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: October 30, 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 October 30, 2023, Two Harbors Investment Corp. issued a press release announcing its financial results for the fiscal quarter ended September 30, 2023. A copy of the press release and the 2023 Third 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 October 30, 2023.
99.2	2023 Third 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: October 30, 2023

Two Harbors Investment Corp. Reports Third Quarter 2023 Financial Results

Completed Acquisition of RoundPoint Mortgage Servicing LLC

NEW YORK, October 30, 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 September 30, 2023.

Quarterly Summary

- Reported book value of $15.36 per common share, and declared a third quarter common stock dividend of $0.45 per share, representing a (3.5)% quarterly economic return on book value.(1)
- Incurred Comprehensive Loss of $56.8 million, or $(0.61) per weighted average basic common share.
- Generated Income Excluding Market-Driven Value Changes (IXM) of $0.51 per weighted average basic common share.(2)
- Closed acquisition of RoundPoint Mortgage Servicing LLC, which is expected to be accretive to pre-tax earnings in 2024 of $25-30 million through additional revenues and cost savings achieved by vertically integrating self-servicing capabilities.
- Settled $472.2 million unpaid principal balance (UPB) of MSR through flow-sale acquisitions.

"In the third quarter, fixed income markets fluctuated as participants tried to understand the Fed's future path. The correlation of higher rates, higher volatility and wider mortgage spreads remained in place, which impacted our book value and returns," stated Bill Greenberg, Two Harbors' President and CEO. "Notwithstanding the continued market volatility, the highlight of our quarter was undoubtedly closing the acquisition of RoundPoint Mortgage Servicing LLC. We anticipate that bringing our servicing in-house will be accretive to pre-tax earnings in 2024 by $25-30 million. We believe this is a tremendous opportunity for our stakeholders and for the growth of both Two Harbors and RoundPoint."

"As interest rates increased, we actively managed our Agency RMBS exposure by rotating into higher coupons. Our MSR portfolio continued to perform well, with prepayment speeds declining quarter-over-quarter and coming in below expectations, which is a tailwind to this strategy," stated Nick Letica, Two Harbors' Chief Investment Officer. "While elevated interest rate and spread volatility can pose near-term challenges to the RMBS sector, the combination of wide spreads and longer-term tightening potential make this a very attractive time to invest in our assets. Additionally, with the weighted average coupon of our MSR so far out of the money, we have a low convexity, low duration asset with stable cash flows. The combination of these two attractive assets leads to our belief that we can generate a low-to-mid-teens return in this environment."

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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) Income Excluding Market-Driven Value Changes, or IXM, is a non-GAAP measure. Please see page 11 for a definition of IXM and a reconciliation of GAAP to non-GAAP financial information.

Operating Performance

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

Two Harbors Investment Corp. Operating Performance (unaudited)

(dollars in thousands, except per common share data)

	Three Months Ended September 30, 2023			Three Months Ended June 30, 2023		
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	$ (56,845)	$ (0.61)	(14.5)%	$ 31,478	$ 0.31	8.1 %
GAAP Net Income	$ 294,077	$ 3.04	75.0 %	$ 187,784	$ 1.94	48.3 %
Income Excluding Market-Driven Value Changes[1]	$ 49,288	$ 0.51	12.6 %	$ 57,501	$ 0.60	14.8 %
Earnings Available for Distribution[2]	$ (776)	$ (0.01)	(0.2)%	$ (3,716)	$ (0.04)	(1.0)%
Operating Metrics						
Dividend per common share	$ 0.45			$ 0.45		
Annualized dividend yield[3]	13.6 %			13.0 %		
Book value per common share at period end	$ 15.36			$ 16.39		
Economic return on book value[4]	(3.5)%			2.2 %		
Operating expenses, excluding non-cash LTIP amortization and certain operating expenses[5]	$ 12,629			$ 11,885		
Operating expenses, excluding non-cash LTIP amortization and certain operating expenses, as a percentage of average equity[5]	2.3 %			2.2 %		

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

(2) Earnings Available for Distribution, or EAD, is a non-GAAP measure. Please see page 12 for a definition of EAD and a reconciliation of GAAP to non-GAAP financial information.

(3) 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.

(4) 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.

(5) Excludes non-cash equity compensation expense of $1.6 million for the third quarter of 2023 and $1.7 million for the second quarter of 2023 and certain operating expenses of $10.4 million for the third quarter of 2023 and $7.1 million for the second quarter of 2023. Certain operating expenses predominantly consists of expenses incurred in connection with the company's ongoing litigation with PRCM Advisers LLC. It also includes certain transaction expenses incurred in connection with the company's acquisition of RoundPoint Mortgage Servicing LLC.

Portfolio Summary

As of September 30, 2023, the company's portfolio was comprised of $12.0 billion of Agency RMBS, MSR and other investment securities as well as their associated notional debt hedges. Additionally, the company held $2.1 billion bond equivalent value of net long to-be-announced securities (TBAs).

The following tables summarize the company's investment portfolio as of September 30, 2023 and June 30, 2023:

Two Harbors Investment Corp. Portfolio
(dollars in thousands)

Portfolio Composition	As of September 30, 2023		As of June 30, 2023	
	(unaudited)		(unaudited)	
Agency RMBS	$ 8,832,783	73.3 %	$ 8,887,839	72.6 %
Mortgage servicing rights[1]	3,213,113	26.6 %	3,273,956	26.7 %
Other	7,861	0.1 %	87,808	0.7 %
Aggregate Portfolio	12,053,757		12,249,603	
Net TBA position[2]	2,134,444		2,894,560	
Total Portfolio	$ 14,188,201		$ 15,144,163	

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(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.

Portfolio Metrics Specific to Agency RMBS	As of September 30, 2023	As of June 30, 2023
	(unaudited)	(unaudited)
Weighted average cost basis[1]	$ 100.81	$ 101.41
Weighted average experienced three-month CPR	6.5 %	6.5 %
Gross weighted average coupon rate	5.5 %	5.6 %
Weighted average loan age (months)	24	22

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(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 September 30, 2023	As of June 30, 2023
(dollars in thousands)	(unaudited)	(unaudited)
Unpaid principal balance	$ 218,662,270	$ 222,622,177
Gross coupon rate	3.4 %	3.4 %
Current loan size	$ 338	$ 340
Original FICO[2]	759	759
Original LTV	72 %	72 %
60+ day delinquencies	0.7 %	0.6 %
Net servicing fee	25.2 basis points	26.4 basis points

	Three Months Ended September 30, 2023	Three Months Ended June 30, 2023
	(unaudited)	(unaudited)
Fair value gains	$ 67,369	$ 21,679
Servicing income	$ 178,625	$ 175,223
Servicing expenses	$ 28,894	$ 25,477
Change in servicing reserves	$ 994	$ (301)

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(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 September 30, 2023	As of June 30, 2023
(dollars in thousands)	(unaudited)	(unaudited)
Net long TBA notional[(1)]	$ 2,194,000	$ 3,051,000
Futures notional	$ (7,870,450)	$ (6,624,550)
Interest rate swaps notional	$ 8,545,965	$ 8,977,714
Swaptions net notional	$ (200,000)	$ (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 September 30, 2023 and June 30, 2023:

September 30, 2023	Balance	Weighted Average Borrowing Rate	Weighted Average Months to Maturity	Number of Distinct Counterparties
(dollars in thousands, unaudited)				
Repurchase agreements collateralized by securities	$ 8,835,454	5.56 %	3.25	17
Repurchase agreements collateralized by MSR	277,816	7.06 %	2.34	3
Total repurchase agreements	9,113,270	5.65 %	3.23	18
Revolving credit facilities collateralized by MSR and related servicing advance obligations	1,410,671	8.65 %	15.68	4
Term notes payable collateralized by MSR	295,025	8.23 %	8.84	n/a
Unsecured convertible senior notes	268,179	6.25 %	27.55	n/a
Total borrowings	$ 11,087,145			

June 30, 2023	Balance	Weighted Average Borrowing Rate	Weighted Average Months to Maturity	Number of Distinct Counterparties
(dollars in thousands, unaudited)				
Repurchase agreements collateralized by securities	$ 8,807,824	5.23 %	2.19	18
Repurchase agreements collateralized by MSR	260,000	8.67 %	5.98	1
Total repurchase agreements	9,067,824	5.33 %	2.30	19
Revolving credit facilities collateralized by MSR and related servicing advance obligations	1,455,421	8.46 %	18.71	4
Term notes payable collateralized by MSR	398,653	8.00 %	11.87	n/a
Unsecured convertible senior notes	267,791	6.25 %	30.58	n/a
Total borrowings	$ 11,189,689			

Borrowings by Collateral Type	As of September 30, 2023	As of June 30, 2023
(dollars in thousands)	(unaudited)	(unaudited)
Agency RMBS	$ 8,835,221	$ 8,760,221
Mortgage servicing rights and related servicing advance obligations	1,983,512	2,114,074
Other - secured	233	47,603
Other - unsecured[1]	268,179	267,791
Total	11,087,145	11,189,689
TBA cost basis	2,147,540	2,905,852
Net payable (receivable) for unsettled RMBS	—	54,739
Total, including TBAs and net payable (receivable) for unsettled RMBS	$ 13,234,685	$ 14,150,280
Debt-to-equity ratio at period-end[2]	5.2 :1.0	5.0 :1.0
Economic debt-to-equity ratio at period-end[3]	6.3 :1.0	6.4 :1.0

Cost of Financing by Collateral Type[4]	Three Months Ended September 30, 2023	Three Months Ended June 30, 2023
	(unaudited)	(unaudited)
Agency RMBS	5.61 %	5.20 %
Mortgage servicing rights and related servicing advance obligations[5]	9.01 %	8.70 %
Other - secured	6.79 %	5.89 %
Other - unsecured[1][5]	6.92 %	6.88 %
Annualized cost of financing	6.26 %	5.89 %
Interest rate swaps[6]	(0.25) %	(0.13) %
U.S. Treasury futures[7]	(0.40) %	(0.21) %
TBAs[8]	3.79 %	3.49 %
Annualized cost of financing, including swaps, U.S. Treasury futures and TBAs	5.26 %	5.08 %

(1) Unsecured convertible senior notes.
(2) Defined as total borrowings to fund Agency and non-Agency investment securities and MSR, divided by total equity.
(3) 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) Excludes repurchase agreements collateralized by U.S. Treasuries.
(5) Includes amortization of debt issuance costs.
(6) 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.
(7) 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.
(8) 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 October 31, 2023 at 10:00 a.m. ET to discuss third 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 October 31, 2023, through 12:00 p.m. ET on November 14, 2023. The playback can be accessed by calling (877) 660-6853, conference code 13740826. 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 acquisition of RoundPoint Mortgage Servicing LLC and to manage the risks associated with operating a mortgage loan servicer; 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 to maintain our MSR portfolio; 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)

	September 30, 2023	December 31, 2022
	(unaudited)	
ASSETS		
Available-for-sale securities, at fair value (amortized cost $9,497,257 and $8,114,627, respectively; allowance for credit losses $4,556 and $6,958, respectively)	$ 8,830,726	$ 7,778,734
Mortgage servicing rights, at fair value	3,213,113	2,984,937
Cash and cash equivalents	644,184	683,479
Restricted cash	400,777	443,026
Accrued interest receivable	39,038	36,018
Due from counterparties	315,467	253,374
Derivative assets, at fair value	20,592	26,438
Reverse repurchase agreements	282,767	1,066,935
Other assets	170,065	193,219
Total Assets	$ 13,916,729	$ 13,466,160
LIABILITIES AND STOCKHOLDERS' EQUITY		
Liabilities:		
Repurchase agreements	$ 9,113,270	$ 8,603,011
Revolving credit facilities	1,410,671	1,118,831
Term notes payable	295,025	398,011
Convertible senior notes	268,179	282,496
Derivative liabilities, at fair value	23,550	34,048
Due to counterparties	312,248	541,709
Dividends payable	55,675	64,504
Accrued interest payable	90,709	94,034
Other liabilities	230,174	145,991
Total Liabilities	11,799,501	11,282,635
Stockholders' Equity:		
Preferred stock, par value $0.01 per share; 100,000,000 shares authorized and 25,578,232 and 26,092,050 shares issued and outstanding, respectively ($639,456 and $652,301 liquidation preference, respectively)	618,579	630,999
Common stock, par value $0.01 per share; 175,000,000 shares authorized and 96,186,425 and 86,428,845 shares issued and outstanding, respectively	962	864
Additional paid-in capital	5,826,133	5,645,998
Accumulated other comprehensive loss	(660,008)	(278,711)
Cumulative earnings	1,782,654	1,453,371
Cumulative distributions to stockholders	(5,451,092)	(5,268,996)
Total Stockholders' Equity	2,117,228	2,183,525
Total Liabilities and Stockholders' Equity	$ 13,916,729	$ 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 September 30, 2023		Nine Months Ended September 30, 2023	
	2023	2022	2023	2022
	(unaudited)		(unaudited)	
Interest income:				
Available-for-sale securities	$ 107,827	$ 88,472	$ 309,060	$ 188,518
Other	15,781	5,916	48,903	7,719
Total interest income	123,608	94,388	357,963	196,237
Interest expense:				
Repurchase agreements	129,298	57,868	350,599	85,480
Revolving credit facilities	32,526	15,178	87,866	29,960
Term notes payable	6,634	5,427	22,516	12,608
Convertible senior notes	4,636	4,877	14,164	14,720
Total interest expense	173,094	83,350	475,145	142,768
Net interest (expense) income	(49,486)	11,038	(117,182)	53,469
Other income:				
(Loss) gain on investment securities	(471)	(6,426)	12,499	(256,487)
Servicing income	178,625	148,833	507,168	442,985
Gain (loss) on servicing asset	67,369	(6,720)	60,969	489,461
Gain on interest rate swap and swaption agreements	111,909	34,806	86,288	29,499
Gain (loss) on other derivative instruments	86,212	159,044	(22,398)	(43,991)
Other income (loss)	2,903	—	5,103	(117)
Total other income	446,547	329,537	649,629	661,350
Expenses:				
Servicing expenses	29,903	21,152	83,459	68,847
Compensation and benefits	8,617	10,100	31,568	33,312
Other operating expenses	15,984	10,688	38,354	26,465
Total expenses	54,504	41,940	153,381	128,624
Income before income taxes	342,557	298,635	379,066	586,195
Provision for income taxes	36,365	21,023	52,237	95,733
Net income	306,192	277,612	326,829	490,462
Dividends on preferred stock	(12,115)	(13,747)	(36,595)	(41,242)
Gain on repurchase and retirement of preferred stock	—	—	2,454	—
Net income attributable to common stockholders	$ 294,077	$ 263,865	$ 292,688	$ 449,220
Basic earnings per weighted average common share	$ 3.04	$ 3.04	$ 3.06	$ 5.19
Diluted earnings per weighted average common share	$ 2.81	$ 2.78	$ 2.91	$ 4.80
Dividends declared per common share	$ 0.45	$ 0.68	$ 1.50	$ 2.04
Weighted average number of shares of common stock:				
Basic	96,176,287	86,252,104	95,059,856	86,107,979
Diluted	105,628,130	96,132,100	104,849,018	96,120,844

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 September 30, 2023		Nine Months Ended September 30, 2023	
	2023	**2022**	**2023**	**2022**
	(unaudited)		(unaudited)	
Comprehensive loss:				
Net income	$ 306,192	$ 277,612	$ 326,829	$ 490,462
Other comprehensive loss:				
Unrealized loss on available-for-sale securities	(350,922)	(551,673)	(381,297)	(887,729)
Other comprehensive loss	(350,922)	(551,673)	(381,297)	(887,729)
Comprehensive loss	(44,730)	(274,061)	(54,468)	(397,267)
Dividends on preferred stock	(12,115)	(13,747)	(36,595)	(41,242)
Gain on repurchase and retirement of preferred stock	—	—	2,454	—
Comprehensive loss attributable to common stockholders	$ (56,845)	$ (287,808)	$ (88,609)	$ (438,509)

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	
	September 30, 2023	**June 30, 2023**
	(unaudited)	(unaudited)
Reconciliation of Comprehensive (loss) income to Income Excluding Market-Driven Value Changes:		
Comprehensive (loss) income attributable to common stockholders	$ (56,845)	$ 31,478
Adjustments to exclude market-driven value changes[(1)] and certain operating expenses:		
RMBS and other Agency securities market-driven value changes[(2)]	391,159	195,343
MSR market-driven value changes[(3)]	(138,182)	(94,172)
Swap and swaption market-driven value changes[(4)]	(110,764)	(57,085)
TBA market-driven value changes[(5)]	98,613	87,800
Realized and unrealized gains on futures	(178,918)	(126,923)
Other realized gains	(2,903)	(2,201)
Change in servicing reserves	994	(301)
Deboarding fees associated with RoundPoint acquisition	3,336	2,368
Certain operating expenses[(6)]	10,396	7,134
Gain on repurchase and retirement of preferred stock	—	(2,454)
Net provision for income taxes associated with market-driven value changes	32,402	16,514
Income Excluding Market-Driven Value Changes[(7)]	$ 49,288	$ 57,501
Weighted average basic common shares	96,176,287	96,387,877
Income Excluding Market-Driven Value Changes per weighted average basic common share	$ 0.51	$ 0.60

(1) The market-driven value changes adjustment for each of RMBS and other Agency securities, MSR, swap and swaptions and TBA represents unexpected price changes for the referenced period. As defined, the calculation of IXM includes modeled price changes that are measured daily based on a "Realized Forwards" methodology, which includes the assumption that spreads, forward interest rates, shape of the term structure and volatility factored into the previous day ending fair value are unchanged. Unexpected price changes represent the differences between (a) actual spreads, forward interest rates, shape of the term structure and volatility, and (b) the spreads, forward interest rates, shape of the term structure and volatility that were factored into the previous day ending fair value. Unexpected price changes are measured daily and used to determine the portion of actual market price changes not attributable to modeled price changes. The reported market-driven value changes adjustment for each of RMBS and other Agency securities, MSR, swap and swaptions and TBA is the sum of all daily unexpected price changes for the referenced period. Please refer to end notes (2) through (5) below for further information.

(2) 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, shape of the term structure 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.

(3) 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, 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, shape of the term structure and volatility factored into the previous day ending fair value are unchanged.

(4) 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.

(5) 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.

(6) Certain operating expenses predominantly consists of expenses incurred in connection with the company's ongoing litigation with PRCM Advisers LLC. It also includes certain transaction expenses incurred in connection with the company's acquisition of RoundPoint Mortgage Servicing LLC.

(7) 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, certain operating expenses and gains on the repurchase and retirement of preferred stock and convertible senior notes. As defined, IXM includes the realization of portfolio cash flows which incorporates actual prepayments, changes in portfolio accrued interest, 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, shape of the term structure and volatility factored into the previous day ending fair value are unchanged. Assumptions for spreads, forward interest rates, shape of the term structure, 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 operating expenses and provision for income taxes associated with IXM. The purpose of presenting IXM, and the various adjustments related to market-driven value changes and certain legal expenses and acquisition transaction costs, is to provide management, analysts and investors with a profit and loss attribution that allows them to better understand the sources of returns from the company's investment portfolio, operating expenses and tax expenses. 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.

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	
	September 30, 2023	**June 30, 2023**
	(unaudited)	(unaudited)
Reconciliation of Comprehensive (loss) income to Earnings Available for Distribution:		
Comprehensive (loss) income attributable to common stockholders	$ (56,845)	$ 31,478
Adjustment for other comprehensive loss attributable to common stockholders:		
Unrealized loss on available-for-sale securities	350,922	156,306
Net income attributable to common stockholders	$ 294,077	$ 187,784
Adjustments to exclude reported realized and unrealized (gains) losses:		
Realized loss on securities	289	2,640
Unrealized loss (gain) on securities	280	(4,834)
(Reversal of) provision for credit losses	(98)	22
Realized and unrealized gain on mortgage servicing rights	(67,369)	(21,679)
Realized loss on termination or expiration of interest rate swaps and swaptions	5,176	—
Unrealized gain on interest rate swaps and swaptions	(110,234)	(53,080)
Realized and unrealized gain on other derivative instruments	(86,121)	(47,063)
Gain on repurchase and retirement of preferred stock	—	(2,454)
Other realized and unrealized gains	(2,903)	(2,200)
Other adjustments:		
MSR amortization(1)	(90,485)	(91,836)
TBA dollar roll (losses) income(2)	(2,106)	(3,526)
U.S. Treasury futures income(3)	11,174	5,652
Change in servicing reserves	994	(301)
Non-cash equity compensation expense	1,576	1,735
Certain operating expenses(4)	10,396	7,134
Net provision for income taxes on non-EAD	34,578	18,290
Earnings available for distribution to common stockholders(5)	$ (776)	$ (3,716)
Weighted average basic common shares	96,176,287	96,387,877
Earnings available for distribution to common stockholders per weighted average basic common share	$ (0.01)	$ (0.04)

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(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) Certain operating expenses predominantly consists of expenses incurred in connection with the company's ongoing litigation with PRCM Advisers LLC. It also includes certain transaction expenses incurred in connection with the company's acquisition of RoundPoint Mortgage Servicing LLC.

(5) 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 certain operating 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 certain 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.


An Agency + MSR REIT
Third Quarter 2023
Earnings Call
OCTOBER 31, 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 acquisition of RoundPoint Mortgage Servicing LLC and to manage the risks associated with operating a mortgage loan servicer; 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 to maintain our MSR portfolio; 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.

Book Value	$15.36
Common Stock Dividend	$0.45
Economic Return on Book Value[1]	(3.5)%
Comprehensive Loss	$(0.61)
Income Excluding Market-Driven Value Changes (IXM)[2]	$0.51
Portfolio[3]	$14.1b
Quarter-end Economic Debt-to-Equity[4]	6.3x

Note: Financial data throughout this presentation is as of or for the quarter ended September 30, 2023, unless otherwise noted. Per share metrics utilize basic common shares as the denominator. 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.

RoundPoint Acquisition

A TRANSFORMATIVE ACQUISITION AND DEFINITIVE COMMITMENT TO MSR

Benefits for Stakeholders

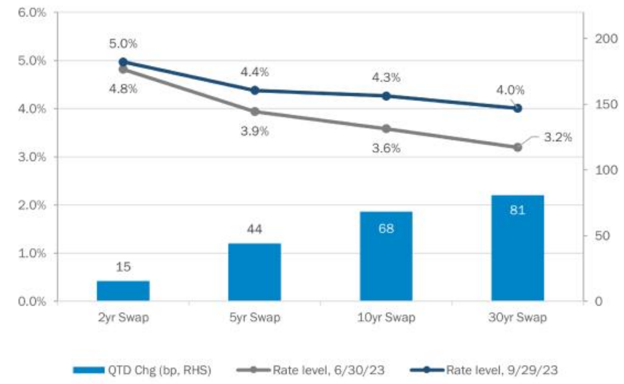
- In-house servicing results in:
  - Significant cost savings over use of third party subservicers; and
  - Receipt of cashflows associated with MSR, including late fees and ancillary income
- Accretive to pre-tax earnings in 2024 by an estimated $25-30 million
- Potential additional revenue streams from new business opportunities

Vision for RoundPoint

- Establish premier mortgage servicing model
- Expand current third party subservicing business
- Explore new ways to participate in structured housing finance market, including new loan products, reverse mortgages, HELOCs, second liens and other ancillary products

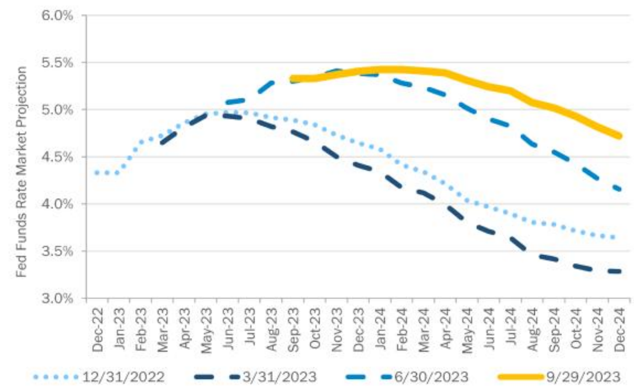
Markets Overview

I. QUARTERLY YIELD CURVE CHANGE[1]



- Markets have embraced the soft landing and "higher for longer" scenario as inflation has moderated while economic data remains strong
- Over the quarter, the yield curve, though still inverted, bear steepened with longer-end rates at their highest levels since 2008

II. FED FUNDS RATE EXPECTATIONS[1]



- The Federal Reserve left interest rates unchanged at its September meeting, leading to higher expected interest rates
- Market expectations have shifted, calling for fewer interest rate cuts in total over an extended period of time; projected short-term rate of 4.72% at the end of 2024

Book Value Summary

($ millions, except per share data)	Q3-2023 Book Value	Q3-2023 Book Value per share
Beginning common stockholders' equity	**$ 1,576.5**	**$ 16.39**
Net income	306.2	
Other comprehensive loss	(350.9)	
Comprehensive loss	(44.7)	
Dividend declaration - preferred	(12.1)	
Comprehensive loss attributable to common stockholders	(56.8)	
Common stock dividends declared	(43.6)	
Other	1.6	
Ending common stockholders' equity	$ 1,477.7	**$ 15.36**
Total preferred stock liquidation preference	639.5	
Ending total equity	**$ 2,117.2**	

- Book value of $15.36 per common share, resulting in a (3.5)% quarterly economic return on book value(1)
  - Main driver of book value decline was spread widening across the mortgage index in August and September
- Incurred Comprehensive Loss of $56.8 million, or $0.61 per weighted average common share

Results and Return Contributions

Three Months Ended September 30, 2023 ($ in thousands)	GAAP Net Income	Other Comprehensive Loss	Total Comprehensive Loss	Market-Driven Value Changes and Certain Operating Expenses[1][2]	Income Excluding Market-Driven Value Changes[3]
RMBS and other Agency securities[4]					
RMBS and other Agency securities income (loss)	$ 105,312	$ (350,922)	$ (245,610)	$ (391,159)	$ 145,549
RMBS and other Agency securities funding expense	(122,919)		(122,919)	—	(122,919)
MSR					
MSR income	216,091		216,091	133,852	82,239
MSR funding expense	(45,539)		(45,539)	—	(45,539)
Derivatives and other					
Swaps and swaptions	111,909		111,909	110,764	1,145
TBAs	(90,662)		(90,662)	(98,613)	7,951
Futures and options on futures	178,918		178,918	178,918	—
Interest on cash, reverse repurchase agreements and other	18,684		18,684	2,903	15,781
Expenses					
Convertible debt interest expense	(4,636)		(4,636)	—	(4,636)
Operating expenses	(24,601)		(24,601)	(10,396)	(14,205)
Tax expense	(36,365)		(36,365)	(32,402)	(3,963)
Earnings (losses) attributable to Two Harbors	**306,192**	**(350,922)**	**(44,730)**	**(106,133)**	**61,403**
Dividends on preferred stock	(12,115)		(12,115)	—	(12,115)
Earnings (losses) attributable to common stockholders	**$ 294,077**	**$ (350,922)**	**$ (56,845)**	**$ (106,133)**	**$ 49,288**
Annualized return on common equity					**12.6%**
Quarterly return per weighted average basic common share					**$ 0.51**

Note: The columns labeled "GAAP Net Income," "Other Comprehensive Loss," and "Total Comprehensive Loss" are based on the company's Comprehensive Loss, determined in accordance with GAAP, that has been reorganized into the categories that represent the company's portfolio of target assets, unsecured and secured financing by asset collateral type, and derivatives and other items. This presentation illustrates both the positive and negative aspects of the company's GAAP performance for the reporting period and provides a reconciliation with our non-GAAP measures shown in the columns labeled "Market-Driven Value Changes and Certain Operating Expenses" and "Income Excluding Market-Driven Value Changes."

IXM Quarterly Review

($ in thousands)	Income Excluding Market-Driven Value Changes[1] Q3-2023	Q2-2023	Variance
RMBS and other Agency securities[2]			
RMBS and other Agency securities income	$ 145,549	$ 142,725	$ 2,824
RMBS and other Agency securities funding expense	(122,919)	(111,317)	(11,602)
MSR			
MSR income	82,239	79,607	2,632
MSR funding expense	(45,539)	(43,552)	(1,987)
Derivatives and other			
Swaps and swaptions	1,145	(552)	1,697
TBAs	7,951	10,717	(2,766)
Interest on cash, reverse repurchase agreements and other	15,781	13,566	2,215
Expenses			
Convertible debt interest expense	(4,636)	(4,692)	56
Operating expenses	(14,205)	(13,620)	(585)
Tax expense	(3,963)	(3,266)	(697)
Earnings attributable to Two Harbors	61,403	69,616	(8,213)
Dividends on preferred stock	(12,115)	(12,115)	—
Earnings attributable to common stockholders	**$ 49,288**	**$ 57,501**	**$ (8,213)**
Annualized return on common equity	**12.6%**	**14.8%**	
Quarterly return per weighted average basic common share	**$ 0.51**	**$ 0.60**	

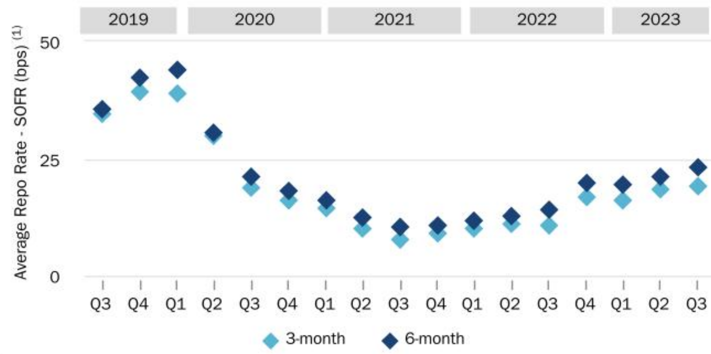
- Third quarter IXM primarily impacted by:
  - Net decrease in asset balances and the large move higher in rates, which pushed the portfolio further out of the money, lowering the aggregate spread of the assets over the quarter as a whole

Strong Balance Sheet and Liquidity Position

BALANCE SHEET AS OF SEPTEMBER 30, 2023

AGENCY RMBS

- $8.8 billion of outstanding repurchase agreements with 17 counterparties
- Weighted average days to maturity of 99 days



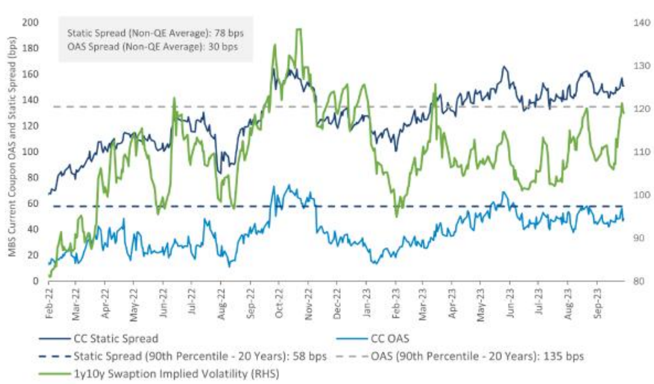
MORTGAGE SERVICING RIGHTS

- $1.7 billion of outstanding borrowings under bilateral MSR asset financing facilities
- $296 million of outstanding 5-year MSR term notes[2]
- $504 million of unused MSR asset financing capacity; $99 million committed and $405 million uncommitted
- $34 million outstanding borrowings and $166 million of unused, committed capacity for servicing advance receivables

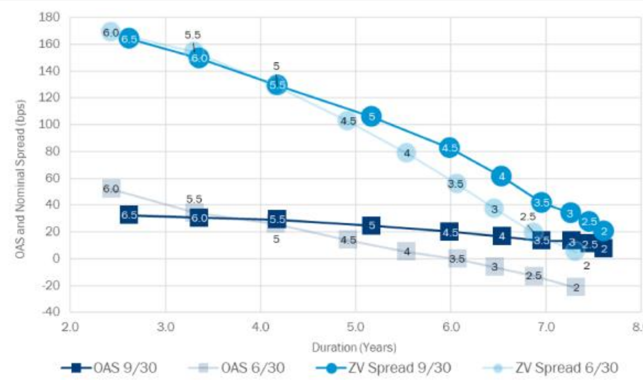
CONTINUED CORRELATION AMONG HIGHER RATES, HIGHER VOLATILITY AND WIDER MORTGAGE SPREADS

- Mortgage spreads widened in August and September as interest rates increased; current coupon nominal spreads widened 11 basis points to 151 basis points and option-adjusted spreads (OAS) increased 4 basis points to 48 basis points
- Lower coupon RMBS underperformed given longer duration, leaving them close to their widest valuations of the year, flattening the coupon spread curve
- Current spread levels are very attractive historically, but elevated rate and spread volatility can pose near-term challenges to the sector
- Universe of 30-year fixed-rate Agency prepayment speeds remained slow, declining quarter-over-quarter to 5.4% CPR from 5.7% CPR, driven by high primary mortgage rates and low housing turnover
- MSR spread performance bolstered by continued strong demand keeping pace with supply
- MSR bulk packages remain well bid; $76 billion UPB of conventional MSR offered in the third quarter, bringing total to $445 billion UPB in the first nine months of 2023

I. RMBS SPREADS REMAIN ATTRACTIVE[1]



II. COUPON/SPREAD CURVE STILL SLOPED BUT FLATTER[2]

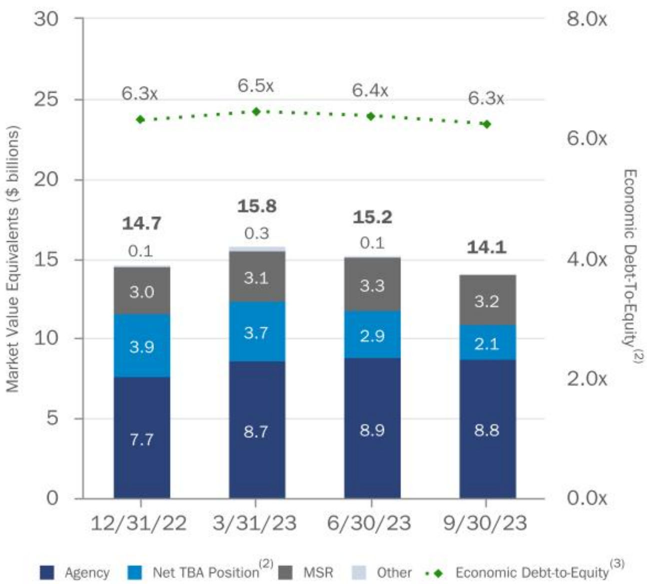


Quarterly Activity and Portfolio Composition

PORTFOLIO COMPOSITION[1]

At September 30, 2023, $14.1 billion portfolio

Includes $12.0 billion settled positions



LEVERAGE AND RISK POSITIONING

- Quarter-end economic debt-to-equity decreased slightly to 6.3x from 6.4x[3]
  - Average economic debt-to-equity of 6.1x in the third quarter, compared to 6.3x in the second quarter[3]
  - Maintained a neutral leverage position balancing wide nominal spreads against elevated rate volatility
- Low book value exposure to changes in rates

PORTFOLIO ACTIVITY HIGHLIGHTS

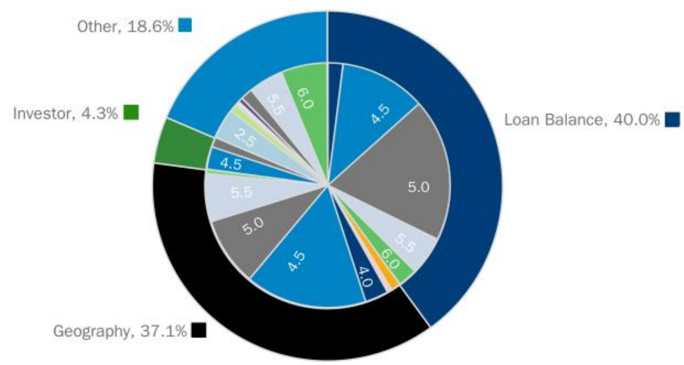
- Moved exposure up-in-coupon, mostly from outperforming "upper belly" 5% coupons to 6% and 6.5% coupons
- Rotated exposure from TBA to specified pools, given strong valuation through a combination of better carry and higher OAS[4]
- Added to specified pool 2.5% and 3% coupons[4]
- Settled $472 million UPB in MSR recapture and flow sale purchases
- Securitized approximately 1.2 basis points of servicing fee on our aggregate MSR portfolio through Fannie Mae and Freddie Mac

Specified Pools

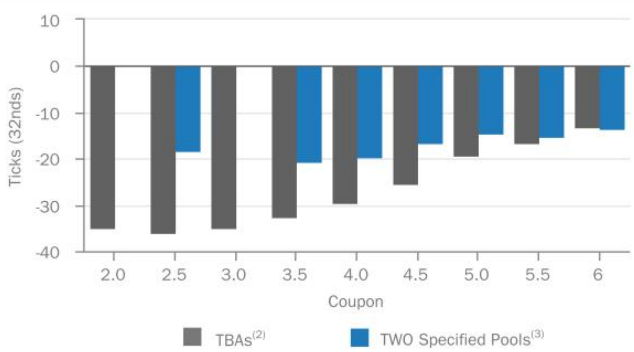
QUARTERLY HIGHLIGHTS

- Benefitted on a relative basis from a concentration in "upper belly" specified pools
- Shifted up-in-coupon by moving $1.9 billion Fannie Mae 5% TBA to 6-6.5% TBAs
- Rotated from lower coupon TBAs into semi-seasoned specified pools mainly in 2.5-3% coupons to capture better carry[1]
- Weighted average specified pool portfolio prepayment speed of 6.7% compared to 6.6% in second quarter 2023[1]

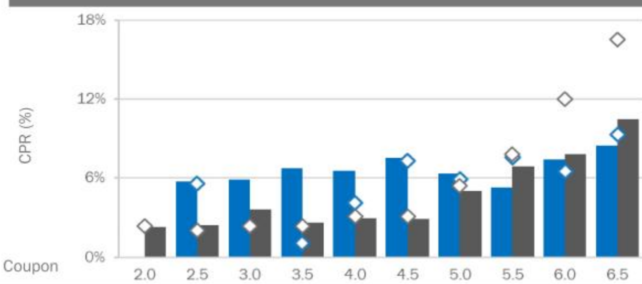
I. SPECIFIED POOL PORTFOLIO[1]



II. RMBS QUARTERLY PERFORMANCE



III. SPECIFIED POOL PREPAYMENT SPEEDS



Coupon	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5
Market Value[4] ($ billions)	$—	$0.34	$0.20	$0.07	$0.46	$2.61	$2.60	$1.34	$0.79	$0.01

TBAs (Q3-2023)[5] | TWO Specified Pools (Q3-2023) | TBAs (Q2-2023)[5] | TWO Specified Pools (Q2-2023)

Mortgage Servicing Rights

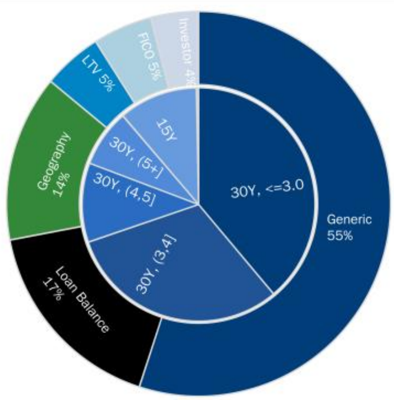
QUARTERLY HIGHLIGHTS

- Completed acquisition of RoundPoint Mortgage Servicing LLC
  - Approximately two thirds of our MSR has been transferred from our subservicing network to RoundPoint
- Settled $472.2 million through flow purchases and recapture
- MSR price multiple increased quarter-over-quarter to 5.8x from 5.5x
- MSR prepay speeds decreased to 4.9% in the third quarter, from 5.4% in the second quarter

I. MSR PORTFOLIO CHARACTERISTICS[1]

	9/30/2023	6/30/2023
Fair value ($ millions)	$ 3,213	$ 3,274
Price multiple	5.8x	5.5x
UPB ($ millions)	$ 220,054	$ 224,327
Gross coupon rate	3.44%	3.43%
Current loan size ($ thousands)	$ 339	$ 340
Original FICO[2]	759	759
Original Loan-to-Value (LTV)	72%	72%
60+ day delinquencies	0.7%	0.6%
Net servicing fee (bps)	25.2	26.4
Loan age (months)	39	36
3-month CPR	4.9%	5.4%

II. MSR PORTFOLIO[3]



III. 30-YEAR MSR PREPAYMENT SPEEDS[4]

Return Potential and Outlook

TWO HARBORS Investment Corp.

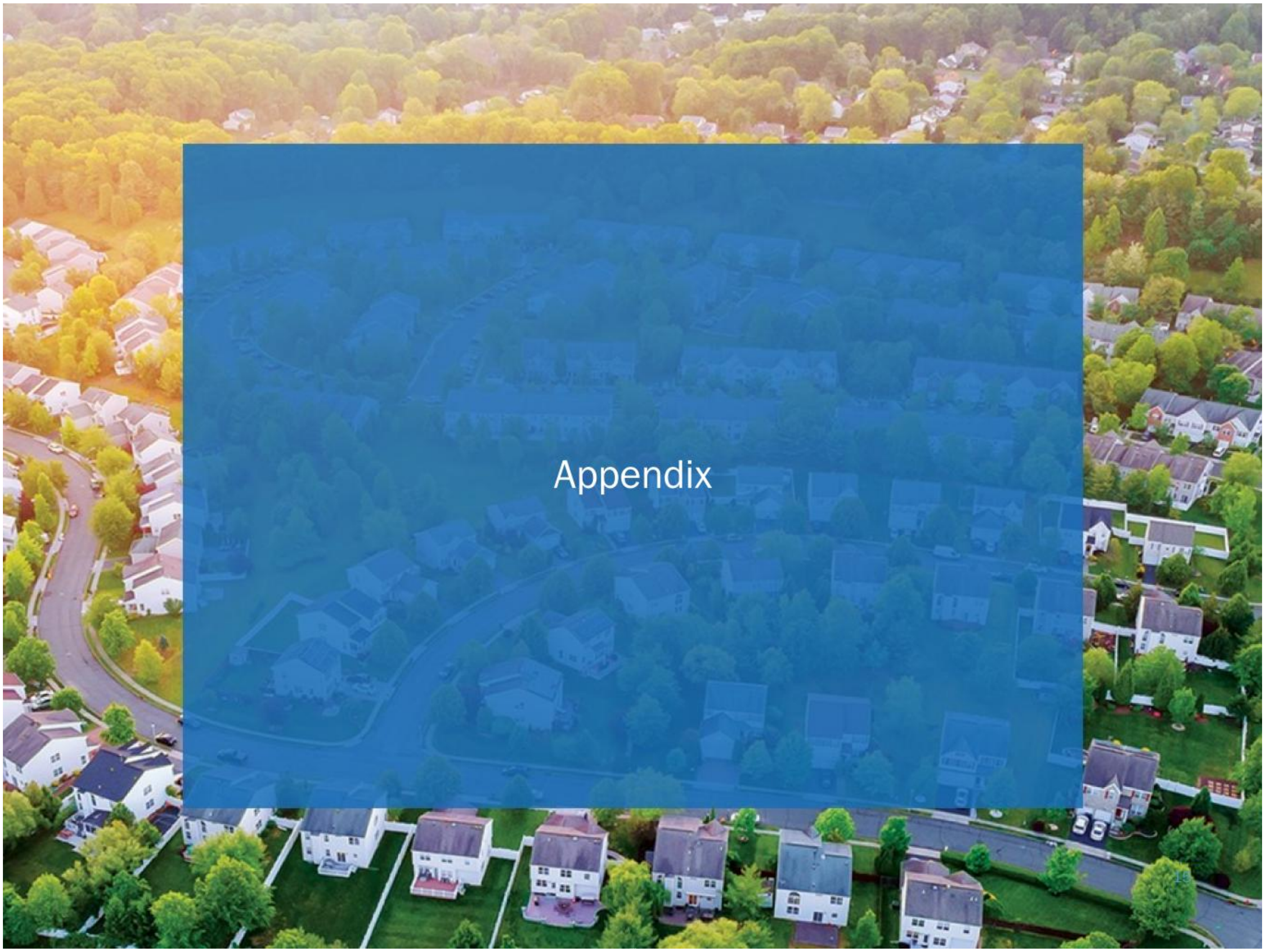
ATTRACTIVE RETURN OPPORTUNITIES FOR UNIQUELY POSITIONED AGENCY RMBS AND MSR PORTFOLIO

PROSPECTIVE MARKET RETURNS As of September 30, 2023	PORTFOLIO MARKET VALUE ($ millions)	INVESTED CAPITAL ALLOCATED[1]	STATIC MARKET RETURN ESTIMATE[2]		
RMBS + MSR					
MSR	3,212				
TBA[3]	2,316				
Hedged MSR	**5,528**	**62%**	**12%**	-	**14%**
RMBS + RATES					
Pools	8,456				
TBA[3]	(177)				
Other Securities	521				
Hedged Securities	**8,800**	**38%**	**15%**	-	**16%**

PROSPECTIVE TWO HARBORS RETURNS As of September 30, 2023	INVESTED CAPITAL ($ millions)		STATIC TWO HARBORS RETURN ESTIMATE[4]		
Total Portfolio Before RoundPoint After-Tax Income and Expenses			**12.8%**	-	**15.1%**
RoundPoint After-Tax Income			**0.8%**	-	**1.0%**
Corporate Operating and Tax Expenses[5]			(3.2)%	-	(3.2)%
Total Portfolio After RoundPoint After-Tax Income and Expenses			**10.4%**	-	**12.9%**
INVESTED CAPITAL					
Convertible Notes	272		6.2%		
Preferred Equity	639		7.6%		
Common Equity	**1,478**		**12.3%**	-	**16.3%**
PROSPECTIVE QUARTERLY STATIC RETURN PER BASIC COMMON SHARE[6]:			**$0.47**	-	**$0.62**

- **Market Presence:** Our size allows us to be nimble and actively allocate capital to our paired Agency and MSR strategy
- **Investment Strategy:** Our portfolio is uniquely constructed with Agency RMBS and MSR; we believe this strategy will further benefit from the acquisition of RoundPoint, which provides potential opportunities to more broadly participate in the mortgage finance space
- **Market Environment:** Agency spreads are historically wide and we believe are very attractive at their current levels, even in the absence of spread tightening; MSR in this market environment generate a very stable cash flow, with speeds that are historically low and very little duration and convexity
- **Financing and Liquidity:** We have a strong balance sheet and diversified financing for both Agency and MSR

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, certain operating expenses. Actual results may differ materially.


Appendix

Effective Coupon Positioning

TWO HARBORS Investment Corp.

Coupon (%)	TBA Market Price(1)	TBA Notional ($m)	Specified Pools Par Value ($m)(2)	MSR/Agency IO UPB ($m)(3)	Combined ($m)
2.5%	$ 79.41	$ —	$ 429	$ —	$ 429
3.0%	$ 82.77	—	244	—	244
3.5%	$ 86.04	300	79	—	379
4.0%	$ 89.10	—	515	—	515
4.5%	$ 91.87	189	2,823	—	3,012
5.0%	$ 94.40	—	2,738	—	2,738
5.5%	$ 96.69	50	1,380	—	1,430
6.0%	$ 98.73	603	790	(1,188)	205
6.5%	$ 100.50	1,052	—	(1,156)	(104)
Total		**$ 2,194**	**$ 8,998**	**$ (2,344)**	**$ 8,848**

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]	2.4 %	0.7 %	(2.4)%	0.7 %
0	-25	Bull Flattener[4]	7.4 %	(2.3)%	(6.7)%	(1.6)%
-50	-50	Parallel Shift[5]	19.4 %	(3.7)%	(18.5)%	(2.8)%
-25	-25	Parallel Shift[5]	9.9 %	(1.7)%	(9.1)%	(0.9)%
0	0	Base	— %	— %	— %	— %
+25	+25	Parallel Shift[5]	(10.2)%	1.2 %	9.0 %	— %
+50	+50	Parallel Shift[5]	(20.7)%	2.1 %	17.9 %	(0.7)%
+25	0	Bear Flattener[3]	(2.2)%	(0.5)%	2.4 %	(0.3)%
0	+25	Bear Steepener[4]	(8.0)%	1.7 %	6.6 %	0.3 %

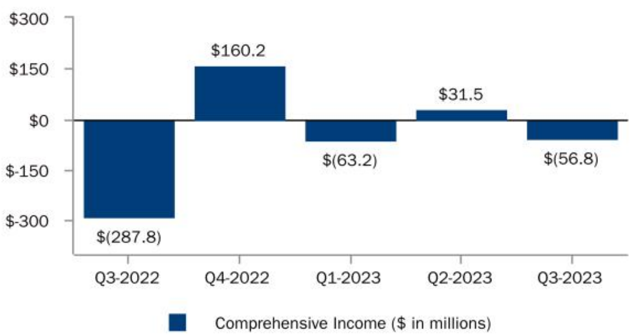
BOOK VALUE EXPOSURE TO CURRENT COUPON SPREAD[6]

	% Change in Common Book Value		
Parallel Shift in Spreads (basis points)	**Agency P&I RMBS/TBA**	**MSR/Agency IO RMBS[1]**	**Combined**
-25	8.7 %	(1.9)%	6.8 %
0	— %	— %	— %
+25	(9.0)%	1.6 %	(7.4)%

Note: Sensitivity data as of September 30, 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.

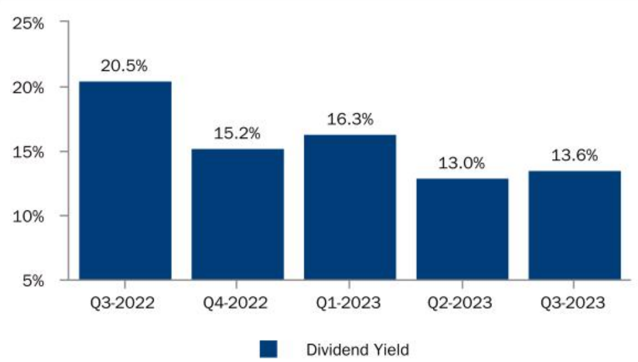
Financial Performance

COMPREHENSIVE (LOSS) INCOME



QUARTERLY ECONOMIC RETURN ON BOOK VALUE(1)

DIVIDEND YIELD(2)



BOOK VALUE AND DIVIDEND PER COMMON SHARE(2)

Comparison of GAAP and non-GAAP Measures

TWO HARBORS Investment Corp.

($ in thousands)	Comprehensive Income	Earnings Available for Distribution (EAD)[1]	Income Excluding Market-Driven Value Changes (IXM)[2]	
RMBS and other Agency securities[3]				
Coupon income	$ 114,170	$ 114,170	$ 114,170	
Amortization	(6,252)	(6,252)	(6,252)	
Realized and unrealized, and provision for credit losses	(353,528)	—	37,631	(4)
Funding expense	(122,919)	(122,919)	(122,919)	
MSR				
Servicing fee income	141,816	141,816	141,816	
Float, ancillary and other income	36,809	36,809	36,809	
Servicing expenses	(28,909)	(28,909)	(25,565)	(5)
Amortization	(63,999)	(90,485)	(63,999)	
Realized and unrealized, including change in servicing reserves	130,374	—	(6,822)	(6)
Funding expense	(45,539)	(45,539)	(45,539)	
Derivatives and other				
Swaps net interest spread	6,851	6,851	6,851	
Swaps and swaptions realized and unrealized	105,058	—	(5,706)	(7)
TBAs	(90,662)	(2,106)	7,951	(8)
U.S. Treasury futures	171,865	11,174	—	
Other futures and options on futures	7,053	—	—	
Interest on cash, reverse repurchase agreements and other	18,684	15,781	15,781	(9)
Expenses				
Convertible debt interest expense	(4,636)	(4,636)	(4,636)	
Operating expenses	(24,601)	(12,629)	(14,205)	(10)
Tax expense[11]	(36,365)	(1,787)	(3,963)	
(Losses) earnings attributable to Two Harbors	(44,730)	11,339	61,403	
Dividends on preferred stock	(12,115)	(12,115)	(12,115)	
(Losses) earnings attributable to common stockholders	**$ (56,845)**	**$ (776)**	**$ 49,288**	
Annualized return on common equity	**(14.5)%**	**(0.2)%**	**12.6%**	
Quarterly return per weighted average basic common share	**$ (0.61)**	**$ (0.01)**	**$ 0.51**	

For each of RMBS and MSR, combination of amounts represents price changes under realized forwards method[2]

GAAP to IXM Reconciliation

Reconciliation of GAAP to non-GAAP Information ($ thousands, except for per common share data)	Three Months Ended September 30, 2023	Three Months Ended June 30, 2023
Comprehensive (loss) income attributable to common stockholders	**$ (56,845)**	**$ 31,478**
Adjustments to exclude market-driven value changes[1] and certain operating expenses:		
RMBS and other Agency securities market-driven value changes[2]	391,159	195,343
MSR market-driven value changes[3]	(138,182)	(94,172)
Swap and swaption market-driven value changes[4]	(110,764)	(57,085)
TBA market-driven value changes[5]	98,613	87,800
Realized and unrealized gains on futures	(178,918)	(126,923)
Other realized gains	(2,903)	(2,201)
Change in servicing reserves	994	(301)
Deboarding fees associated with RoundPoint acquisition	3,336	2,368
Certain operating expenses[6]	10,396	7,134
Gain on repurchase and retirement of preferred stock	—	(2,454)
Net provision for income taxes associated with market-driven value changes	32,402	16,514
Income Excluding Market-Driven Value Changes to common stockholders	$ 49,288	$ 57,501
Weighted average basic common shares	96,176,287	96,387,877
Income Excluding Market-Driven Value Changes per weighted average basic common share	$ 0.51	$ 0.60

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, certain operating expenses and gains on the repurchase and retirement of preferred stock and convertible senior notes. As defined, IXM includes the realization of portfolio cash flows which incorporates actual prepayments, changes in portfolio accrued interest, 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, shape of the term structure and volatility factored into the previous day ending fair value are unchanged. Assumptions for spreads, forward interest rates, shape of the term stricture, 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 certain operating expenses and provision for income taxes associated with IXM. The purpose of presenting IXM, and the various adjustments related to market-driven value changes and certain legal expenses and acquisition transaction costs, is to provide management, analysts and investors with a profit and loss attribution that allows them to better understand the sources of returns from the company's investment portfolio, operating expenses and tax expenses. 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.

Earnings Available for Distribution

($ millions, except per share data)	Q3-2023	Q2-2023	Variance
Interest income	$ 123.6	$ 117.8	$ 5.8
Interest expense	173.1	159.6	(13.5)
Net interest expense	(49.5)	(41.8)	(7.7)
Servicing income	178.6	175.2	3.4
MSR amortization[1]	(90.5)	(91.8)	1.3
Interest spread income on interest rate swaps	6.9	3.5	3.4
TBA dollar roll losses[2]	(2.1)	(3.5)	1.4
U.S. Treasury futures income[3]	11.2	5.6	5.6
Other derivatives income	—	0.1	(0.1)
Total other income	104.1	89.1	15.0
Servicing expenses	28.9	25.5	(3.4)
Operating expenses	12.6	11.9	(0.7)
Total expenses	41.5	37.4	(4.1)
Provision for income taxes	1.8	1.5	(0.3)
Earnings Available for Distribution[4]	**$ 11.3**	**$ 8.4**	**$ 2.9**
Dividends on preferred stock	(12.1)	(12.1)	—
Earnings Available for Distribution available to common stockholders	**$ (0.8)**	**$ (3.7)**	**$ 2.9**
Earnings Available for Distribution per weighted average basic common share	**$ (0.01)**	**$ (0.04)**	
Earnings Available for Disribution annualized return on average common equity	**(0.2)%**	**(1.0)%**	
Operating expenses, excluding non-cash LTIP amortization and certain operating expenses, as a percentage of average equity[5]	2.3 %	2.2 %	

- EAD is expected to continue to diverge from ongoing earnings power[6]
  - 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

Q3-2023 Portfolio Yields and Financing Costs

TWO HARBORS Investment Corp.

($ thousands)				
Portfolio Asset Type	Measure	Average Amortized Cost	Income[1]	Average Yield
Available-for-sale securities	GAAP	$ 9,284,380	$ 107,827	4.65%
Adjustments to include other portfolio items:				
Mortgage servicing rights[2][3]	Non-GAAP	2,029,201	59,276	11.68%
Agency derivatives[2][4]	Non-GAAP	18,257	91	1.99%
TBAs[2][5]	Non-GAAP	2,599,044	22,517	3.47%
Total portfolio	Non-GAAP	$ 13,930,882	$ 189,711	5.45%
Financing Collateral Type	Measure	Average Outstanding Balance	Expense[6]	Average Cost
Borrowings collateralized by available-for-sale securities	GAAP	$ 8,757,647	$ 122,746	5.61%
Adjustments to include other financing items:				
Borrowings collateralized by mortgage servicing rights and advances	GAAP	2,021,279	45,539	9.01%
Borrowings collateralized by Agency derivatives[4]	GAAP	11,679	173	5.93%
Convertible senior notes[7]	GAAP	268,043	4,636	6.92%
Interest rate swaps[2][8]	Non-GAAP		(6,851)	(0.20)%
U.S. Treasury futures[2][9]	Non-GAAP		(11,174)	(0.33)%
TBAs[2][5]	Non-GAAP	2,599,044	24,623	3.79%
Total financing	Non-GAAP	$ 13,657,692	$ 179,692	5.26%
Net Spread	Measure			Average Yield, less Cost
Net spread on AFS securities	**GAAP**			**(0.96%)**
Net spread on total portfolio	**Non-GAAP**			**0.19%**

GAAP to EAD Reconciliation

TWO HARBORS Investment Corp.

Reconciliation of GAAP to non-GAAP Information ($ thousands, except for per common share data)	Three Months Ended September 30, 2023	Three Months Ended June 30, 2023
Comprehensive (loss) income attributable to common stockholders	**$ (56,845)**	**$ 31,478**
Adjustment for other comprehensive loss attributable to common stockholders:		
Unrealized loss on available-for-sale securities	350,922	156,306
Net income attributable to common stockholders	**$ 294,077**	**$ 187,784**
Adjustments to exclude reported realized and unrealized (gains) losses:		
Realized loss on securities	289	2,640
Unrealized loss (gain) on securities	280	(4,834)
(Reversal of) provision for credit losses	(98)	22
Realized and unrealized gain on mortgage servicing rights	(67,369)	(21,679)
Realized loss on termination or expiration of interest rate swaps and swaptions	5,176	—
Unrealized gain on interest rate swaps and swaptions	(110,234)	(53,080)
Realized and unrealized gain on other derivative instruments	(86,121)	(47,063)
Gain on repurchase and retirement of preferred stock	—	(2,454)
Other realized and unrealized gains	(2,903)	(2,200)
Other adjustments:		
MSR amortization[(1)]	(90,485)	(91,836)
TBA dollar roll losses[(2)]	(2,106)	(3,526)
U.S. Treasury futures income[(3)]	11,174	5,652
Change in servicing reserves	994	(301)
Non-cash equity compensation expense	1,576	1,735
Certain operating expenses[(4)]	10,396	7,134
Net provision for income taxes on non-EAD	34,578	18,290
Earnings available for distribution to common stockholders	$ (776)	$ (3,716)
Weighted average basic common shares	96,176,287	96,387,877
Earnings available for distribution to common stockholders per weighted average basic common share	$ (0.01)	$ (0.04)

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 certain operating 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 certain 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.

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							
≤ 2.5%	$ 428	$ 341	4.6 %	— %	$ 365	3.3 %	27
3.0%	243	202	2.6 %	85.4 %	215	3.7 %	23
3.5%	79	68	5.9 %	75.3 %	73	4.3 %	20
4.0%	515	463	7.4 %	100.0 %	520	4.6 %	46
4.5%	2,820	2,613	6.0 %	100.0 %	2,877	5.2 %	34
5.0%	2,738	2,599	6.2 %	100.0 %	2,789	5.8 %	17
5.5%	1,380	1,340	6.6 %	99.8 %	1,394	6.4 %	15
6.0%	792	785	4.5 %	99.8 %	812	6.9 %	14
≥ 6.5%	9	9	18.1 %	97.7 %	10	7.8 %	248
	9,004	8,420	6.0 %	95.4 %	9,055	5.6 %	24
Other P&I[3]	382	351	1.1 %	— %	373	5.1 %	11
IOs and IIOs[4]	1,078	62	8.1 %	— %	79	4.7 %	117
Total Agency RMBS	$ 10,464	$ 8,833		90.9 %	$ 9,507		

	Notional Amount ($ millions)	Bond Equivalent Value ($ millions)[5]	Through-the-Box Speeds[6]
TBA Positions			
≤ 2.5%	$ —	$ —	2.3 %
3.0%	—	—	2.4 %
3.5%	300	258	2.4 %
4.0%	—	—	3.1 %
4.5%	189	176	3.1 %
5.0%	—	—	5.4 %
5.5%	50	48	7.8 %
6.0%	603	595	12.0 %
≥ 6.5%	1,052	1,057	16.5 %
Net TBA Position	$ 2,194	$ 2,134	

Mortgage Servicing Rights Portfolio[1]

TWO HARBORS Investment Corp.

	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%	302,169	$ 96,221	2.8%	$ 376	32	768	71%	0.4%	3.9%	25.1
3.25% - 3.75%	147,636	38,588	3.4%	331	45	753	74%	0.7%	5.1%	25.2
3.75% - 4.25%	107,554	22,550	3.9%	275	67	751	76%	1.0%	6.0%	25.5
4.25% - 4.75%	60,608	11,217	4.4%	264	66	739	77%	1.8%	6.8%	25.3
4.75% - 5.25%	41,743	9,778	4.9%	355	35	746	79%	1.5%	5.2%	25.2
> 5.25%	60,436	16,920	5.9%	382	17	745	80%	1.2%	5.7%	25.9
	720,146	195,274	3.5%	349	39	758	74%	0.7%	4.8%	25.2
15-Year Fixed										
≤ 2.25%	22,852	6,074	2.0%	313	29	777	59%	0.1%	3.8%	25.0
2.25% - 2.75%	38,633	8,235	2.4%	262	33	772	59%	0.2%	5.2%	25.0
2.75% - 3.25%	34,763	4,781	2.9%	193	59	766	61%	0.3%	7.1%	25.3
3.25% - 3.75%	19,957	2,011	3.4%	152	72	756	64%	0.5%	8.9%	25.4
3.75% - 4.25%	9,350	800	3.9%	141	68	742	65%	0.8%	8.4%	25.3
> 4.25%	6,515	785	4.9%	224	31	741	65%	0.9%	9.2%	27.0
	132,070	22,686	2.6%	246	42	768	60%	0.3%	5.8%	25.2
Total ARMs	2,600	702	4.4%	359	54	761	70%	1.0%	16.6%	25.4
Total Portfolio	854,816	$ 218,662	3.4%	$ 338	40	759	72%	0.7%	4.9%	25.2

Mortgage Servicing Rights UPB Roll-Forward

$ millions	Q3-2023	Q2-2023	Q1-2023	Q4-2022	Q3-2022
UPB at beginning of period	$ 222,622	$ 212,445	$ 204,877	$ 206,614	$ 227,074
Bulk purchases of mortgage servicing rights	—	14,234	10,713	—	—
Flow purchases of mortgage servicing rights	472	539	669	2,678	4,449
Sales of mortgage servicing rights	—	—	(143)	—	(19,807)
Scheduled payments	(1,640)	(1,595)	(1,527)	(1,538)	(1,565)
Prepaid	(2,787)	(2,993)	(2,120)	(2,440)	(3,709)
Other changes	(5)	(8)	(24)	(437)	172
UPB at end of period	$ 218,662	$ 222,622	$ 212,445	$ 204,877	$ 206,614

Financing

$ millions

Outstanding Borrowings and Maturities[1]	Repurchase Agreements	Revolving Credit Facilities	Term Notes Payable	Convertible Notes	Total Outstanding Borrowings	Percent (%)
Within 30 days	$ 1,717.6	$ —	$ —	$ —	$ 1,717.6	15.5 %
30 to 59 days	1,129.0	—	—	—	1,129.0	10.2 %
60 to 89 days	—	—	—	—	—	— %
90 to 119 days	2,570.7	—	—	—	2,570.7	23.2 %
120 to 364 days	3,696.0	357.3	295.0	—	4,348.3	39.2 %
One to three years	—	1,053.4	—	268.2	1,321.6	11.9 %
Three to five years	—	—	—	—	—	— %
	$ 9,113.3	$ 1,410.7	$ 295.0	$ 268.2	$ 11,087.2	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	$ 8,822.5	$ —	$ —	n/a	$ 8,822.5	70.8 %
Mortgage servicing rights, at fair value	503.6	2,307.3	398.4	n/a	3,209.3	25.7 %
Restricted cash	343.1	—	0.2	n/a	343.3	2.8 %
Due from counterparties	34.9	—	—	n/a	34.9	0.3 %
Derivative assets, at fair value	9.6	—	—	n/a	9.6	0.1 %
Other assets (includes servicing advances)	—	42.7	—	n/a	42.7	0.3 %
U.S. Treasuries[3]	—	—	—	n/a	—	— %
	$ 9,713.7	$ 2,350.0	$ 398.6	n/a	$ 12,462.3	100.0 %

Futures

Type & Maturity	Notional Amount ($M)	Carrying Value ($M)[1]	Weighted Average Days to Expiration
U.S. Treasury futures - 5 year	$ (2,868)	$ —	96
U.S. Treasury futures - 10 year	(2,075)	—	90
U.S. Treasury futures - 20 year	(335)	—	90
SOFR futures			
< 1 year	(1,843)	—	239
> 1 and < 2 years	(750)	—	581
Total futures	$ (7,871)	$ —	174

Interest Rate Swaps and Swaptions

INTEREST RATE SWAPS

Maturities	Notional Amounts ($B)	Average Fixed Pay Rate	Average Receive Rate	Average Maturity (Years)
Payers				
2023	$ —	— %	— %	—
2024	—	— %	— %	—
2025	2.6	4.730 %	5.310 %	1.5
2026	—	— %	— %	—
2027 and Thereafter	3.1	3.570 %	5.310 %	8.7
	$ 5.7	4.108 %	5.310 %	5.3

Maturities	Notional Amounts ($B)	Average Pay Rate	Average Fixed Receive Rate	Average Maturity (Years)
Receivers				
2023	$ —	— %	— %	—
2024	—	— %	— %	—
2025	1.8	5.310 %	3.899 %	1.5
2026	—	— %	— %	—
2027 and Thereafter	1.0	5.310 %	3.314 %	7.1
	$ 2.8	5.310 %	3.755 %	8.6

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	$ 0.5	$ 0.6	5.4	$ 200.0	5.13 %	1.0
Sale Contracts:							
Payer	<6 Months	$ (0.3)	$ (0.4)	5.4	$ (400.0)	5.61 %	1.0

End Notes

PAGE 3 - Financials Overview

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. Income Excluding Market-Driven Value Changes, or IXM, is a non-GAAP measure. Please Appendix slide 20 for a definition of IXM and a reconciliation of GAAP to non-GAAP financial information.
3. Includes $12.0 billion in settled positions and $2.1 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 11 and Appendix slides 24 and 25.
4. 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.

PAGE 5 - Markets Overview

1. Bloomberg data as of the dates noted.

PAGE 6 - Book Value Summary

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.

PAGE 7 - Results and Return Contributions

1. Market-Driven Value changes represents the company's portfolio return from unexpected price changes. Unexpected price changes represent the differences between (a) actual spreads, forward interest rates, shape of the term structure and volatility, and (b) the spreads, forward interest rates, shape of the term structure and volatility that were factored into the previous day ending fair value. Unexpected price changes are measured daily and used to determine the portion of actual market price changes not attributable to modeled price changes. The reported market-driven value changes adjustment for each of RMBS and other Agency securities, MSR, swap and swaptions and TBA is the sum of all daily unexpected price changes for the referenced period. Please Appendix slide 20 for a definition of IXM and a reconciliation of GAAP to non-GAAP financial information.
2. Certain operating expenses predominantly consists of expenses incurred in connection with the company's ongoing litigation with PRCM Advisers LLC. It also includes certain transaction expenses incurred in connection with the company's acquisition of RoundPoint Mortgage Servicing LLC.
3. Income Excluding Market-Driven Value Changes, or IXM, is a non-GAAP measure. Please Appendix slide 20 for a definition of IXM and a reconciliation of GAAP to non-GAAP financial information.
4. 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 8 - IXM Quarterly Review
1. Income Excluding Market-Driven Value Changes, or IXM, is a non-GAAP measure. Please Appendix slide 20 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.

PAGE 9 - 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 three-month and six-month periods between Q3 2019 and Q3 2023 (as of September 30, 2023).
2. Balance of five-year MSR term notes excludes deferred debt issuance costs.

PAGE 10 - Market Conditions
1. Source: J.P. Morgan DataQuery. Data is model-based and represents universal mortgage-backed securities (UMBS) TBA spreads as of the dates noted. In 2023, J.P. Morgan updated their model affecting only 2023 data.
2. Source: Spreads generated using internal projections for prepayments. Data as of September 30, 2023.

PAGE 11 - Quarterly Activity and Portfolio Composition
1. For additional detail on the portfolio, see Appendix slides 24 and 25.
2. 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.
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. 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 12 - 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 September 30, 2023.
5. Three-month prepayment speeds of delivered TBA contracts; average of J.P. Morgan, Bank of America, and Citi data.

End Notes (continued)

TWO HARBORS Investment Corp.

PAGE 13 - 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. 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 as well as MSR on loans recently settled for which transfer to the company is not yet complete.
5. Three-month prepayment speeds of delivered TBA contracts; average of J.P. Morgan, Bank of America, and Citi data.

PAGE 14 - 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 16 - Effective Coupon Positioning

1. Represents UMBS TBA market prices as of September 30, 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 17 - 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.

End Notes (continued)

PAGE 18 - 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.

PAGE 19 - Comparison of GAAP and non-GAAP Measures

1. Earnings Available for Distribution, or EAD, is a non-GAAP measure. Please see Appendix slide 23 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 20 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 price change based on Realized Forwards 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. RMBS and other Agency securities daily price change for IXM is reflected as the sum of amortization and realized and unrealized, and provision for credit losses.
5. Servicing expenses for IXM excludes deboarding fees associated with one-time transfers of MSR.
6. MSR daily price change based on Realized Forwards 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 servicing expenses. MSR daily price change for IXM is reflected as the sum of amortization and realized and unrealized, including change in servicing reserves.
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. Other income for IXM excludes gains on repurchases of convertible senior notes.
10. Operating expenses for IXM excludes certain operating expenses. Certain operating expenses predominantly consists of expenses incurred in connection with the company's ongoing litigation with PRCM Advisers LLC. It also includes certain transaction expenses incurred in connection with the company's acquisition of RoundPoint Mortgage Servicing LLC.
11. 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.

End Notes (continued)

PAGE 20 - GAAP to IXM Reconciliation

1. The market-driven value changes adjustment for each of RMBS and other Agency securities, MSR, swap and swaptions and TBA represents unexpected price changes for the referenced period. As defined, the calculation of IXM includes modeled price changes that are measured daily based on a "Realized Forwards" methodology, which includes the assumption that spreads, forward interest rates, shape of the term structure and volatility factored into the previous day ending fair value are unchanged. Unexpected price changes represent the differences between (a) actual spreads, forward interest rates, shape of the term structure and volatility, and (b) the spreads, forward interest rates, shape of the term structure and volatility that were factored into the previous day ending fair value. Unexpected price changes are measured daily and used to determine the portion of actual market price changes not attributable to modeled price changes. The reported market-driven value changes adjustment for each of RMBS and other Agency securities, MSR, swap and swaptions and TBA is the sum of all daily unexpected price changes for the referenced period. Please refer to end notes (2) through (5) for this slide for further information.
2. 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, shape of the term structure 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.
3. 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, 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, shape of the term structure and volatility factored into the previous day ending fair value are unchanged.
4. 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.
5. 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.
6. Certain operating expenses predominantly consists of expenses incurred in connection with the company's ongoing litigation with PRCM Advisers LLC. It also includes certain transaction expenses incurred in connection with the company's acquisition of RoundPoint Mortgage Servicing LLC.

PAGE 21 - 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 23 for a definition of EAD and a reconciliation of GAAP to non-GAAP financial information.
5. Certain operating expenses predominantly consists of expenses incurred in connection with the company's ongoing litigation with PRCM Advisers LLC. It also includes certain transaction expenses incurred in connection with the company's acquisition of RoundPoint Mortgage Servicing LLC.
6. 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 22 - 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. As reported elsewhere in the company's filings with the Securities and Exchange Commission, MSR, Agency derivatives, TBA, interest rate swap agreements and U.S. Treasury futures are reported at fair value in the company's consolidated financial statements in accordance with GAAP, and the GAAP presentation and disclosure requirements for these items do not define or include the concepts of yield or cost of financing, amortized cost, or outstanding borrowings.
3. 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.
4. Represents inverse interest-only Agency RMBS which are accounted for as derivative instruments in accordance with GAAP.
5. 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.
6. 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.
7. Unsecured convertible senior notes.
8. 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.
9. 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 23 - 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.
4. Certain operating expenses predominantly consists of expenses incurred in connection with the company's ongoing litigation with PRCM Advisers LLC. It also includes certain transaction expenses incurred in connection with the company's acquisition of RoundPoint Mortgage Servicing LLC.

End Notes (continued)

PAGE 24 - Agency RMBS Portfolio

1. Weighted average actual one-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 $9.9 million of Agency derivatives and $51.8 million of interest-only Agency RMBS. Agency derivatives are inverse interest-only Agency RMBS, which are accounted for as derivative instruments in accordance with GAAP.
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, Bank of America, 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 5.6 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.

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 September 30, 2023, all underlying swap floating rates were tied to SOFR.


TWO HARBORS
Investment Corp.