	0.5 %
U.S. Treasuries[3]	195.3	—	—	n/a	195.3	1.6 %
	$ 9,700.9	$ 2,067.9	$ 501.4	n/a	$ 12,270.2	100.0 %

Futures

Type & Maturity	Notional Amount ($M)	Carrying Value ($M)[(1)]	Weighted Average Days to Expiration
U.S. Treasury futures - 2 year	$ (1,530)	$ —	97
U.S. Treasury futures - 5 year	(2,021)	—	97
U.S. Treasury futures - 10 year	(1,005)	—	91
U.S. Treasury futures - 20 year	183	—	91
Eurodollar futures - 3 month			
< 1 year	(2,238)	—	185
> 1 and < 2 years	(333)	—	444
Total futures	$ (6,944)	$ —	139

Interest Rate Swaps and Swaptions

TWO HARBORS Investment Corp.

INTEREST RATE SWAPS

Maturities	Notional Amounts ($B)	Average Fixed Pay Rate	Average Receive Rate	Average Maturity (Years)
Payers				
2024	$ —	— %	— %	—
2025	—	— %	— %	—
2026	2.6	4.730 %	4.870 %	2.0
2027	—	— %	— %	—
2028 and Thereafter	2.7	3.510 %	4.870 %	6.5
	$ 5.3	4.118 %	4.870 %	4.2

Maturities	Notional Amounts ($B)	Average Pay Rate	Average Fixed Receive Rate	Average Maturity (Years)
Receivers				
2024	$ —	— %	— %	—
2025	—	— %	— %	—
2026	1.8	4.870 %	3.805 %	2.0
2027	—	— %	— %	—
2028 and Thereafter	1.3	4.870 %	3.313 %	6.1
	$ 3.1	4.870 %	3.692 %	8.1

INTEREST RATE SWAPTIONS

Option					Underlying Swap		
Swaption	**Expiration**	**Cost ($M)**	**Fair Value ($M)**	**Average Months to Expiration**	**Notional Amount ($M)**	**Average Fixed Rate(1)**	**Average Term (Years)**
Purchase Contracts:							
Payer	<6 Months	$ 0.7	$ 0.1	5.2	$ 200.0	5.19 %	1.0
Sale Contracts:							
Payer	<6 Months	$ (0.6)	$ (0.1)	5.2	$ (400.0)	5.72 %	1.0

End Notes

PAGE 3 - Financials Overview

1. Includes $12.1 billion in settled positions and $3.7 billion net TBA position, which represents the bond equivalent value of the company's TBA position. Bond equivalent value is defined as notional amount multiplied by market price. Accounted for as derivative instruments in accordance with GAAP. For additional detail on the portfolio, see slide 12 and Appendix slides 24 and 25.
2. Economic 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.
3. Economic debt-to-equity is defined as total borrowings to fund Agency and non-Agency investment securities and MSR, plus the implied debt on net TBA cost basis and net payable (receivable) for unsettled RMBS, divided by total equity.
4. Income Excluding Market-Driven Value Changes, or IXM, is a non-GAAP measure. Please Appendix slide 23 for a definition of IXM and a reconciliation of GAAP to non-GAAP financial information.
5. Earnings Available for Distribution, or EAD, is a non-GAAP measure. Please see Appendix slide 22 for a definition of EAD and a reconciliation of GAAP to non-GAAP financial information.

PAGE 4 - Key Market Highlights

1. Bloomberg data as of the dates noted.
2. Price multiples in the scenarios in this chart are hypothetical projections based on internal models and are not based on our financial results, nor are they projections of our results. The scenarios are provided for illustration purposes only and may not represent all assumptions used. Actual results of a portfolio may differ.

PAGE 5 - Book Value Summary

1. Earnings Available for Distribution, or EAD, is a non-GAAP measure. Please see Appendix slide 22 for a definition of EAD and a reconciliation of GAAP to non-GAAP financial information.
2. Economic 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.

PAGE 6 - Results and Return Contributions

1. Income Excluding Market-Driven Value Changes, or IXM, is a non-GAAP measure. Please Appendix slide 23 for a definition of IXM and a reconciliation of GAAP to non-GAAP financial information.
2. RMBS and other Agency securities includes inverse interest-only Agency RMBS which are accounted for as derivative instruments in accordance with GAAP.

End Notes (continued)

PAGE 7 - Comparison of GAAP and non-GAAP Measures

1. Earnings Available for Distribution, or EAD, is a non-GAAP measure. Please see Appendix slide 22 for a definition of EAD and a reconciliation of GAAP to non-GAAP financial information.
2. Income Excluding Market-Driven Value Changes, or IXM, is a non-GAAP measure. Please Appendix slide 23 for a definition of IXM and a reconciliation of GAAP to non-GAAP financial information.
3. RMBS and other Agency securities includes inverse interest-only Agency RMBS which are accounted for as derivative instruments in accordance with GAAP.
4. RMBS and other Agency securities daily amortization for IXM is equal to the previous day ending fair value multiplied by the sum of the risk-free rate and zero-volatility OAS, less coupon income.
5. Servicing expenses for IXM excludes deboarding fees associated with one-time transfers of MSR.
6. MSR daily amortization for IXM is equal to the previous day ending fair value multiplied by the the sum of the risk-free rate and zero-volatility OAS, less service fee income and recurring servicing expenses.
7. Swaps daily IXM is equal to the previous day ending fair value multiplied by the overnight SOFR, which is reflected as the sum of swap net interest spread and swap realized and unrealized. Swaptions daily IXM is equal to the previous day ending fair value multiplied by the realized forward rate.
8. TBAs daily income for IXM is equal to the zero-volatility OAS less the implied repo spread, multiplied by the previous day ending fair value.
9. Operating expenses for IXM excludes other nonrecurring expenses.
10. Tax benefit (expense) for each GAAP and non-GAAP metric includes the estimated tax expense associated with each pre-tax GAAP and non-GAAP metric earned or incurred in the company's taxable REIT subsidiaries, or TRSs.

PAGE 8 - Earnings Available for Distribution

1. MSR amortization refers to the portion of change in fair value of MSR primarily attributed to the realization of expected cash flows (runoff) of the portfolio, which is deemed a non-GAAP measure due to the company's decision to account for MSR at fair value.
2. TBA dollar roll income is the economic equivalent to holding and financing Agency RMBS using short-term repurchase agreements.
3. U.S. Treasury futures income is the economic equivalent to holding and financing a relevant cheapest-to-deliver U.S. Treasury note or bond using short-term repurchase agreements.
4. Earnings Available for Distribution, or EAD, is a non-GAAP measure. Please see Appendix slide 22 for a definition of EAD and a reconciliation of GAAP to non-GAAP financial information.
5. Agency fixed-rate RMBS use the GAAP concept of amortized cost and yield-to-maturity determined at time of purchase. Net servicing income and MSR amortization is based on original pricing yield and does not include the benefit of increased float income and lower compensating interest. Financing costs are largely variable and short-term, responding more quickly to rising rates than our longer term assets. U.S. Treasury futures income represents the sum of the implied net cash and expected change in price of a financed U.S. Treasury security, but excludes unexpected price change.

End Notes (continued)

PAGE 9 - Portfolio Yields and Financing Costs

1. Includes interest income, net of premium amortization/discount accretion, on Agency and non-Agency investment securities, servicing income, net of estimated amortization and servicing expenses, on MSR, and the implied asset yield portion of dollar roll income on TBAs. Amortization on MSR refers to the portion of change in fair value of MSR primarily attributed to the realization of expected cash flows (runoff) of the portfolio, which is deemed a non-GAAP measure due to the company's decision to account for MSR at fair value. TBA dollar roll income is the non-GAAP economic equivalent to holding and financing Agency RMBS using short-term repurchase agreements.
2. Amortized cost on MSR for a given period equals the net present value of the remaining future cash flows (obtained by applying original prepayment assumptions to the actual unpaid principal balance at the start of the period) using a discount rate equal to the original pricing yield. Original pricing yield is the discount rate which makes the net present value of the cash flows projected at purchase equal to the purchase price. MSR amortized cost is deemed a non-GAAP measure due to the company's decision to account for MSR at fair value.
3. Represents inverse interest-only Agency RMBS which are accounted for as derivative instruments in accordance with GAAP.
4. Both the implied asset yield and implied financing benefit/cost of dollar roll income on TBAs are calculated using the average cost basis of TBAs as the denominator. TBA dollar roll income is the non-GAAP economic equivalent to holding and financing Agency RMBS using short-term repurchase agreements. TBAs are accounted for as derivative instruments in accordance with GAAP.
5. Includes interest expense and amortization of deferred debt issuance costs on borrowings under repurchase agreements (excluding those collateralized by U.S. Treasuries), revolving credit facilities, term notes payable and convertible senior notes, interest spread income/expense and amortization of upfront payments made or received upon entering into interest rate swap agreements, and the implied financing benefit/cost portion of dollar roll income on TBAs. TBA dollar roll income is the non-GAAP economic equivalent to holding and financing Agency RMBS using short-term repurchase agreements.
6. Unsecured convertible senior notes.
7. The cost of financing on interest rate swaps held to mitigate interest rate risk associated with the company's outstanding borrowings is calculated using average borrowings balance as the denominator.
8. The cost of financing on U.S. Treasury futures held to mitigate interest rate risk associated with the company's outstanding borrowings is calculated using average borrowings balance as the denominator. U.S. Treasury futures income is the economic equivalent to holding and financing a relevant cheapest-to-deliver U.S. Treasury note or bond using short-term repurchase agreements.

PAGE 10 - Strong Balance Sheet and Liquidity Position

1. Source: Bloomberg. Represents the average spread between repurchase rates and the Secured Overnight Financing Rate (SOFR) over trailing 3-month and 6-month periods between Q1 2019 and Q1 2023 (as of March 31, 2023).
2. Balance of 5-year MSR term notes excludes deferred debt issuance costs.

End Notes (continued)

PAGE 11 - RMBS Market Conditions

1. Represents universal mortgage-backed securities (UMBS) TBA spreads as of the dates noted.
2. Source: Mizuho projections. OAS numbers from Bloomberg Agency MBS Index Prepayment Model (BAM).

PAGE 12 - Quarterly Activity and Portfolio Composition

1. For additional detail on the portfolio, see Appendix slides 24 and 25.
2. Economic debt-to-equity is defined as total borrowings to fund Agency and non-Agency investment securities and MSR, plus the implied debt on net TBA cost basis and net payable (receivable) for unsettled RMBS, divided by total equity.
3. Net TBA position represents the bond equivalent value of the company's TBA position. Bond equivalent value is defined as notional amount multiplied by market price. Accounted for as derivative instruments in accordance with GAAP.
4. Specified pools include securities with implicit or explicit prepayment protection including lower loan balances (securities collateralized by loans less than or equal to $300K of initial principal balance), higher LTVs (securities collateralized by loans with greater than or equal to 80% LTV), certain geographic concentrations, loans secured by investor-owned properties, and lower FICO scores, as well as securities without such protection, including large bank-serviced and others.

PAGE 13 - Specified Pools

1. Specified pools include securities with implicit or explicit prepayment protection including lower loan balances (securities collateralized by loans less than or equal to $300K of initial principal balance), higher LTVs (securities collateralized by loans with greater than or equal to 80% LTV), certain geographic concentrations, loans secured by investor-owned properties, and lower FICO scores, as well as securities without such protection, including large bank-serviced and others.
2. Represents UMBS generic TBA performance during the quarter.
3. Specified pool performance excludes certain coupons in which we were not invested for the full duration of the quarter.
4. Specified pool market value by coupon as of March 31, 2023.
5. Three month prepayment speeds of delivered TBA contracts; average of J.P. Morgan, Credit Suisse, and Citi data.

PAGE 14 - Mortgage Servicing Rights

1. MSR portfolio based on the loans underlying the MSR reported by subservicers on a month lag, adjusted for current month purchases. Portfolio metrics, other than fair value and UPB, represent averages weighted by UPB.
2. FICO represents a mortgage industry accepted credit score of a borrower.
3. MSR portfolio based on the loans underlying the MSR reported by subservicers on a month lag, adjusted for current month purchases and excluding unsettled MSR on loans for which the company is the named servicer.
4. Three month prepayment speeds of delivered TBA contracts; average of J.P. Morgan, Credit Suisse, and Citi data.

End Notes (continued)

PAGE 15 - Return Potential and Outlook

1. Capital allocated represents management's internal allocation. Certain financing balances and associated interest expenses are allocated between investments based on management's assessment of leverage ratios and required capital or liquidity to support the investment.
2. Market return estimates reflect static assumptions using quarter-end spreads and market data.
3. Net TBA position represents the bond equivalent value of the company's TBA position. Bond equivalent value is defined as notional amount multiplied by market price. Accounted for as derivative instruments in accordance with GAAP.
4. Estimated return on invested capital reflects static return assumptions using quarter end portfolio valuations.
5. Total expenses includes operating expenses and tax expense within the company's taxable REIT subsidiaries.
6. Prospective quarterly static return estimate per basic common share reflects portfolio performance expectations given current market conditions and represents the comprehensive income attributable to common stockholders (net of dividends on preferred stock).

PAGE 17 - Effective Coupon Positioning

1. Represents UMBS TBA market prices as of March 31, 2023.
2. Specified pools include securities with implicit or explicit prepayment protection including lower loan balances (securities collateralized by loans less than or equal to $300K of initial principal balance), higher LTVs (securities collateralized by loans with greater than or equal to 80% LTV), certain geographic concentrations, loans secured by investor-owned properties, and lower FICO scores, as well as securities without such protection, including large bank-serviced and others.
3. MSR/Agency IO represents an internally calculated exposure of a synthetic TBA position and the current coupon equivalents of our MSR, including the effect of unsettled MSR, and Agency IO RMBS.

PAGE 18 - Risk Positioning

1. MSR/Agency IO RMBS includes the effect of unsettled MSR.
2. Other includes all other derivative assets and liabilities and borrowings. Other excludes TBAs, which are included in the Agency P&I RMBS/TBA category.
3. Bull Steepener/Bear Flattener is a shift in short-term rates that represents estimated change in common book value for theoretical non-parallel shifts in the yield curve. Analysis uses a +/- 25 basis point shift in 2-year rates while holding long-term rates constant.
4. Bull Flattener/Bear Steepener is a shift in long-term rates that 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 short-term rates constant.
5. Parallel shift represents estimated change in common book value for theoretical parallel shift in interest rates.
6. Book value exposure to current coupon represents estimated change in common book value for theoretical parallel shifts in spreads.

PAGE 19 - Financial Performance

1. Economic 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.

End Notes (continued)

PAGE 20 - Q1-2023 Operating Performance

1. Earnings Available for Distribution, or EAD, is a non-GAAP measure. Please see Appendix slide 22 for a definition of Earnings Available for Distribution and a reconciliation of GAAP to non-GAAP financial information.

PAGE 21 - Q4-2022 Operating Performance

1. Earnings Available for Distribution, or EAD, is a non-GAAP measure. Please see Appendix slide 22 for a definition of Earnings Available for Distribution and a reconciliation of GAAP to non-GAAP financial information.

PAGE 22 - GAAP to EAD Reconciliation

1. MSR amortization refers to the portion of change in fair value of MSR primarily attributed to the realization of expected cash flows (runoff) of the portfolio, which is deemed a non-GAAP measure due to the company's decision to account for MSR at fair value.
2. TBA dollar roll income is the economic equivalent to holding and financing Agency RMBS using short-term repurchase agreements.
3. U.S. Treasury futures income is the economic equivalent to holding and financing a relevant cheapest-to-deliver U.S. Treasury note or bond using short-term repurchase agreements.

PAGE 23 - GAAP to IXM Reconciliation

1. RMBS and other Agency securities market-driven value changes refers to the sum of interest income, realized and unrealized gains and losses on RMBS and other Agency securities, less the sum of the realization of RMBS and other Agency securities cash flows which incorporates actual prepayments, changes in RMBS and other Agency securities accrued interest, and modeled price changes. Modeled price changes are measured daily based on a "Realized Forwards" methodology, which includes the assumption that spreads, forward interest rates and volatility factored into the previous day ending fair value are unchanged. RMBS and other Agency securities includes inverse interest-only Agency RMBS which are accounted for as derivative instruments in accordance with GAAP.
2. MSR market-driven value changes refers to the sum of servicing income, servicing expenses, realized and unrealized gains and losses on MSR, less the sum of the realization of MSR cash flows which incorporates actual prepayments, recurring servicing income and servicing expenses, and modeled price changes. Modeled price changes are measured daily based on a "Realized Forwards" methodology, which includes the assumption that spreads, forward interest rates and volatility factored into the previous day ending fair value are unchanged.
3. Swap and swaption market-driven value changes refers to the net interest spread and realized and unrealized gains and losses on interest rate swap and swaption agreements, less the swaps daily IXM that is equal to the previous day ending fair value multiplied by the overnight SOFR and swaptions daily IXM that is equal to the previous day ending fair value multiplied by the realized forward rate.
4. TBA market-driven value changes refers to the total realized and unrealized gains and losses, less the daily zero-volatility OAS less the implied repo spread, multiplied by the previous day ending fair value.
5. Nonrecurring deboarding fees are associated with one-time transfers of MSR.

End Notes (continued)

PAGE 24 - Agency RMBS Portfolio

1. Weighted average actual 1 month CPR released at the beginning of the following month based on RMBS held as of the preceding month-end.
2. Determination of the percentage of prepay protected 30-year fixed Agency RMBS includes securities with implicit or explicit prepayment protection including lower loan balances (securities collateralized by loans less than or equal to $300K of initial principal balance), higher LTVs (securities collateralized by loans with greater than or equal to 80% LTV), certain geographic concentrations, loans secured by investor-owned properties, and lower FICO scores.
3. Other P&I includes 15-year fixed, Hybrid ARMs, CMO and DUS pools.
4. IOs and IIOs represent market value of $15.8 million of Agency Derivatives and $33.9 million of IOs.
5. Bond equivalent value is defined as the notional amount multiplied by market price. Accounted for as derivative instruments in accordance with GAAP.
6. Three month prepayment speeds of delivered TBA contracts; average of J.P. Morgan, Credit Suisse, and Citi data.

PAGE 25 - Mortgage Servicing Rights Portfolio

1. MSR portfolio excludes residential mortgage loans for which the company is the named servicing administrator. Portfolio metrics, other than fair value and UPB, represent averages weighted by UPB.
2. FICO represents a mortgage industry accepted credit score of a borrower.

PAGE 27 - Financing

1. Outstanding borrowings have a weighted average of 5.9 months to maturity.
2. Repurchase agreements and revolving credit facilities secured by MSR and/or other assets may be over-collateralized due to operational considerations.
3. U.S. Treasury securities effectively borrowed under reverse repurchase agreements.

PAGE 28 - Futures

1. Exchange-traded derivative instruments (futures and options on futures) require the posting of an “initial margin” amount determined by the clearing exchange, which is generally intended to be set at a level sufficient to protect the exchange from the derivative instrument’s maximum estimated single-day price movement. The company also exchanges “variation margin” based upon daily changes in fair value, as measured by the exchange. The exchange of variation margin is considered a settlement of the derivative instrument, as opposed to pledged collateral. Accordingly, the receipt or payment of variation margin is accounted for as a direct reduction to the carrying value of the exchange-traded derivative asset or liability.

PAGE 29 - Interest Rate Swaps and Swaptions

1. As of March 31, 2023, 100.0% of the underlying swap floating rates were tied to SOFR.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