

ARMOUR RESIDENTIAL REIT, INC.

Monthly Update SEPTEMBER 2025

ARMOUR Residential REIT, Inc. ("ARMOUR"; NYSE: ARR) brings private capital into the mortgage markets to support home ownership for a broad and diverse spectrum of Americans. We seek to create shareholder value through thoughtful investment and risk management of a leveraged and diversified portfolio of mortgage-backed securities issued or guaranteed by U.S Government-sponsored entities. We rely on the decades of experience of our management team for (i) MBS securities portfolio analysis and selection, (ii) access to equity capital and repurchase financing on potentially attractive rates and terms, and (iii) hedging and liquidity strategies to moderate interest rate and MBS price risk. We prioritize maintaining common share dividends appropriate for the intermediate term rather than focusing on short-term market fluctuations.

ARMOUR is externally managed by ARMOUR Capital Management LP, who is also the majority owner of BUCKLER Securities LLC, a FINRA registered broker-dealer that is the largest provider of ARMOUR's repurchase financing.

ARMOUR Key Data as of 08/31/2025

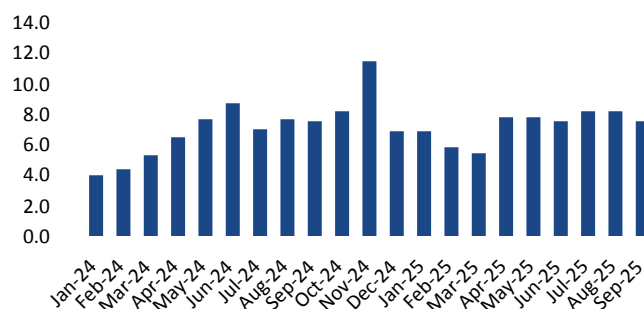
| | |
|--|-----------|
| Common Stock Price | \$15.31 |
| Debt-Equity ⁽¹⁾ | 7.4 |
| Implied Leverage ⁽²⁾ | 7.8 |
| Total Liquidity ⁽³⁾ (in millions) | \$1,089.4 |
| Total Liquidity as a Percentage of Total Capital | 51 % |

Dividend Information

| | |
|-------------------------------------|------------|
| September 2025 Common Dividend | \$0.24 |
| Common Ex-Dividend Date/Record Date | 09/15/2025 |
| Pay Date | 09/29/2025 |

| ARMOUR Portfolio | % of Portfolio | Current Value (millions) | Effective Duration Using Current Values |
|----------------------------|----------------|--------------------------|---|
| Agency CMBS | 5.7 % | \$1,044 | 3.82 |
| 30 Year Fixed Rate Pools | 92.0 % | \$16,744 | 4.35 |
| Conventionals | 87.4 % | \$15,907 | 4.44 |
| 30y 2.5s | 1.3 % | \$237 | 8.12 |
| 30y 3.0s | 3.8 % | \$699 | 7.64 |
| 30y 3.5s | 6.2 % | \$1,133 | 6.59 |
| 30y 4.0s | 5.1 % | \$923 | 6.14 |
| 30y 4.5s | 4.9 % | \$886 | 5.65 |
| 30y 5.0s | 15.1 % | \$2,739 | 5.17 |
| 30y 5.5s | 25.0 % | \$4,542 | 4.02 |
| 30y 6.0s | 21.8 % | \$3,961 | 2.90 |
| 30y 6.5s | 4.3 % | \$786 | 1.69 |
| Ginnie Mae | 4.6 % | \$837 | 2.64 |
| 30y 5.5s | 3.9 % | \$705 | 2.86 |
| 30y 6.0s | 0.7 % | \$132 | 1.47 |
| Agency Portfolio | 97.8 % | \$17,789 | |
| FN 30y 6.5 TBAs | 0.9 % | \$155 | 1.38 |
| Net TBA Positions | 0.9 % | \$155 | |
| 5Y US Treasury Longs | 1.4 % | \$252 | 4.20 |
| US Treasury Long Positions | 1.4 % | \$252 | |
| Total Portfolio | 100.0 % | \$18,196 | |

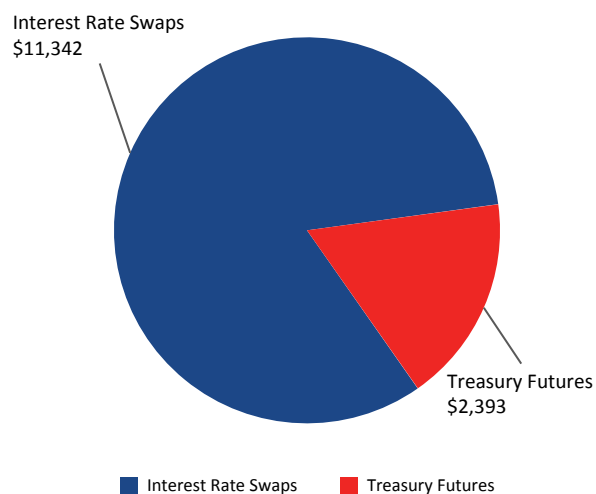
ARMOUR Portfolio CPR



| ARMOUR Repo Composition | Principal Borrowed (millions) | % of Repo Positions with ARMOUR | Weighted Average Original Term (days) | Weighted Average Remaining Term (days) | Longest Maturity (days) |
|---------------------------------------|-------------------------------|---------------------------------|---------------------------------------|--|-------------------------|
| BUCKLER Securities LLC ⁽⁴⁾ | \$7,727 | 49.0 % | 40 | 28 | 59 |
| All Other Counterparties | \$8,033 | 51.0 % | 60 | 34 | 138 |
| Total ⁽⁵⁾ | \$15,760 | 100.0 % | 50 | 31 | |

| ARMOUR Interest Rate Swaps Maturity (months) | Notional Amount (millions) | Weighted Average Remaining Term (months) | Weighted Average Rate |
|--|----------------------------|--|-----------------------|
| 0-12 | \$53 | 7 | 0.22 |
| 13-24 | \$1,729 | 19 | 1.65 |
| 25-36 | \$3,443 | 33 | 3.73 |
| 37-48 | \$0 | — | — |
| 49-60 | \$1,202 | 53 | 0.49 |
| 61-72 | \$2,050 | 65 | 0.95 |
| 73-84 | \$400 | 78 | 1.48 |
| 85-96 | \$300 | 85 | 1.28 |
| 97-108 | \$500 | 104 | 3.95 |
| 109-120 | \$1,465 | 113 | 3.82 |
| >120 | \$200 | 180 | 4.01 |
| Total | \$11,342 | 58 | 2.43 |

ARMOUR Hedge Type Notional (millions) ⁽⁶⁾



Certain statements made in this presentation regarding ARMOUR Residential REIT, Inc. ("ARMOUR" or the "Company"), and any other statements regarding ARMOUR's future expectations, beliefs, goals or prospects constitute "forward-looking statements" made within the meaning of the safe harbor provisions of the United States Private Securities Litigation Reform Act of 1995. Any statements that are not statements of historical fact (including statements containing the words "expect," "estimate," "project," "budget," "forecast," "anticipate," "intend," "plan," "may," "will," "could," "should," "believes," "predicts," "potential," "continue," and similar expressions) should also be considered forward-looking statements. Forward-looking statements include but are not limited to statements regarding the projections and future plans for ARMOUR's business, growth and operational improvements. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict and many of which are outside of ARMOUR's control. A number of important factors could cause actual results or events to differ materially from those indicated by such forward-looking statements. Additional information concerning these factors and risks are contained in the Company's most recent annual and quarterly reports and other reports filed with the Securities and Exchange Commission. ARMOUR assumes no obligation to update the information in this communication, except as otherwise required by law. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof.

This material is for information purposes only and does not constitute an offer to sell, a solicitation of an offer to buy, or a recommendation for any securities or financial instruments. The statements, information and estimates contained herein are based on information that the Company believes to be reliable as of today's date unless otherwise indicated. ARMOUR cannot guarantee future results, levels of activity, performance or achievements.

Pricing and duration information are estimates provided by independent third-party providers based on models that require inputs and assumptions. Actual realized prices and durations will depend on a number of factors that cannot be predicted with certainty and may be materially different from estimates.

Estimates do not reflect any costs of operation of ARMOUR.

THE INFORMATION PRESENTED HEREIN IS UNAUDITED AND NOT REVIEWED BY OUR INDEPENDENT PUBLIC ACCOUNTANTS.

Footnotes

1. Total Repo divided by Shareholders' Equity.
2. Total Repo, including US Treasuries, plus TBA market value minus forward settling net sales and purchases divided by Shareholders' Equity.
3. Total Liquidity is cash plus unencumbered Agency and US Government securities. Excludes any forward settling sales.
4. BUCKLER Securities LLC is a FINRA registered broker-dealer affiliated with ARMOUR REIT.
5. Repo composition includes funding for US Treasury longs and margin collateral posted to ARMOUR.
6. ARMOUR's Treasury Futures have a weighted average duration of 10.5 years.