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

# FORM 8-K/A

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

Date of Report: May 6, 2020

# 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.) |
| **575 Lexington Avenue, Suite 2930** | **New York, NY** | **10022** |
| (Address of Principal Executive Offices) | | (Zip Code) |

**(612) 629-2500**
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 (see General Instruction A.2. below):

☐ 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 |
| 7.75% Series D Cumulative Redeemable Preferred Stock | TWO PRD | New York Stock Exchange |
| 7.50% Series E Cumulative Redeemable Preferred Stock | TWO PRE | 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.

☐

**Explanatory Note**

On May 6, 2020, Two Harbors Investment Corp. (the "Company") furnished as Exhibit 99.2 to its Current Report on Form 8-K (the "Original Form 8-K") its 2020 First Quarter Earnings Call Presentation (the "Original Presentation") to accompany the release of its financial results for the quarter ended March 31, 2020. The Original Presentation incorrectly references, on slide 18, that anticipated returns on Agency residential mortgage-backed securities ("RMBS") are in the mid-to-high teens and that returns for the Company's current book of mortgage servicing rights ("MSR"), paired with Agency RMBS, are in the low-to-mid teens. As referenced in the updated presentation furnished herewith as Exhibit 99.2 (the "Updated Presentation"), the Company anticipates that returns on Agency RMBS are in the low-to-mid teens and that anticipated returns for the Company's current book of MSR, paired with Agency RMBS, are in the high teens.

The Company is filing this Amendment No. 1 to the Original Form 8-K solely to correct and replace the Original Presentation with the Updated Presentation. Accordingly, Item 9.01 is hereby amended by furnishing herewith the Updated Presentation as Exhibit 99.2. No other changes have been made to either the Original Presentation or the Original Form 8-K.

**Item 9.01 Financial Statements and Exhibits.**

(d) Exhibits.

| Exhibit No. | Description |
| --- | --- |
| 99.1 | Press Release of Two Harbors Investment Corp., dated May 6, 2020 (incorporated by reference to Exhibit 99.1 of the Company's Current Report on Form 8-K filed with the SEC on May 6, 2020). |
| 99.2 | 2020 First Quarter Earnings Call Presentation. |
| 104 | Cover Page Interactive Data File, formatted in Inline XBRL. |

**SIGNATURES**

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

TWO HARBORS INVESTMENT CORP.

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

Date: May 7, 2020


First Quarter 2020
Earnings Call
MAY 7, 2020
TWO HARBORS
Investment Corp.
A Pine River Capital Managed Company

# Safe Harbor Statement

## FORWARD-LOOKING STATEMENTS

This presentation includes "forward-looking statements" within the meaning of the safe harbor provisions of the United States Private Securities Litigation Reform Act of 1995. Actual results may differ from expectations, estimates and projections and, consequently, readers should not rely on these forward-looking statements as predictions of future events. Words such as "expect," "target," "assume," "estimate," "project," "budget," "forecast," "anticipate," "intend," "plan," "may," "will," "could," "should," "believe," "predicts," "potential," "continue," and similar expressions are intended to identify such forward-looking statements. These forward-looking statements involve significant risks and uncertainties that could cause actual results to differ materially from expected results, including, among other things, those described in our Annual Report on Form 10-K for the year ended December 31, 2019, and any subsequent Quarterly Reports on Form 10-Q, under the caption "Risk Factors." Factors that could cause actual results to differ include, but are not limited to: the state of credit markets and general economic conditions; the ongoing impact of the COVID-19 pandemic, and the actions taken by federal and state governmental authorities and GSEs in response, on the U.S. economy, financial markets and our target assets; changes in interest rates and the market value of our assets; changes in prepayment rates of mortgages underlying our target assets; the rates of default or decreased recovery on the mortgages underlying our target assets; the occurrence, extent and timing of credit losses within our portfolio; the concentration of credit risks we are exposed to; declines in home prices; our ability to establish, adjust and maintain appropriate hedges for the risks in our portfolio; the availability and cost of our target assets; the availability and cost of financing; changes in the competitive landscape within our industry; our ability to effectively execute and to realize the benefits of strategic transactions and initiatives we have pursued or may in the future pursue; our decision not to renew our management agreement with PRCM Advisers LLC and our ability to successfully transition to a self-managed company; our ability to manage various operational risks and costs associated with our business; interruptions in or impairments to our communications and information technology systems; our ability to acquire mortgage servicing rights (MSR) and successfully operate our seller-servicer subsidiary and oversee our subservicers; the impact of any deficiencies in the servicing or foreclosure practices of third parties and related delays in the foreclosure process; our exposure to legal and regulatory claims; legislative and regulatory actions affecting our business; the impact of new or modified government mortgage refinance or principal reduction programs; our ability to maintain our REIT qualification; and limitations imposed on our business due to our REIT status and our exempt status under the Investment Company Act of 1940.

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

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.

# Executive Overview

## *Took Decisive Action in Unprecedented Market Conditions Stemming from COVID-19 Pandemic*

### *Quarterly Summary*

- Experienced unprecedented market conditions stemming from the global COVID-19 pandemic. As a result, we took decisive action to reduce portfolio risk and amass a strong defensive liquidity position.
- Sold substantially all of our non-Agency securities, eliminating the risk of continued outsized margin calls and ongoing funding concerns associated with the significant spread widening on these assets.
- Focused on the safety and well-being of our people by implementing mandatory work-from-home measures across all three of our offices.
- Reported book value of $6.96 per common share.
- Incurred a Comprehensive Loss of $(2.1) billion, or $(7.63) per weighted average basic common share, representing an annualized return on average common equity of (225.2)%.
- Reported Core Earnings of $67.6 million, or $0.25 per weighted average basic common share.(1)

### *Post Quarter-End Business Update*

- Announced non-renewal of management agreement and transition to self-management effective September 19, 2020. Expect benefits to stockholders to include: (1) substantial annual cost savings of approximately $42 million or $0.15 per common share; (2) further alignment of interests of management and stockholders; (3) potential for enhanced returns on future capital growth; and (4) potential for attracting new institutional investors.
- In advanced discussions with two major banks regarding servicing advance facilities, which are expected to be finalized in the next 30-60 days, subject to customary closing conditions and GSE approvals.
- Paid interim dividend of $0.05 per common share and all first quarter preferred dividends; will continue to evaluate our quarterly dividends based on evolving market conditions.



(1) Core Earnings is a non-GAAP measure. Please see Appendix slide 24 for a definition of Core Earnings and a reconciliation of GAAP to non-GAAP financial information.

# Book Value Summary

| (Dollars in millions, except per share data) | Q1-2020 Book Value | Q1-2020 Book Value per share |
|---|---|---|
| **Beginning common stockholders' equity** | **$ 3,969.2** | **$ 14.54** |
| GAAP Net Loss: | | |
| Core Earnings, net of tax[1] | 86.6 | |
| Dividend declaration - preferred | (19.0) | |
| Core Earnings attributable to common stockholders, net of tax[1] | 67.6 | |
| Realized and unrealized gains and losses, net of tax | (1,956.2) | |
| Other comprehensive loss, net of tax | (198.1) | |
| Preferred stock dividends in arrears | 19.0 | |
| Other | 2.3 | |
| Repurchases of common stock | (1.1) | |
| Issuance of common stock, net of offering costs | 0.1 | |
| **Ending common stockholders' equity** | **$ 1,902.8** | **$ 6.96** |
| Total preferred stock liquidation preference | 1,001.3 | |
| **Ending total equity** | **$ 2,904.1** | |

| Attribution of Decrease in Book Value | |
|---|---|
| Realized and unrealized losses on Credit Strategy (non-Agency securities & derivatives) | (71)% |
| Realized and unrealized losses on Rates Strategy (Agency RMBS, MSR & derivatives) | (33)% |
| Other | 4 % |



(1) Core Earnings is a non-GAAP measure. Please see Appendix slide 24 for a definition of Core Earnings and a reconciliation of GAAP to non-GAAP financial information.

# Core Earnings Review[1]

| (Dollars in millions, except per share data) | Q4-2019 | Q1-2020 | Variance ($) |
|---|---|---|---|
| Interest income | $ 237.3 | $ 255.5 | $ 18.2 |
| Interest expense | 167.3 | 167.3 | — |
| Net interest income | 70.0 | 88.2 | 18.2 |
| Servicing income, net of amortization on MSR | 54.6 | 55.2 | 0.6 |
| Gain (loss) on swaps and swaptions | 4.8 | (12.6) | (17.4) |
| Gain on other derivatives | 9.0 | 5.3 | (3.7) |
| Other | 0.1 | 0.1 | — |
| Total other income | 68.5 | 48.0 | (20.5) |
| Expenses | 49.4 | 47.0 | 2.4 |
| Provision for income taxes | 2.5 | 2.6 | 0.1 |
| **Core Earnings[1]** | **86.6** | **86.6** | **—** |
| Dividends on preferred stock | 18.9 | 19.0 | (0.1) |
| **Core Earnings attributable to common stockholders[1]** | **$ 67.7** | **$ 67.6** | **$ (0.1)** |
| | | | |
| **Basic weighted average Core EPS** | **$ 0.25** | **$ 0.25** | |
| **Core Earnings annualized return on average common equity** | **6.8%** | **7.3%** | |

- First quarter Core Earnings results
  - Favorably driven by:
    - Higher net interest income due to purchase of higher coupon Agency RMBS earlier in the quarter
    - Lower amortization
  - Offset by:
    - Increased interest spread cost on swap positions due to LIBOR resets
    - Lower TBA dollar roll income



(1) Core Earnings is a non-GAAP measure. Please see Appendix slide 24 for a definition of Core Earnings and a reconciliation of GAAP to non-GAAP financial information.

# Performance Summary

- Repo costs improved in the quarter, but this was offset by higher swap costs as 3-month LIBOR rates declined in the quarter
- Expect to see improvement in repo costs as LIBOR has come down post quarter-end

| | Realized Q4-2019 | Realized Q1-2020 |
|---|---|---|
| | | |
| **Annualized portfolio yield[(1)]** | **3.54%** | **3.52%** |
| **Rates** | | |
| Agency RMBS, Agency Derivatives and MSR | 3.20% | 3.18% |
| **Credit** | | |
| Non-Agency securities | 6.29% | 6.76% |
| **Annualized cost of funds[(2)]** | **2.35%** | **2.39%** |
| **Annualized net yield for aggregate portfolio** | **1.19%** | **1.13%** |

(1) Includes interest income on RMBS and servicing income net of servicing expenses and amortization on MSR.
(2) Cost of funds includes interest spread income/expense associated with the portfolio's interest rate swaps and caps.

# Financing Profile

## ECONOMIC DEBT-TO-EQUITY(1)

- 7.0x at March 31, 2020, compared to 7.5x at December 31, 2019
- Average leverage of 7.4x in the first quarter

## DIVERSE FINANCING PROFILE

### AGENCY RMBS

- Outstanding repurchase agreements of $17.8 billion with 22 counterparties
- Have not experienced any significant issues accessing the repo markets; active in rolling repo positions in the quarter

### MORTGAGE SERVICING RIGHTS

- Outstanding borrowings of $252.1 million under bilateral MSR financing facilities
- $400 million of outstanding 5-year MSR term notes(2)
- Committed total capacity of $450 million under MSR financing alternatives
- In advanced discussions with two major banks on servicing advance facilities



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

# Transition to Self-Management

## NON-RENEWAL OF MANAGEMENT AGREEMENT

- Announced election not to renew the management agreement with PRCM Advisers
- Decision was a result of diligent, thorough and extensive months-long process led by the independent directors of our Board
- Expect to pay one-time cash termination fee of approximately $144 million
- Confident that this is the right time to make this change and results in material economic benefits to our stockholders

## ANTICIPATED BENEFITS FOR STOCKHOLDERS

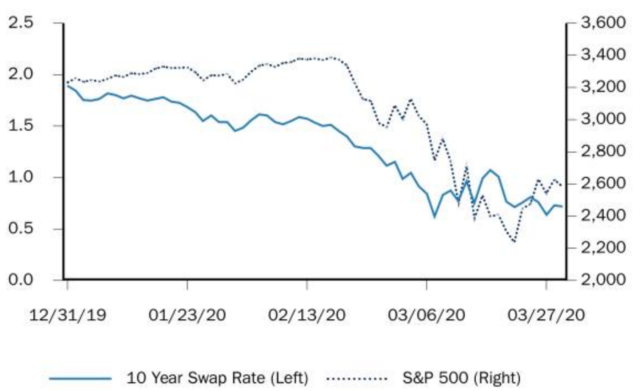
- ✓ Substantial anticipated annual cost savings of approximately $0.15 per common share
- ✓ Potential for enhanced returns on future capital growth
- ✓ Further aligns management with stockholders and reduces conflicts of interest
- ✓ Potential for attracting new institutional investors who disfavor external management structures
- ✓ Expect to continue to be managed by experienced senior management team

# Markets Overview - COVID-19 Pandemic

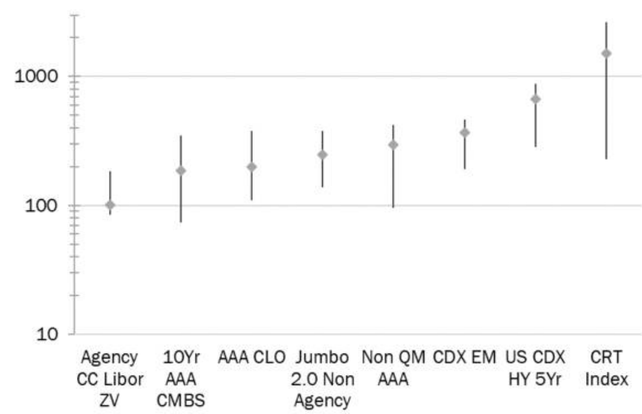
## RAPID AND DRAMATIC VOLATILITY RESULTED IN UNPRECEDENTED SPREAD WIDENING

- The COVID-19 pandemic had a swift and dramatic impact on the financial markets in March, causing extreme volatility and unprecedented spread widening across all asset classes
- Interest rates fell roughly 100 basis points (bps); equities, after reaching a high on February 19th, fell 35% before recovering
- Agency RMBS spreads widened as much as 100 bps to 200 bps, depending on coupon, beginning in the second week of March
- Since quarter-end, Agency RMBS have recovered almost completely to pre-crisis levels, whereas most other sectors have retraced some of their widening

Q1-2020 10-YEAR SWAP RATE AND S&P 500 PERFORMANCE(1)




SPREAD WIDENING IMPACT ACROSS ASSET CLASSES(2)





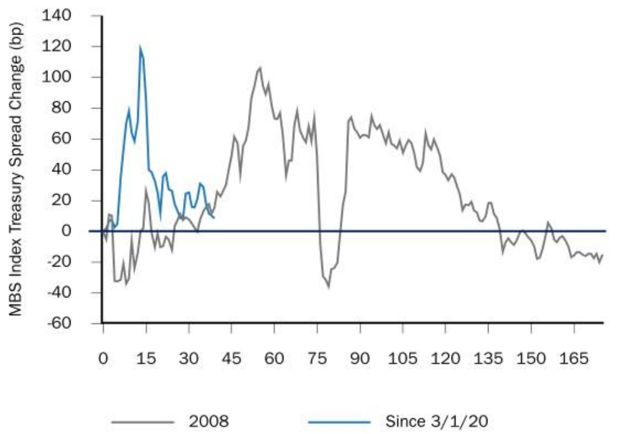

(1) Source: Bloomberg, as of March 31, 2020.
(2) Source: J.P. Morgan data query, as of April 29, 2020.

# Markets Overview - COVID-19 Pandemic

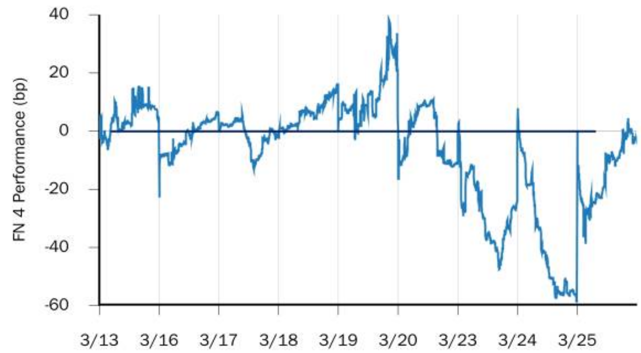
## HISTORIC MBS SPREAD WIDENING

- Current coupon spreads widened a similar amount compared to the 2008 financial crisis, but in a more compressed time period
  - It took 10 days vs. 60 days to reach the wides, and another 10 days vs. 100 days to retrace to the tights
- There were very extreme movements in mortgage spreads, sometimes widening and tightening 50 bps in a single day
- Price volatility was also created by illiquidity in the RMBS market

### SPREAD CHANGES IN 2008 VS. MARCH 2020(1)




### DAILY SPREAD CHANGES IN MARCH 2020(2)





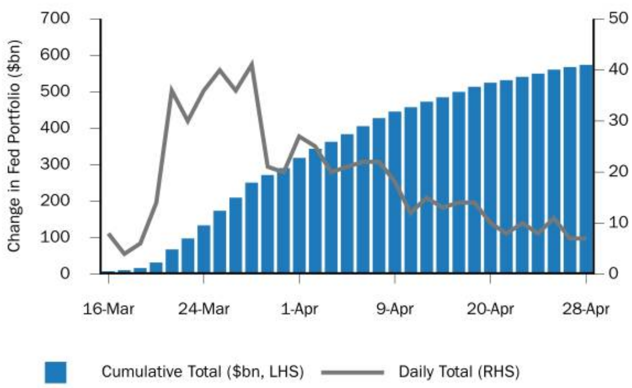

(1) J.P. Morgan's MBS Index, as of April 27, 2020.
(2) Source: Bloomberg, as of April 24, 2020.

# Markets Overview - COVID-19 Pandemic

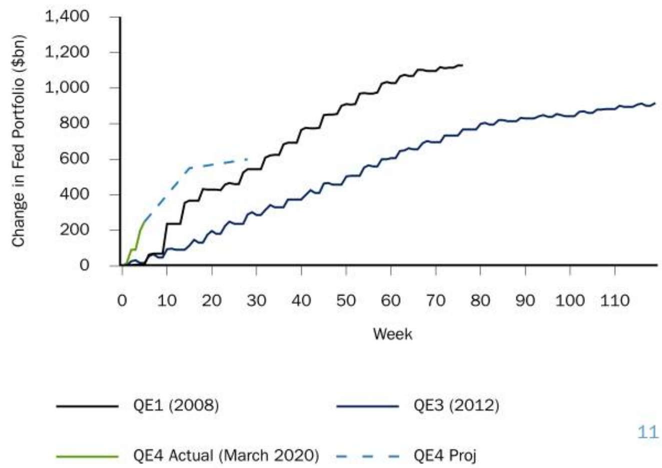
## EMERGENCY FED INTERVENTIONS THROUGHOUT MARCH STABILIZED THE MARKETS

- **March 3:** Fed intervened with an emergency 50 basis point cut to try to calm the markets
- **March 15**: The Fed cut rates again to zero. Additionally, the Fed announced that they would begin purchasing $500 billion Treasuries and $200 billion Agency RMBS in an attempt to stabilize those markets
- **March 23**: Fed said that they would buy an unlimited amount of Treasuries and RMBS to stabilize the market; this has become known as QE4
  - To date, the Fed has purchased more than $500 billion of RMBS, and expanded its balance sheet to over $6 trillion

### DAILY FED PURCHASES(1)




### CHANGE IN FED PORTFOLIO(2)




(1) Source: Citi Research, Federal Reserve, as of April 15, 2020.
(2) Source: Citi Research, Bloomberg, as of April 15, 2020.

# Portfolio Composition and Quarterly Activity

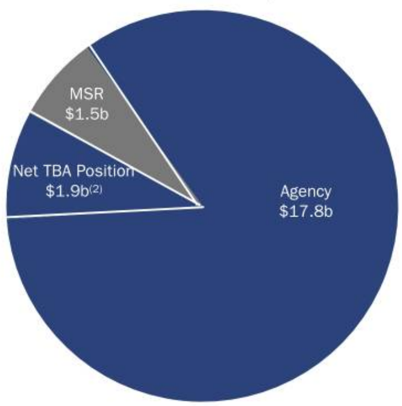
## PORTFOLIO ACTIVITY

- Took the following actions in response to the COVID-19 pandemic liquidity crisis:
  - De-levered Agency portfolio by selling approximately $18 billion of specified pools and TBAs
  - Sold substantially all of the non-Agency securities, eliminating risk of continued outsized margin calls and ongoing funding concerns

## Q1-2020 PORTFOLIO COMPOSITION(1)

### $21.2b PORTFOLIO AS OF MARCH 31, 2020

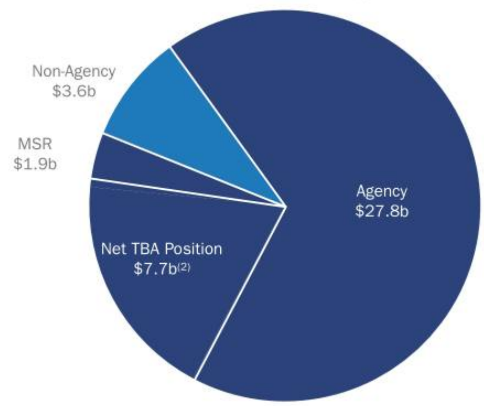
Includes $19.3b settled positions




## Q4-2019 PORTFOLIO COMPOSITION

### $41.0b PORTFOLIO AS OF DECEMBER 31, 2019

Includes $33.4b settled positions



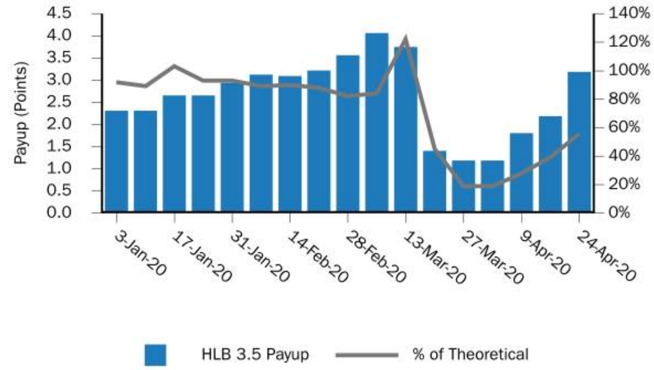

(1) For additional detail on the portfolio, see Appendix slides 25-27.
(2) Represents bond equivalent value of TBA position. Bond equivalent value is defined as notional amount multiplied by market price. Accounted for as derivative instruments in accordance with GAAP.

## Specified Pools

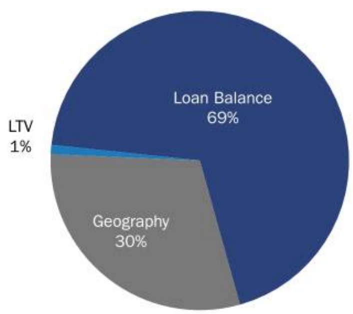
### SPECIFIED POOL QUARTERLY CHANGES

- Despite falling rates and theoretically more valuable protection, specified pool payups fell precipitously during the quarter, at times trading below TBA levels
- During the quarter we sold $7.0 billion of TBAs
- We also sold $13.4 billion of low payup 3's through 4.5's
- Specified pools significantly recovered in April

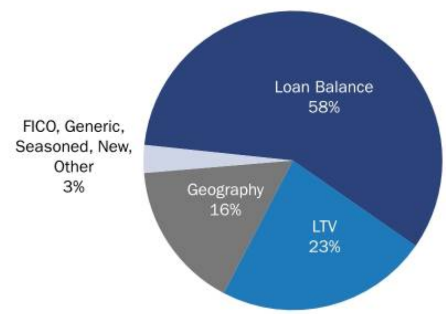
### EXAMPLE OF HIGH LOAN BALANCE 3.5(1)




### SPECIFIED POOL PORTFOLIO COMPOSITION 3/31/2020




### SPECIFIED POOL PORTFOLIO COMPOSITION 12/31/2019





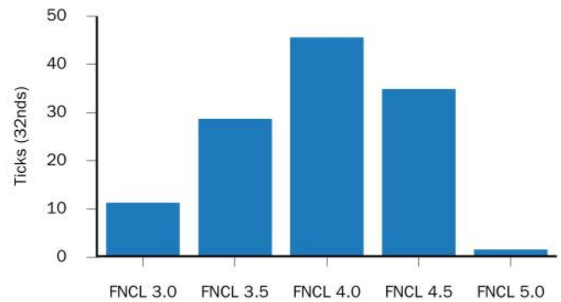

(1) J.P. Morgan data query, as of April 27, 2020.

# Coupon Positioning & Performance

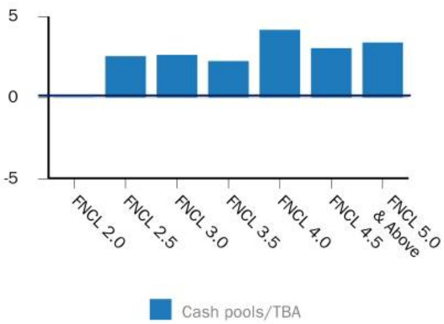
## QUARTERLY REVIEW

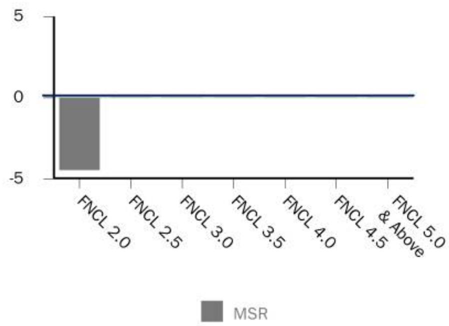
- Despite massive intraday and interday volatility in the RMBS spreads, quarter-to-date RMBS performed well, with the middle of the stack outperforming their hedges by about 1 point
- In March, when liquidity was poor, reduced lower coupons since they were more liquid than higher coupons
- Opportunistically moved down in coupon when the Fed stepped in to buy higher coupons

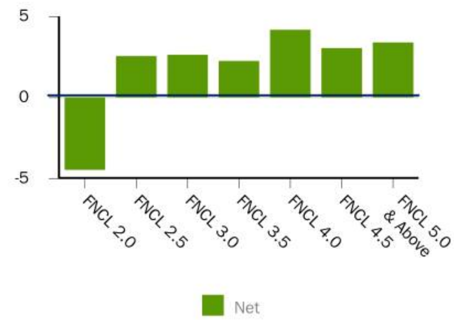
## QUARTERLY TBA PERFORMANCE(1)




## EFFECTIVE COUPON POSITIONING(2)




(1) J.P. Morgan Data Query as of March 31, 2020.

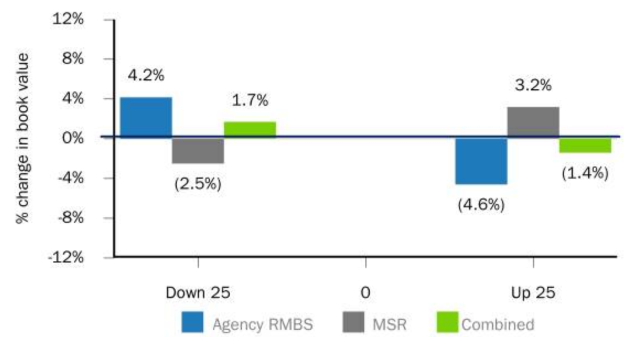
(2) The effective coupon positioning for MSR is an internally calculated exposure that represents the current coupon equivalents of our MSR assets. Data as of March 31, 2020.

# Risk Positioning

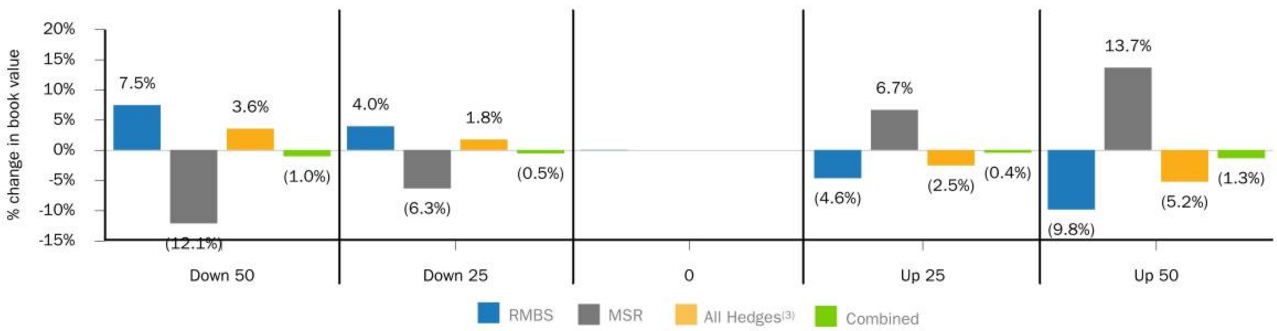
## LOW RISK EXPOSURES

- Exposure to mortgage spreads and interest rates remains small
- In a 25 bps spread widening, potential book value decrease of 1.4%
- In a 50 bps instantaneous parallel shift upward in interest rates, potential book value decrease of 1.3%

## COMMON BOOK VALUE EXPOSURE TO CHANGES IN SPREADS(1)




## COMMON BOOK VALUE EXPOSURE TO CHANGES IN RATES(2)




Note: Sensitivity data as of March 31, 2020. The above spread scenario is provided for illustration purposes only and is not necessarily indicative of Two Harbors' financial condition and operating results, nor is it necessarily indicative of the financial condition or results of operations that may be expected for any future period or date.

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

(2) Represents estimated change in common book value for theoretical parallel shift in interest rates.

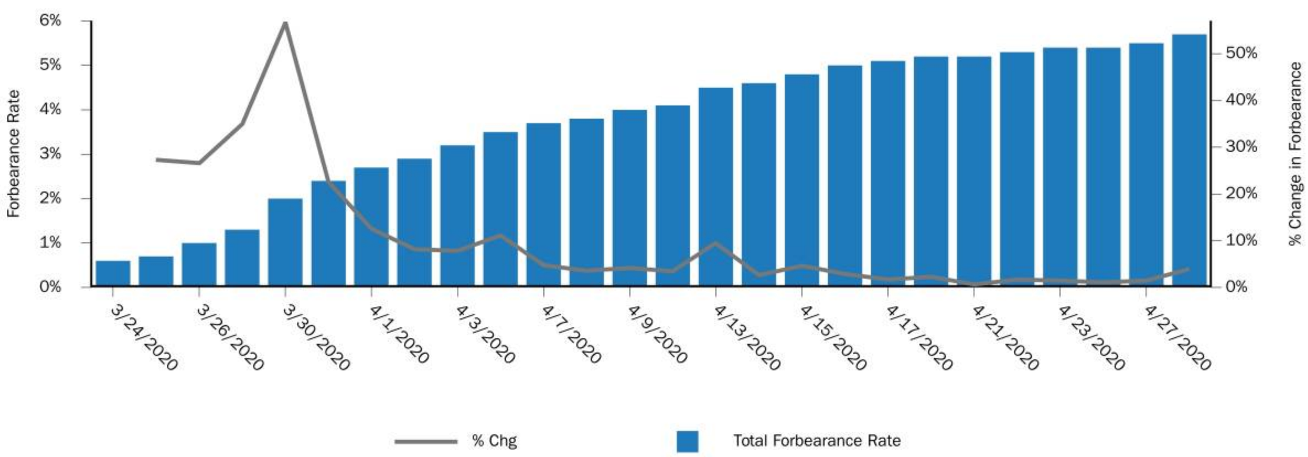
(3) All hedges includes derivative assets and liabilities and all borrowings. All Hedges excludes Agency derivatives, which are included in the RMBS category.

# Special Topic - Mortgage Loan Forbearance(1)

## MORTGAGE FORBEARANCE RATE ANTICIPATED TO BE MANAGEABLE

- As of April 28, 2020, 5.7% of our loans, by count, were in forbearance; 6.3% by UPB
- Blue bars are cumulative forbearance rate, by number of loans, and shown on the left hand axis
- Gray line (right axis) is the daily change in forbearance requests; daily changes are bouncing around the 2% area
- Believe that base case is roughly a 15% ultimate take-up rate

LOANS IN FORBEARANCE - AS OF 4/24/2020

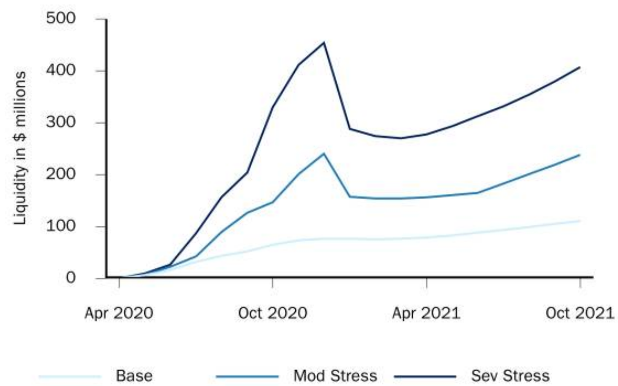


# Special Topic - Forbearance Scenario Analysis(1)

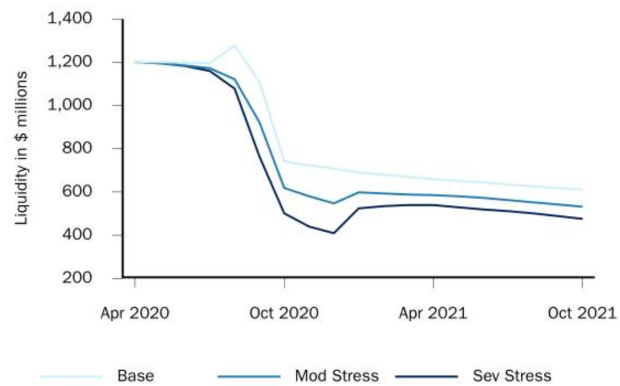
## CONFIDENT IN LIQUIDITY POSITION AND ABILITY TO MAKE FUTURE SERVICING ADVANCES

- Congress enacted the Coronavirus Aid, Relief, and Economic Security Act (CARES Act)
  - Provides up to 180 days of forbearance for borrowers with federally backed mortgages who experience financial hardship related to the pandemic
  - If needed, borrowers can extend forbearance for another 180 days
  - Prohibits foreclosures for 60 days
- Forbearance modeling is shown below in three scenarios: base case, moderate stress, severe stress
  - Base case: 15% peak forbearance, 25 CPR
  - Moderate stress: 20% peak forbearance, 20 CPR
  - Severe stress: 25% peak forbearance, 15 CPR

### FORBEARANCE PROJECTION




### LIQUIDITY PROJECTION




(1) The above forbearance and liquidity projections are provided for illustration purposes only and are not necessarily indicative of Two Harbors' financial condition and operating results, nor are these projections necessarily indicative of the financial condition or results of operations that may be expected for any future period or date. These scenarios include as assumptions: prepay speeds start at 25 CPR and ramp down to 10 CPR over 4 months; P&I advancing stops after 4 months, and is reimbursed at loan resolution, assumed to be 15 months from now; interim T&I reimbursement for Fannie. Based on model assumptions as of April 24, 2020.

# Outlook - Return Expectations

## OPPORTUNITY SET IN OUR TARGET ASSETS IS VERY ATTRACTIVE TODAY

- There are multiple near-term potential drags on earnings, including but not limited to:
  - Sub-optimal capital allocation
  - High cash balances
  - Servicing advance facilities costs
  - Higher sub-servicing costs on delinquent loans
  - Uncertainty in MSR pricing
- Estimate that returns on Agency RMBS are in the low-to-mid teens
- Estimate that forward-looking returns for current book of MSR (paired with Agency RMBS) are in the high teens
- Estimate that forward-looking returns for new flow MSR (paired with Agency RMBS) are north of 25%

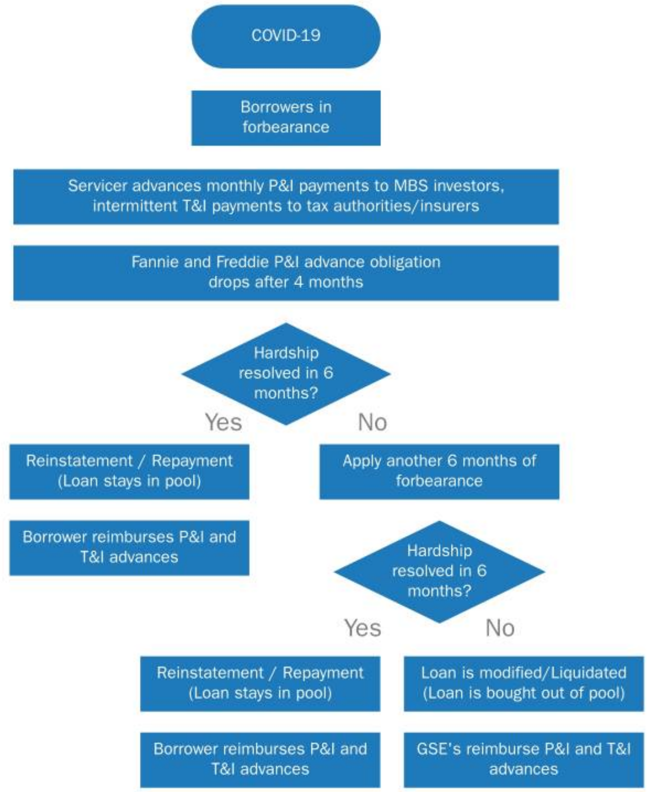
## Appendix


TWO HARBORS
Investment Corp.
A Pine River Capital Managed Company

# Special Topic - Servicing Advances

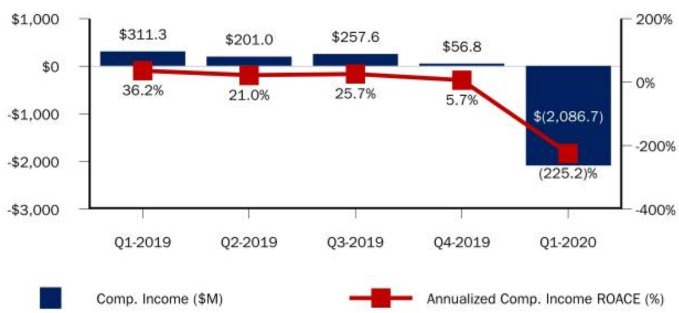
## ADVANCING OBLIGATIONS HAVE CHANGED

- Under the CARES Act, a borrower can request initial forbearance relief of up to 180 days
- Servicer is required to advance months of:
  - 4 months of scheduled principal and interest, for Fannie loans
  - 4 months of scheduled interest, for Freddie loans
  - Advances of taxes and insurance
- Prior to the end of the initial forbearance period, the servicer checks in with the borrower:
  - If the borrower can begin to make payments again either through reinstatement (lump sum) or a repayment plan; then principal and interest, and taxes and insurance are repaid to the servicer over the course of the plan
  - If the borrower cannot make payments, another 6 months of forbearance can be requested
- At the end of 12 months:
  - If the borrower can make his payments either through reinstatement (lump sum) or a repayment plan, then principal and interest, and taxes and insurance are repaid to the servicer over the course of the plan
  - If the borrower cannot make the payments, then there are several potential options:
    - Payment deferral (add payments to the end), or
    - Modification or liquidation
  - In the case of modification or liquidation, the loan is bought out of the pool and principal and interest, and taxes and insurance are repaid to the servicer



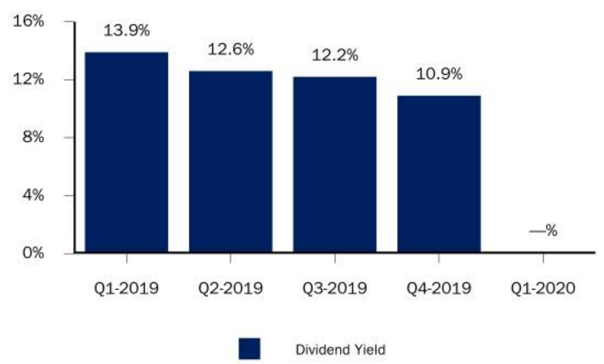
# Financial Performance

## COMPREHENSIVE INCOME (LOSS)




## QUARTERLY RETURN ON BOOK VALUE(1)


## DIVIDEND YIELD(2)




## BOOK VALUE AND DIVIDEND PER COMMON SHARE(2)


(1) Return on book value is defined as the increase (decrease) in book value per common share from the beginning to the end of the given period, plus dividends declared in the period, divided by the book value as of the beginning of the period.
(2) Historical dividends may not be indicative of future dividend distributions. The company ultimately distributes dividends based on its taxable income per common share, not GAAP earnings. The annualized dividend yield on the company's common stock is calculated based on the closing price of the last trading day of the relevant quarter.

# Q1-2020 Operating Performance

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

(1) Core Earnings is a non-GAAP measure. Please see Appendix slide 24 of this presentation for a definition of Core Earnings and a reconciliation of GAAP to non-GAAP financial information.

# Q4-2019 Operating Performance

| (In millions, except for per common share data) | Q4-2019 Core Earnings[1] | Realized Gains (Losses) | Unrealized MTM | Total |
|---|---|---|---|---|
| Interest income | $ 237.3 | $ — | $ 1.1 | $ 238.4 |
| Interest expense | 167.3 | — | — | 167.3 |
| Net interest income | 70.0 | — | 1.1 | 71.1 |
| Total other-than-temporary impairments and loss recovery adjustments | — | — | (3.3) | (3.3) |
| Gain on investment securities | — | 27.6 | 0.5 | 28.1 |
| Servicing income | 127.7 | — | — | 127.7 |
| (Loss) gain on servicing asset | (73.1) | (3.4) | 54.7 | (21.8) |
| Gain (loss) on interest rate swaps, caps and swaptions | 4.8 | (1.5) | (10.1) | (6.8) |
| Gain (loss) on other derivative instruments | 9.0 | (10.8) | (9.0) | (10.8) |
| Other income (loss) | 0.1 | — | (0.1) | — |
| Total other income | 68.5 | 11.9 | 36.0 | 116.4 |
| Management fees & other expenses | 49.4 | 2.5 | — | 51.9 |
| Net income before income taxes | 89.1 | 9.4 | 33.8 | 132.3 |
| Income tax expense (benefit) | 2.5 | (1.5) | (3.4) | (2.4) |
| **Net income** | **86.6** | **10.9** | **37.2** | **134.7** |
| Dividends on preferred stock | 19.0 | — | — | 19.0 |
| **Net income attributable to common stockholders** | **$ 67.6** | **$ 10.9** | **$ 37.2** | **$ 115.8** |
| Weighted average earnings per basic common share | $ 0.25 | $ 0.04 | $ 0.13 | $ 0.42 |

(1) Core Earnings is a non-GAAP measure. Please see Appendix slide 24 of this presentation for a definition of Core Earnings and a reconciliation of GAAP to non-GAAP financial information.

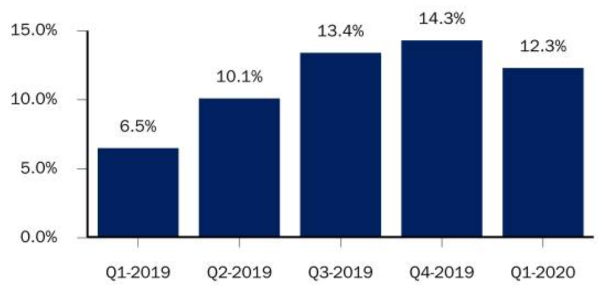
# GAAP to Core Earnings Reconciliation[(1)]

| Reconciliation of GAAP to non-GAAP Information<br>(In thousands, except for per common share data) | Three Months Ended December 31, 2019 | Three Months Ended March 31, 2020 |
|---|---|---|
| Reconciliation of Comprehensive income (loss) to Core Earnings: | | |
| | | |
| **Comprehensive income (loss) attributable to common stockholders** | **$ 56,850** | **$ (2,086,676)** |
| Adjustment for other comprehensive loss attributable to common stockholders: | | |
| Unrealized loss on available-for-sale securities | 58,954 | 198,070 |
| **Net income (loss) attributable to common stockholders** | **$ 115,804** | **$ (1,888,606)** |
| Adjustments for non-core earnings: | | |
| Other-than-temporary impairments and loss recovery adjustments | 2,198 | — |
| Realized (gain) loss on securities | (27,615) | 1,035,038 |
| Unrealized (gain) loss on securities | (526) | 931 |
| Provision for credit losses | — | 45,638 |
| Realized and unrealized (gain) loss on mortgage servicing rights | (51,387) | 511,059 |
| Realized loss (gain) on termination or expiration of swaps and swaptions | 1,495 | (361,853) |
| Unrealized losses on interest rate swaps, caps and swaptions | 10,148 | 599,834 |
| Losses on other derivative instruments | 19,833 | 138,819 |
| Other loss (income) | 73 | (735) |
| Change in servicing reserves | 72 | 232 |
| Non-cash equity compensation expense | 2,423 | 2,315 |
| Other nonrecurring expenses | — | 719 |
| Net benefit from income taxes on non-Core Earnings | (4,847) | (15,774) |
| **Core Earnings attributable to common stockholders[(1)]** | **$ 67,671** | **$ 67,617** |
| | | |
| Weighted average basic common shares | 272,906,815 | 273,392,615 |
| Core Earnings per weighted average basic common share | $ 0.25 | $ 0.25 |

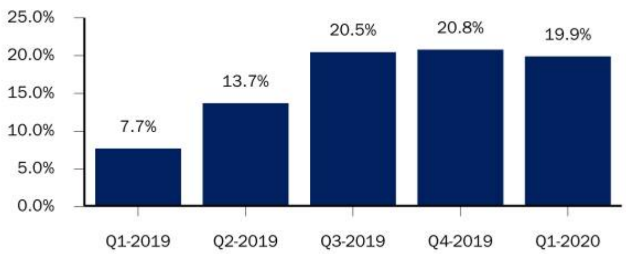
(1) Core Earnings is a non-U.S. GAAP measure that we define as comprehensive (loss) income attributable to common stockholders, excluding "realized and unrealized gains and losses" (impairment losses, provision for credit losses, realized and unrealized gains and losses on the aggregate portfolio, reserve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

## Portfolio Metrics

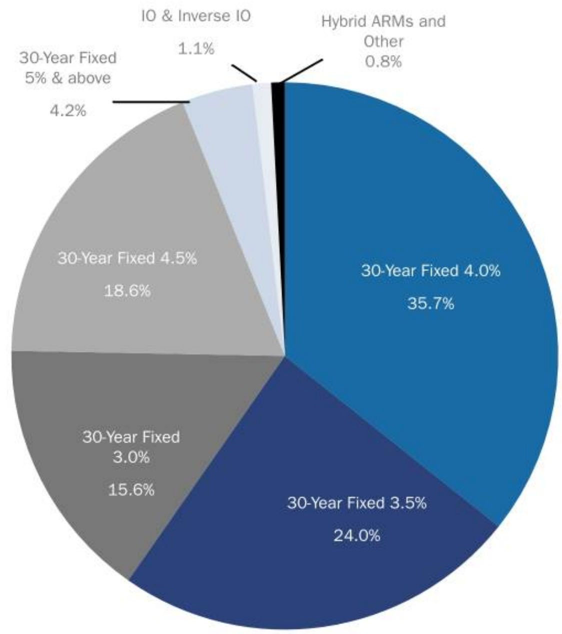
### AGENCY RMBS CPR(1)




### MSR CPR




### AGENCY PORTFOLIO COMPOSITION




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

# Agency RMBS Portfolio

| As of March 31, 2020 | Par Value ($M) | Market Value ($M) | Weighted Average CPR | % Prepay Protected(1) | Amortized Cost Basis ($M) | Gross Weighted Average Coupon | Weighted Average Age (Months) |
|---|---|---|---|---|---|---|---|
| **30-Year fixed** | | | | | | | |
| 3.0% | $ 2,636 | $ 2,778 | 3.0% | 100.0% | $ 2,720 | 3.7% | 5 |
| 3.5% | 3,991 | 4,267 | 6.7% | 100.0% | 4,184 | 4.2% | 8 |
| 4.0% | 5,858 | 6,351 | 15.8% | 100.0% | 6,124 | 4.5% | 33 |
| 4.5% | 3,030 | 3,303 | 17.9% | 100.0% | 3,196 | 5.0% | 26 |
| ≥ 5.0% | 687 | 754 | 23.4% | 98.6% | 729 | 5.8% | 52 |
| | 16,202 | 17,453 | 12.4% | 99.9% | 16,953 | 4.5% | 22 |
| | | | | | | | |
| **Other P&I(2)** | 114 | 132 | 7.8% | —% | 128 | 6.7% | 216 |
| **IOs and IIOs(3)** | 2,841 | 195 | 10.3% | —% | 212 | 5.2% | 138 |
| **Total Agency RMBS** | **$ 19,157** | **$ 17,780** | | **98.1%** | **$ 17,293** | | |

| As of March 31, 2020 | Notional Amount ($M) | Bond Equivalent Value ($M)(4) | Implied CPR(5) |
|---|---|---|---|
| **TBA Positions** | | | |
| 2.5% | $ 2,565 | $ 2,657 | 3.4% |
| 3.0% | (1,753) | (1,854) | 25.9% |
| 3.5% | — | — | 35.1% |
| 4.0% | (1,750) | (1,868) | 44.4% |
| 4.5% | — | — | 45.4% |
| 5.0% | 2,699 | 2,912 | 44.6% |
| **Net TBA position** | **$ 1,761** | **$ 1,847** | |

(1) Includes securities with implicit or explicit protection including lower loan balances (securities collateralized by loans less than or equal to $200K of initial principal balance), higher LTVs (securities collateralized by loans with greater than or equal to 80% LTV), certain geographic concentrations and lower FICO scores.
(2) Includes 15-year fixed, Hybrid ARMs, CMO and DUS pools.
(3) Represents market value of $121.7 million of IOs and $73.3 million of Agency Derivatives.
(4) Bond equivalent value is defined as the notional amount multiplied by market price. Accounted for as derivative instruments in accordance with GAAP.
(5) Implied TBA speeds from J.P. Morgan Data Query.

# Mortgage Servicing Rights Portfolio[1]

| (dollars in millions) | Number of Loans | | Unpaid Principal Balance | | Fair Value | % Fannie Mae | Gross Weighted Average Coupon Rate | Weighted Average Loan Age (months) | Weighted Average Original FICO[2] | Weighted Average Original LTV | 60+ Day Delinquencies | 3-Month CPR | Net Servicing Fee (bps) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **30-Year Fixed** | | | | | | | | | | | | | |
| ≤ 3.75% | 116,156 | $ | 31,109 | $ | 273 | 70% | 3.5% | 43 | 771 | 70% | 0.1% | 11.4% | 26.7 |
| 3.75% - 4.25% | 253,260 | | 62,353 | | 531 | 64% | 3.9% | 38 | 760 | 76% | 0.2% | 16.4% | 27.5 |
| 4.25% - 4.75% | 189,552 | | 41,814 | | 344 | 65% | 4.4% | 35 | 745 | 79% | 0.3% | 26.0% | 26.7 |
| 4.75% - 5.25% | 90,724 | | 18,305 | | 157 | 66% | 4.9% | 28 | 731 | 80% | 0.5% | 29.8% | 28.0 |
| > 5.25% | 33,733 | | 5,702 | | 50 | 70% | 5.5% | 26 | 709 | 80% | 1.0% | 26.6% | 31.0 |
| | 683,425 | | 159,283 | | 1,355 | 66% | 4.1% | 37 | 753 | 76% | 0.3% | 21.4% | 27.3 |
| **15-Year Fixed** | | | | | | | | | | | | | |
| ≤ 2.75% | 2,336 | | 465 | | 3 | 80% | 2.6% | 47 | 778 | 60% | —% | 8.1% | 26.1 |
| 2.75% - 3.25% | 41,584 | | 7,378 | | 53 | 77% | 3.0% | 45 | 772 | 62% | —% | 10.1% | 25.9 |
| 3.25% - 3.75% | 41,510 | | 6,607 | | 50 | 72% | 3.4% | 39 | 760 | 65% | 0.1% | 13.5% | 27.8 |
| 3.75% - 4.25% | 21,363 | | 2,988 | | 24 | 63% | 3.9% | 33 | 747 | 66% | 0.3% | 20.0% | 29.7 |
| > 4.25% | 11,471 | | 1,377 | | 11 | 62% | 4.5% | 25 | 734 | 66% | 0.3% | 24.5% | 31.4 |
| | 118,264 | | 18,815 | | 141 | 72% | 3.4% | 39 | 734 | 64% | 0.1% | 14.2% | 27.6 |
| **Total ARMs** | 6,286 | | 1,616 | | 9 | 68% | 3.6% | 44 | 762 | 66% | 0.3% | 27.8% | 25.2 |
| **Total Portfolio** | 807,975 | $ | 179,714 | $ | 1,505 | 66% | 4.1% | 37 | 754 | 75% | 0.3% | 19.9% | 27.3 |

(1) Excludes residential mortgage loans for which the company is the named servicing administrator.
(2) FICO represents a mortgage industry accepted credit score of a borrower.

# Financing

| $ in millions | | | | | | | |
|---|---|---|---|---|---|---|---|
| Outstanding Borrowings and Maturities[1] | Repurchase Agreements | FHLB Advances | Revolving Credit Facilities | Term Notes Payable | Convertible Notes | Total Outstanding Borrowings | Percent (%) |
| Within 30 days | $ 6,138.2 | $ — | $ — | $ — | $ — | $ 6,138.2 | 32.7% |
| 30 to 59 days | 6,034.5 | — | — | — | — | 6,034.5 | 32.1% |
| 60 to 89 days | 2,046.5 | — | — | — | — | 2,046.5 | 10.9% |
| 90 to 119 days | 1,722.9 | — | — | — | — | 1,722.9 | 9.2% |
| 120 to 364 days | 1,853.4 | — | 252.1 | — | — | 2,105.5 | 11.2% |
| One to three years | — | — | — | — | 285.2 | 285.2 | 1.5% |
| Three to five years | — | — | — | 394.8 | — | 394.8 | 2.1% |
| Five to ten years | — | — | — | — | — | — | —% |
| Ten years and over[2] | — | 50.0 | — | — | — | 50.0 | 0.3% |
| | $ 17,795.5 | $ 50.0 | $ 252.1 | $ 394.8 | $ 285.2 | $ 18,777.6 | 100.0% |
| Collateral Pledged for Borrowings[3] | Repurchase Agreements[4] | FHLB Advances | Revolving Credit Facilities[4] | Term Notes Payable | Convertible Notes | Total Collateral Pledged | Percent (%) |
| Available-for-sale securities, at fair value | $ 17,661.4 | $ 52.2 | $ — | $ — | n/a | $ 17,713.6 | 92.8% |
| Derivative assets, at fair value | 73.2 | — | — | — | n/a | 73.2 | 0.4% |
| Mortgage servicing rights, at fair value | 368.8 | — | 372.4 | 566.8 | n/a | 1,308.0 | 6.8% |
| | $ 18,103.4 | $ 52.2 | $ 372.4 | $ 566.8 | n/a | $ 19,094.8 | 100.0% |

(1) Weighted average of 3.7 months to maturity.
(2) Includes FHLB advances of $50 million with original maturities of 20 years.
(3) Excludes FHLB membership and activity stock totaling $12.0 million.
(4) Repurchase agreements and/or revolving credit facilities secured by MSR may be over-collateralized due to operational considerations.

# Interest Rate Swaps

INTEREST RATE SWAPS

| Maturities | Notional Amounts ($B) | Average Fixed Pay Rate | Average Receive Rate | Average Maturity Years |
|---|---|---|---|---|
| **Payers** | | | | |
| 2020 | $ 3.6 | 1.806% | 1.352% | 0.6 |
| 2021 | 15.8 | 1.681% | 1.685% | 1.2 |
| 2022 | 2.6 | 1.911% | 1.176% | 2.5 |
| 2023 | 0.2 | 3.057% | 1.683% | 3.6 |
| 2024 and after | 8.7 | 2.224% | 1.555% | 7.0 |
| | $ 30.9 | 1.878% | 1.580% | 2.9 |

| Maturities | Notional Amounts ($B) | Average Pay Rate | Average Fixed Receive Rate | Average Maturity (Years) |
|---|---|---|---|---|
| **Receivers** | | | | |
| 2020 | $ — | —% | —% | — |
| 2021 | 9.2 | 1.188% | 0.799% | 1.0 |
| 2022 | 6.1 | 1.152% | 0.527% | 2.0 |
| 2023 | — | —% | —% | — |
| 2024 and after | 9.9 | 1.319% | 1.418% | 8.4 |
| | $ 25.2 | 1.255% | 0.943% | 3.1 |

# Interest Rate Swaptions

| | | Option | | | | Underlying Swap | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Swaption** | **Expiration** | **Cost ($M)** | **Fair Value ($M)** | **Average Months to Expiration** | **Notional Amount ($M)** | **Average Pay Rate** | **Average Receive Rate** | **Average Term (Years)** |
| Purchase Contracts: | | | | | | | | |
| Payer | <6 Months | $ 9.0 | $ — | 0.9 | $ 2,550 | 2.27% | 3M LIBOR | 10.0 |
| Total Payer | | $ 9.0 | $ — | 0.9 | $ 2,550 | 2.27% | 3M LIBOR | 10.0 |
| | | | | | | | | |
| Sale Contracts: | | | | | | | | |
| Receiver | <6 Months | $ (4.5) | $ (62.7) | 0.9 | $ (1,174) | 3M LIBOR | 1.26% | 10.0 |
| Total Receiver | | $ (4.5) | $ (62.7) | 0.9 | $ (1,174) | 3M LIBOR | 1.26% | 10.0 |


TWO HARBORS
Investment Corp.
A Pine River Capital Managed Company