## E A R N

ELLINGTON RESIDENTIAL MORTGAGE REIT

February 17, 2021

## Earnings <br> Conference Call

Q4 2020


## Forward-Looking Statements

This presentation contains forward-looking statements within the meaning of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements involve numerous risks and uncertainties. Actual results may differ from the Company's beliefs, expectations, estimates, and projections and, consequently, you should not rely on these forwardlooking statements as predictions of future events. Forward-looking statements are not historical in nature and can be identified by words such as "believe," "expect," "anticipate," "estimate," "project," "plan," "continue," "intend," "should," "would," "could," "goal," "objective," "will," "may," "seek," or similar expressions or their negative forms, or by references to strategy, plans, or intentions.

The Company's results can fluctuate from month to month and from quarter to quarter depending on a variety of factors, some of which are beyond the Company's control and/or are difficult to predict, including, without limitation, changes in interest rates and the market value of the Company's securities, changes in mortgage default rates and prepayment rates, the Company's ability to borrow to finance its assets, changes in government regulations affecting the Company's business, the Company's ability to maintain its exclusion from registration under the Investment Company Act of 1940 and other changes in market conditions and economic trends including changes resulting from the ongoing spread and economic effects of the novel coronavirus (COVID19) pandemic and associated responses to the pandemic. Furthermore, forward-looking statements are subject to risks and uncertainties, including, among other things, those described under Item 1A of our Annual Report on Form 10-K filed on March 12, 2020 and Part II, Item 1A of our Quarterly Report on Form 10-Q filed on May 11, 2020 which can be accessed through the link to our SEC filings under "For Our Shareholders" on our website (www.earnreit.com) or at the SEC's website (www.sec.gov). Other risks, uncertainties, and factors that could cause actual results to differ materially from those projected may be described from time to time in reports we file with the SEC, including reports on Forms 10-Q, 10-K and 8-K. The Company undertakes no obligation to update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise.

## Modeling

Some statements in this presentation may be derived from proprietary models developed by Ellington Management Group, L.L.C. ("Ellington"). Some examples provided may be based upon the hypothetical performance of such models. Models, however, are inherently imperfect and subject to a number of risks, including that the underlying data used by the models is incorrect, inaccurate, or incomplete, or that the models rely upon assumptions that may prove to be incorrect. The utility of model-based information is highly limited. The information is designed to illustrate Ellington's current view and expectations and is based on a number of assumptions and limitations, including those specified herein. Certain models make use of discretionary settings or parameters which can have a material effect on the output of the model. Ellington exercises discretion as to which settings or parameters to use in different situations, including using different settings or parameters to model different securities. Actual results and events may differ materially from those described by such models.

## Projected Yields and Spreads

Projected yields and spreads discussed herein are based upon Ellington models and rely on a number of assumptions, including as to prepayment, default and interest rates and changes in home prices. Such models are inherently imperfect and there is no assurance that any particular investment will perform as predicted by the models, or that any such investment will be profitable. Projected yields are presented for the purposes of (i) providing insight into the strategy's objectives, (ii) detailing anticipated risk and reward characteristics in order to facilitate comparisons with other investments, (iii) illustrating Ellington's current views and expectations, and (iv) aiding future evaluations of performance. They are not a guarantee of future performance. They are based upon assumptions regarding current and future events and conditions, which may not prove to be accurate. There can be no assurance that the projected yields will be achieved. Investments involve risk of loss.

## Financial Information

All financial information included in this presentation is as of December 31, 2020 unless otherwise indicated. We undertake no duty or obligation to update this presentation to reflect subsequent events or developments.

Fourth Quarter Market Update

| Quarter Ended | 12/31/2020 | 9/30/2020 | Q/Q | 6/30/2020 | Q/Q | 3/31/2020 | Q/Q | 12/31/2019 | Q/Q |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UST (\%) ${ }^{(1)}$ |  |  |  |  |  |  |  |  |  |
| 3M UST | 0.06 | 0.09 | -0.03 | 0.13 | -0.04 | 0.06 | +0.07 | 1.54 | -1.48 |
| 2 Y UST | 0.12 | 0.13 | -0.01 | 0.15 | -0.02 | 0.25 | -0.10 | 1.57 | -1.32 |
| 5Y UST | 0.36 | 0.28 | +0.08 | 0.29 | -0.01 | 0.38 | -0.09 | 1.69 | -1.31 |
| $10 Y$ UST | 0.91 | 0.68 | +0.23 | 0.66 | +0.03 | 0.67 | -0.01 | 1.92 | -1.25 |
| 30Y UST | 1.64 | 1.46 | +0.19 | 1.41 | +0.04 | 1.32 | +0.09 | 2.39 | -1.07 |
| 3M10Y Spread | 0.85 | 0.59 | +0.26 | 0.53 | +0.07 | 0.61 | -0.08 | 0.37 | +0.23 |
| 2Y10Y Spread | 0.79 | 0.56 | +0.24 | 0.51 | +0.05 | 0.42 | +0.08 | 0.35 | +0.08 |
| US Dollar Swaps (\%) ${ }^{(1)}$ |  |  |  |  |  |  |  |  |  |
| $2 Y$ SWAP | 0.20 | 0.22 | -0.02 | 0.22 | +0.00 | 0.49 | -0.26 | 1.70 | -1.21 |
| 5 S SWAP | 0.43 | 0.35 | +0.08 | 0.33 | +0.02 | 0.52 | -0.20 | 1.73 | -1.21 |
| $10 Y$ SWAP | 0.93 | 0.71 | +0.22 | 0.64 | +0.07 | 0.72 | -0.08 | 1.90 | -1.18 |
| LIBOR (\%) ${ }^{(1)}$ |  |  |  |  |  |  |  |  |  |
| 1M | 0.14 | 0.15 | -0.00 | 0.16 | -0.01 | 0.99 | -0.83 | 1.76 | -0.77 |
| 3M | 0.24 | 0.23 | +0.00 | 0.30 | -0.07 | 1.45 | -1.15 | 1.91 | -0.46 |
| 1M3MSpread | 0.09 | 0.09 | +0.01 | 0.14 | -0.05 | 0.46 | -0.32 | 0.15 | +0.31 |
| Mortgage Rates (\%) ${ }^{(2)}$ |  |  |  |  |  |  |  |  |  |
| 15Y | 2.42 | 2.65 | -0.23 | 2.81 | -0.16 | 3.05 | -0.24 | 3.37 | -0.32 |
| 30Y | 2.67 | 2.90 | -0.23 | 3.13 | -0.23 | 3.50 | -0.37 | 3.74 | -0.24 |
| FNMA Pass-Thrus ${ }^{(1)}$ |  |  |  |  |  |  |  |  |  |
| 30Y2.5 | \$105.45 | \$104.89 | +\$0.56 | \$104.23 | +\$0.66 | \$103.55 | +\$0.69 | \$98.92 | +\$4.63 |
| $30 Y 3.5$ | \$105.73 | \$105.48 | +\$0.25 | \$105.17 | +\$0.31 | \$105.80 | -\$0.63 | \$102.86 | +\$2.94 |
| $30 Y 4.5$ | \$108.39 | \$108.17 | +\$0.22 | \$107.45 | +\$0.72 | \$107.64 | -\$0.19 | \$105.30 | +\$2.34 |
| Libor-based OAS (bps) ${ }^{(3)}$ |  |  |  |  |  |  |  |  |  |
| FNMA3OY2.5 OAS | -12.4 | 17.4 | -29.8 | 19.9 | -2.5 | 35.7 | -15.8 | 28.3 | +7.4 |
| FNMA30Y3.5 OAS | 30.2 | 43.7 | -13.5 | 43.1 | +0.6 | 10.9 | +32.2 | 36.4 | -25.5 |
| FNMA30Y4.5 OAS | 34.1 | 63.4 | -29.3 | 79.3 | -15.9 | 58.4 | +20.9 | 63.6 | -5.2 |
| Libor-based ZSpread (bps) ${ }^{(4)}$ |  |  |  |  |  |  |  |  |  |
| FNMA30Y2.5 ZSpread | 37.5 | 70.5 | -33.0 | 71.7 | -1.2 | 98.0 | -26.3 | 70.5 | +27.5 |
| FNMA30Y3.5 ZSpread | 53.6 | 66.3 | -12.7 | 64.9 | +1.4 | 32.5 | +32.4 | 84.0 | -51.5 |
| FNMA30Y4.5 ZSpread | 42.0 | 72.0 | -30.0 | 87.8 | -15.8 | 64.3 | +23.5 | 91.8 | -27.5 |


| Results |
| :--- |
|  |
| BVPS ${ }^{(3)}$ |
| Portfolio |
| Leverage ${ }^{(3)}$ |
| Dividends |

- Net Income: $\$ 7.4$ million or $\$ 0.60$ per share; full year 2020 net income of $\$ 20.1$ million or $\$ 1.63$ per share
- Core Earnings ${ }^{(1)}$ : $\$ 4.2$ million or $\$ 0.34$ per share; full year 2020 core earnings of $\$ 15.6$ million or $\$ 1.26$ per share
- Economic Return: 4.5\% for the quarter, and 13.1\% for 2020
- Net Interest Margin ${ }^{(2)}$ : 2.12\%
- Shareholders' Equity: \$166.4 million
- Book Value Per Share: \$13.48
- Agency RMBS Portfolio: \$1.06 billion ${ }^{(3)}$
- Weighted average prepayment speed on fixed-rate specified pools decreased to $21.0 \%$ CPR from 21.4\% CPR last quarter
- Average pay-ups on specified pools decreased to $2.40 \%$ from $2.55 \%$ last quarter, primarily because new purchases during the quarter consisted mainly of lower-pay-up pools
- Non-Agency RMBS Portfolio: \$17.6 million ${ }^{(3)}$
- Reduced size of the portfolio by $28 \%$ during the quarter as we continued to monetize gains in this sector
- Debt-to-Equity Ratio: 6.1:1
- Net Mortgage Assets-to-Equity Ratio of 5.6:1 ${ }^{(4)}$
- Cash and cash equivalents of $\$ 58.2$ million, in addition to other unencumbered assets of $\$ 47.4$ million
- Declared fourth quarter dividend of $\$ 0.28$ per share (paid in January 2021)
- Annualized dividend yield of $9.1 \%$ based on closing price of $\$ 12.29$ on $2 / 16 / 2021$

1 - Delivered an economic return of $13.1 \%$ during an unprecedented year

2 Total return on our common stock was 36.0\% ${ }^{(1)}$


Generated net income of $\$ 1.63$ per share, core earnings of $\$ 1.26$ per share, and dividends of \$1.12 per share


Disciplined risk and liquidity management protected book value and preserved liquidity during COVIDrelated volatility


Strong liquidity position allowed us to take full advantage of investment opportunities in the aftermath of the crisis
$6 \longrightarrow$ Successfully navigated a surge in prepayment rates


- Over the two year period spanning 2019/2020, EARN generated a cumulative economic return of nearly 30\%; we estimate this to be the best in the Agency REIT peer set
- EARN has emphatically demonstrated its ability to deliver strong and steady returns in a diversity of market environments

Summary of Financial Results

|  | Quarter Ended 12/31/2020 |  | Quarter Ended 9/30/2020 |  |
| :---: | :---: | :---: | :---: | :---: |
| (in thousands except per share amounts) |  |  |  |  |
| Interest Income | \$ | 6,174 | \$ | 7,776 |
| Interest Expense |  | (716) |  | (819) |
| Total Net Interest Income | \$ | 5,458 | \$ | 6,957 |
| Total Other Gain (Loss) ${ }^{(1)}$ |  | (381) |  | (419) |
| Total Expenses |  | $(1,400)$ |  | $(1,406)$ |
| Add back: Deferred Offering Costs Expensed |  | - |  | 39 |
| Add back: Catch-up Premium Amortization Adjustment ${ }^{(2)}$ |  | 559 |  | (405) |
| Core Earnings ${ }^{(3)}$ | \$ | 4,236 | \$ | 4,766 |
| Per Share ${ }^{(4)}$ | \$ | 0.34 | \$ | 0.39 |
| Net Realized and Unrealized Gain (Loss): |  |  |  |  |
| RMBS | \$ | $(1,528)$ | \$ | 391 |
| Long TBAs Held for Investment |  | 3,143 |  | 3,609 |
| Interest Rate Hedges and Other Activities, Net |  | 2,102 |  | $(1,014)$ |
| Total Net Realized and Unrealized Gain (Loss) | \$ | 3,717 | \$ | 2,986 |
| Deduct: Deferred Offering Costs Expensed |  | - |  | (39) |
| Deduct: Catch-up Premium Amortization Adjustment ${ }^{(2)}$ |  | (559) |  | 405 |
| Net Income (Loss) | \$ | 7,394 | \$ | 8,118 |
| Per Share ${ }^{(4)}$ | \$ | 0.60 | \$ | 0.66 |
| Weighted Average Yield ${ }^{(5)}$ |  | 2.53\% |  | 2.68\% |
| Cost of Funds |  | -0.41\% |  | -0.47\% |
| Net Interest Margin ${ }^{(6)}$ |  | 2.12\% |  | 2.21\% |
| Average Pay-Ups |  | 2.40\% |  | 2.55\% |
| Shareholders' Equity | \$ | 166,402 | \$ | 162,401 |
| Book Value Per Share ${ }^{(4)}$ | \$ | 13.48 | \$ | 13.17 |

Consolidated Balance Sheet (Unaudited)

## EARN

As of
ellington residential mortgage leit

| (in thousands except share amounts) | December 31, 2020 |  |  | September 30, 2020 | December 31, $2019{ }^{(1)}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Assets |  |  |  |  |  |  |
| Cash and cash equivalents | \$ | 58,166 | \$ | 61,193 | \$ | 35,351 |
| Mortgage-backed securities, at fair value |  | 1,081,380 |  | 1,113,620 |  | 1,401,778 |
| Other investments, at fair value |  | 292 |  | 5,290 |  | - |
| Due from brokers |  | 47,798 |  | 49,530 |  | 34,596 |
| Financial derivative-assets, at fair value |  | 2,791 |  | 1,738 |  | 4,180 |
| Reverse repurchase agreements |  | - |  | 20,013 |  | 2,084 |
| Receivable for securities sold |  | - |  | 7,191 |  | 5,500 |
| Interest receivable |  | 4,114 |  | 4,562 |  | 5,016 |
| Other assets |  | 270 |  | 380 |  | 604 |
| Total Assets | \$ | 1,194,811 | \$ | 1,263,517 | \$ | 1,489,109 |
| Liabilities and Shareholders' Equity |  |  |  |  |  |  |
| Liabilities |  |  |  |  |  |  |
| Repurchase agreements | \$ | 1,015,245 | \$ | 1,061,640 | \$ | 1,296,272 |
| Payable for securities purchased |  | - |  | 5,308 |  | 19,433 |
| Due to brokers |  | 1,064 |  | 669 |  | 33 |
| Financial derivatives-liabilities, at fair value |  | 6,630 |  | 7,916 |  | 2,047 |
| U.S. Treasury securities sold short, at fair value |  | - |  | 19,986 |  | 2,070 |
| Dividend Payable |  | 3,456 |  | 3,454 |  | 3,488 |
| Accrued expenses |  | 918 |  | 1,077 |  | 588 |
| Management fee payable to affiliate |  | 626 |  | 611 |  | 605 |
| Interest payable |  | 470 |  | 455 |  | 3,729 |
| Total Liabilities | \$ | 1,028,409 | \$ | 1,101,116 | \$ | 1,328,265 |

## Shareholders' Equity

Preferred shares, par value $\$ 0.01$ per share, 100,000,000 shares authorized;
(0 shares issued and outstanding, respectively)
Common shares, par value \$0.01 per share, 500,000,000 shares authorized;

| (12,343,542, 12,334,636, and 12,45 respectively) |  | 123 |  | 123 |  | 124 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Additional paid-in-capital |  | 229,614 |  | 229,551 |  | 230,358 |
| Accumulated deficit |  | $(63,335)$ |  | $(67,273)$ |  | $(69,638)$ |
| Total Shareholders' Equity |  | 166,402 |  | 162,401 |  | 160,844 |
| Total Liabilities and Shareholders' Equity | \$ | 1,194,811 | \$ | 1,263,517 | \$ | 1,489,109 |
| Supplement Per Share Information |  |  |  |  |  |  |
| Book Value Per Share | \$ | 13.48 | \$ | 13.17 | \$ | 12.91 |

Portfolio Summary

|  | December 31, 2020 |  |  |  |  | September 30, 2020 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (in thousands) | Current <br> Principal | Fair <br> Value | Average Price ${ }^{(1)}$ | Cost | Average $\operatorname{Cost}^{(1)}$ | Current <br> Principal | Fair <br> Value | Average $\text { Price }{ }^{(1)}$ | Cost | Average $\operatorname{Cost}^{(1)}$ |
| Agency RMBS ${ }^{(2)}$ |  |  |  |  |  |  |  |  |  |  |
| 15 -year fixed rate mortgages | \$ 77,578 | \$ 83,159 | \$ 107.19 | 80,144 | \$ 103.31 | \$ 80,451 | \$ 86,213 | \$ 107.16 | 83,106 | \$ 103.30 |
| 20 -year fixed rate mortgages | 42,559 | 44,763 | 105.18 | 44,247 | 103.97 | 36,481 | 37,933 | 103.98 | 37,757 | 103.50 |
| 30-year fixed rate mortgages | 763,563 | 834,881 | 109.34 | 799,360 | 104.69 | 781,388 | 854,443 | 109.35 | 818,178 | 104.71 |
| ARMs | 19,459 | 20,442 | 105.05 | 19,981 | 102.68 | 22,518 | 23,590 | 104.76 | 23,011 | 102.19 |
| Reverse mortgages | 61,653 | 67,474 | 109.44 | 65,494 | 106.23 | 67,233 | 74,246 | 110.43 | 71,281 | 106.02 |
| Total Agency RMBS | 964,812 | 1,050,719 | 108.90 | 1,009,226 | 104.60 | 988,071 | 1,076,425 | 108.94 | 1,033,333 | 104.58 |
| Non-Agency RMBS | 23,140 | 17,612 | 76.11 | 15,369 | 66.42 | 32,062 | 24,580 | 76.66 | 21,993 | 68.60 |
| Total RMBS ${ }^{(2)}$ | 987,952 | 1,068,331 | 108.14 | 1,024,595 | 103.71 | 1,020,133 | 1,101,005 | 107.93 | 1,055,326 | 103.45 |
| Agency Interest Only RMBS | n/a | 13,049 | n/a | 15,434 | n/a | n/a | 12,615 | n/a | 14,640 | n/a |
| Total mortgage-backed securities |  | \$ 1,081,380 |  | \$ 1,040,029 |  |  | \$ 1,113,620 |  | \$ 1,069,966 |  |

- Decreased Agency RMBS holdings by 2\% quarter over quarter
- Reduced non-Agency RMBS portfolio by $28 \%$ as we continued to monetize gains in this sector during the fourth quarter

Short \$196.1MM 10-yr equivalents ${ }^{(1)}$
As of 12/31/2020


Short \$189.0MM 10-yr equivalents ${ }^{(1)}$ As of 9/30/2020


We hedge along the entire yield curve to manage interest rate risk and protect book value

Shorting "generic" pools (or TBAs) allows EARN to significantly reduce interest rate risk and basis risk in its Agency portfolio

At quarter end our net position in TBAs was again long, on a 10-year equivalent basis (though it was still net short on a notional basis)

We also hedge interest rate risk with swaps, U.S. Treasury securities, futures, and swaptions

## Dynamic Hedging Strategy

## Net RMBS Exposure Based on Fair Value ${ }^{(1)}$



- EARN often carries significantly lower net effective mortgage exposure than our "headline" leverage suggests
- Our net mortgage assets-to-equity ${ }^{(2)}$ ratio remained at 5.6:1, quarter over quarter, reflecting a slight decline in our overall RMBS portfolio, an increase in shareholders' equity, and a reduction of the size of our net short TBA position

As of 9/30/2020


- Use of TBA short positions as hedges helps drive outperformance in especially volatile quarters, such as the first and second quarters of 2020. When interest rates spike, TBA short positions not only extend with specified pool assets, but they tend to extend more than specified pool assets, which dynamically and automatically hedges a correspondingly larger portion of our specified pool portfolio
- As of December 31, 2020 ${ }^{(1)}$
Securitized Products
US Agency MBS TOAS
US Agency MBS TZV
US Agency FN 3 OAS
US Agency G2 3 OAS
US Spec HLB 3
Non-QM AAA
Legacy Resi
CRT OTR M1
Subprime Auto BBB
US CLO 2.0 AAA
US CLO 2.0 BBB
EUR CLO 2.0 AAA
US CMBS AAA
US CMBS bBB


Source: Morgan Stanley

- During the fourth quarter, yield spreads tightened on virtually all fixed income instruments
- Yield spreads on the following products widened modestly: US Agency G2 3 OAS and CRT OTR M1

3-month LIBOR Minus Earn Repo Funding Rate


- Because we receive 3-month LIBOR on our interest rate swaps, when 3-month LIBOR is lower than our repo funding costs, our hedging costs are higher and our net interest margin is reduced
- The relationship between 3-month LIBOR and our agency repo funding rate was highly volatile during the market turmoil of early 2020, but has since stabilized and narrowed

Ellington is committed to corporate responsibility. We recognize the importance of environmental, social and governance ("ESG") factors, and believe that the implementation of ESG policies will benefit our employees, support long-term shareholder performance, and make a positive impact on the environment and society as a whole.

## 解 <br> Environmental

- Our office is conveniently located near mass transportation.
- We provide financial support and incentives to our employees who use public transit.
- To reduce energy usage, we use Energy Star® certified desktops, monitors and printers; and utilize motion sensor lighting and cooling to reduce energy usage in non-peak hours.
- To reduce waste and promote a cleaner environment, we use green cleaning supplies and kitchen products; recycle electronics, ink cartridges, and packaging; provide recycling containers to employees; and use water coolers to reduce waste.


## Social

- We invest in home mortgage loans, which support homeownership and stability within communities.
- Ellington and senior members of management sponsor numerous charitable causes. We also support employee charitable contributions with matching gift programs.
- Our employees have access to robust health and wellness programs. Ellington also supports various events that support health and wellness.
- We provide opportunities for personal growth with training and education support, including reimbursement for continuing education. We also provide mentorship programs, and internship opportunities.
- We are committed to enhancing gender, racial, and ethnic diversity throughout our organization.
- We are in compliance with applicable employment codes and guidelines, including ADA, Equal Opportunity Employment, NonDiscrimination, Anti-Harassment and NonRetaliation codes.


## II Governance

- Our Manager has a Responsible Investment policy incorporating ESG factors into its investment processes for applicable strategies.
- We operate under a Code of Business Conduct and Ethics.
- EARN has a separate independent Chairman, and the majority of Board members are independent.
- We hold annual elections of Directors.
- We are committed to significant disclosure and transparency, including an established quarterly book value disclosure and dividend policy.
- We foster regular employee engagement, and have an established Whistleblower policy.
- Robust process for shareholder engagement.

Capitalize on investment opportunities driven by market volatility and uncertainty, as we did following the severe dislocations of 2020


Rely on disciplined interest rate hedging and liquidity management to manage future volatility and protect book value
$3 \longrightarrow$ Dial up and down our MBS exposure opportunistically in response to market conditions

Rotate portfolio to take advantage of relative value discrepancies between Agency RMBS, and capitalize on lower borrowing costs, in order to drive Net Interest Margin and Core Earnings

Changes in the prepayment landscape should favor our core strengths of prepayment modeling, asset selection, and dynamic interest rate hedging, while also providing meaningful trading opportunities
$6 \longrightarrow$ Vary capital allocations to non-Agency RMBS as market opportunities change over time

## E A R N

ELLINGTON RESIDENTIAL MORTGAGE REIT



As of $12 / 31 / 2020$

| Category | Fair Value $^{(1)(2)}$ | Wtd. Avg. Coupon |
| :--- | :---: | :---: |
|  |  |  |
| $30-$ Year Fixed | $\$ 834.9$ | 3.87 |
| 20-Year Fixed | 44.8 | 2.35 |
| 15-Year Fixed | 83.2 | 3.35 |
| RM Fixed | 67.5 | 3.86 |
| Subtotal - Fixed | $1,030.4$ | 3.76 |
| ARMs | 20.4 |  |
| Fixed IOs | 13.0 |  |
| Total | $\$ 1,063.8$ |  |



As of 9/30/2020

| Category | Fair Value $^{(1)(2)}$ | Wtd. Avg. Coupon ${ }^{(3)}$ |
| :--- | ---: | :---: |
| 30-Year Fixed | $\$ 854.4$ | 3.91 |
| 20-Year Fixed | 37.9 | 2.16 |
| 15-Year Fixed | 86.2 | 3.38 |
| RM Fixed | 74.2 | 3.93 |
| Subtotal - Fixed | $\mathbf{1 , 0 5 2 . 8}$ | 3.80 |
| ARMs | 23.6 |  |
| Fixed IOs | $\mathbf{1 2 . 6}$ |  |
| Total | $\$ 1,089.0$ |  |

- Decreased portfolio size by approximately 2\%


Average for Quarter Ended 12/31/2020 ${ }^{(1)}$
Collateral Characteristics and Historical 3-Mo CPR


Average for Quarter Ended 9/30/2020 ${ }^{(1)}$
Collateral Characteristics and Historical 3-Mo CPR

| Characteristic $^{(2)}$ | Fair Value $^{(1)(3)}$ | 3-Month CPR \% |
| :--- | :---: | :---: |
| Loan Balance | $\$ 535.2$ | 20.3 |
| MHA $^{(4)}$ | 36.2 | 14.1 |
| Low FICO | 148.8 | 29.3 |
| Non-Owner | 11.6 | 2.1 |
| Geography | 65.1 | 11.6 |
| Jumbo | 10.2 | 28.4 |
| Other | 143.9 | 21.2 |
| Total | $\$ 951.1$ | 21.0 |


| Characteristic $^{(2)}$ | Fair Value |  |
| :--- | ---: | :---: |
| $(1)(3)$ | 3-Month CPR \% |  |
| Loan Balance | $\$ 565.3$ | 21.0 |
| MHA $^{(4)}$ | 38.2 | 21.6 |
| Low FICO | 112.0 | 26.4 |
| Non-Owner | 10.0 | 5.0 |
| Geography | 120.6 | 11.4 |
| Jumbo | 9.6 | 35.5 |
| Other | 110.1 | 27.7 |
| Total | $\$ 965.8$ | 21.4 |



Total Non-Agency Avg Mkt Px: 76.1

[^0]Repo Borrowings ${ }^{(1)}$

|  |  | December 31, 2020 |  | September 30, 2020 |
| :--- | :---: | :---: | :---: | :---: | :---: |

- Outstanding borrowings were with 15 counterparties as of December 31, 2020
- As of December 31st, the weighted average interest rate on our repo borrowings declined slightly to 0.25\% from $0.27 \%$ as of September 30th, as short-term interest rates remained low

| (\$ in thousands) | Estimates Change in Fair Value |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 50 Basis Point Decline in Interest Rates |  |  | 50 Basis Point Increase in Interest Rates |  |  |
|  |  | Market Value | \% of Total Equity |  | Market Value | \% of Total Equity |
| Agency RMBS - ARM Pools | \$ | 322 | 0.19\% | \$ | (231) | -0.14\% |
| Agency RMBS - Fixed Pools and Ios |  | 7,407 | 4.45\% |  | $(7,754)$ | -4.66\% |
| TBAs |  | (682) | -0.41\% |  | $(2,291)$ | -1.38\% |
| Non-Agency RMBS |  | 399 | 0.24\% |  | (297) | -0.18\% |
| Interest Rate Swaps |  | $(4,659)$ | -2.80\% |  | 4,437 | 2.67\% |
| U.S. Treasury Futures |  | $(4,736)$ | -2.84\% |  | 4,608 | 2.77\% |
| Corporate Securities and Derivatives on Corporate Securities |  | (1) | 0.00\% |  | - | 0.00\% |
| Repurchase and Reverse Repurchase Agreements |  | (333) | -0.20\% |  | 659 | 0.40\% |
| Total | \$ | $(2,283)$ | -1.37\% | \$ | (869) | -0.52\% |

Financial Derivatives as of December 31, 2020

## E A R N

ELLINGTON RESIDENTIAL MORTGAGE REIT
(In thousands)
Fixed Payer Interest Rate Swaps

| Maturity | Notional Amount |  | Weighted Average |  |  |  | Weighted Average <br> Years to Maturity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Fair Value |  | Pay Rate | Weighted Average Receive Rate |  |
| 2020-2022 | \$ | 124,347 | \$ | $(1,883)$ | 0.93\% | 0.22\% | 1.78 |
| 2023-2025 |  | 102,591 |  | $(1,839)$ | 0.85\% | 0.22\% | 3.04 |
| 2026-2028 |  | 56,692 |  | 305 | 0.50\% | 0.23\% | 6.54 |
| 2029-2050 |  | 15,228 |  | $(1,334)$ | 1.75\% | 0.22\% | 23.90 |
| Total | \$ | 298,858 | \$ | $(4,751)$ | 0.86\% | 0.22\% | 4.24 |

Fixed Receiver Interest Rate Swaps


TBA Securities

| Coupon | Notional Amount ${ }^{(1)}$ |  | Cost Basis ${ }^{(2)}$ |  | Market Value ${ }^{(3)}$ |  | Net Carrying Value ${ }^{(4)}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1.5 | \$ | 15,000 | \$ | 15,373 | \$ | 15,423 | \$ | 50 |
| 2 |  | 227,950 |  | 235,988 |  | 237,105 |  | 1,117 |
| 2.5 |  | 45,600 |  | 47,806 |  | 48,281 |  | 475 |
| 3 |  | $(60,708)$ |  | $(63,410)$ |  | $(63,553)$ |  | (143) |
| 3.5 |  | $(184,960)$ |  | $(195,189)$ |  | $(195,675)$ |  | (486) |
| 4 |  | $(132,985)$ |  | $(141,918)$ |  | $(141,958)$ |  | (40) |
| 4.5 |  | $(66,200)$ |  | $(71,867)$ |  | $(71,840)$ |  | 27 |
| 5 |  | 14,580 |  | 15,870 |  | 15,892 |  | 22 |
| Total TBAs net | \$ | $(141,723)$ | \$ | $(157,347)$ | \$ | $(156,326)$ |  | 1,021 |

Futures

|  |  |  | Remaining Months <br> to Expiration |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Maturity | Notional Amount | Fair Value | 3.00 |  |  |
| 5 yr | $(5,400)$ | $\$$ | $(5)$ | 3.00 |  |
| 10 yr | $(67,000)$ |  | $(165)$ | 2.70 |  |
| 30 yr | $(75,400)$ | $(149)$ | 2.70 |  |  |
| Total | $\$$ | $(144,500)$ | $\$$ | $(28)$ | 2.85 |

## Consolidated Statement of Operations (Unaudited)

|  | Three-Month Period Ended |  |  |  | Year Ended |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (in thousands except share amounts) | December 31, 2020 |  | September 30, 2020 |  | December 31, 2020 |  |
| Interest Income (Expense) |  |  |  |  |  |  |
| Interest income | \$ | 6,174 | \$ | 7,776 | \$ | 27,320 |
| Interest expense |  | (716) |  | (819) |  | $(9,965)$ |
| Total net interest income | \$ | 5,458 | \$ | 6,957 | \$ | 17,355 |
| Expenses |  |  |  |  |  |  |
| Management fees to affiliate |  | 626 |  | 611 |  | 2,357 |
| Professional fees |  | 199 |  | 237 |  | 1,242 |
| Compensation expense |  | 175 |  | 140 |  | 608 |
| Insurance expense |  | 82 |  | 82 |  | 322 |
| Other operating expenses |  | 318 |  | 336 |  | 1,297 |
| Total expenses | \$ | 1,400 | \$ | 1,406 | \$ | 5,826 |
| Other Income (Loss) |  |  |  |  |  |  |
| Net realized gains (losses) on securities |  | 862 |  | 4,987 |  | 12,117 |
| Net realized gains (losses) on financial derivatives |  | 2,395 |  | (648) |  | $(13,204)$ |
| Change in net unrealized gains (losses) on securities |  | $(2,259)$ |  | $(4,575)$ |  | 15,625 |
| Change in net unrealized gains (losses) on financial derivatives |  | 2,338 |  | 2,803 |  | $(5,955)$ |
| Total other income (loss) |  | 3,336 |  | 2,567 |  | 8,583 |
| Net Income (Loss) | \$ | 7,394 | \$ | 8,118 | \$ | 20,112 |
| Net Income (Loss) per Common Share: |  |  |  |  |  |  |
| Basic and Diluted | \$ | 0.60 | \$ | 0.66 | \$ | 1.63 |
| Weighted Average Shares Outstanding |  | 336,088 |  | 23,044 |  | ,353,246 |
| Cash Dividends Declared per Share | \$ | 0.28 | \$ | 0.28 | \$ | 1.12 |

Consolidated Balance Sheet (Unaudited)

## EARN

As of
ellington residential mortgage leit

| (in thousands except share amounts) | December 31, 2020 |  |  | September 30, 2020 | December 31, $2019^{(1)}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Assets |  |  |  |  |  |  |
| Cash and cash equivalents | \$ | 58,166 | \$ | 61,193 | \$ | 35,351 |
| Mortgage-backed securities, at fair value |  | 1,081,380 |  | 1,113,620 |  | 1,401,778 |
| Other investments, at fair value |  | 292 |  | 5,290 |  | - |
| Due from brokers |  | 47,798 |  | 49,530 |  | 34,596 |
| Financial derivative-assets, at fair value |  | 2,791 |  | 1,738 |  | 4,180 |
| Reverse repurchase agreements |  | - |  | 20,013 |  | 2,084 |
| Receivable for securities sold |  | - |  | 7,191 |  | 5,500 |
| Interest receivable |  | 4,114 |  | 4,562 |  | 5,016 |
| Other assets |  | 270 |  | 380 |  | 604 |
| Total Assets | \$ | 1,194,811 | \$ | 1,263,517 | \$ | 1,489,109 |
| Liabilities and Shareholders' Equity |  |  |  |  |  |  |
| Liabilities |  |  |  |  |  |  |
| Repurchase agreements | \$ | 1,015,245 | \$ | 1,061,640 | \$ | 1,296,272 |
| Payable for securities purchased |  | - |  | 5,308 |  | 19,433 |
| Due to brokers |  | 1,064 |  | 669 |  | 33 |
| Financial derivatives-liabilities, at fair value |  | 6,630 |  | 7,916 |  | 2,047 |
| U.S. Treasury securities sold short, at fair value |  | - |  | 19,986 |  | 2,070 |
| Dividend Payable |  | 3,456 |  | 3,454 |  | 3,488 |
| Accrued expenses |  | 918 |  | 1,077 |  | 588 |
| Management fee payable to affiliate |  | 626 |  | 611 |  | 605 |
| Interest payable |  | 470 |  | 455 |  | 3,729 |
| Total Liabilities | \$ | 1,028,409 | \$ | 1,101,116 | \$ | 1,328,265 |

## Shareholders' Equity

Preferred shares, par value $\$ 0.01$ per share, 100,000,000 shares authorized;
(0 shares issued and outstanding, respectively)
Common shares, par value $\$ 0.01$ per share, 500,000,000 shares authorized;

| (12,343,542, 12,334,636, and 12,45 respectively) |  | 123 |  | 123 |  | 124 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Additional paid-in-capital |  | 229,614 |  | 229,551 |  | 230,358 |
| Accumulated deficit |  | $(63,335)$ |  | $(67,273)$ |  | $(69,638)$ |
| Total Shareholders' Equity |  | 166,402 |  | 162,401 |  | 160,844 |
| Total Liabilities and Shareholders' Equity | \$ | 1,194,811 | \$ | 1,263,517 | \$ | 1,489,109 |
| Supplement Per Share Information |  |  |  |  |  |  |
| Book Value Per Share | \$ | 13.48 | \$ | 13.17 | \$ | 12.91 |

## Reconciliation of Core Earnings to Net Income (Loss) ${ }^{(1)}$

## E A R N

## Three-Month Period Ended

| (in thousands except share amounts) | December 31, 2020 |  | September 30, 2020 |  |
| :---: | :---: | :---: | :---: | :---: |
| Net Income (Loss) | \$ | 7,394 | \$ | 8,118 |
| Adjustments: |  |  |  |  |
| Net realized (gains) losses on securities |  | (862) |  | $(4,987)$ |
| Change in net unrealized (gains) losses on securities |  | 2,259 |  | 4,575 |
| Net realized (gains) losses on financial derivatives |  | $(2,395)$ |  | 648 |
| Change in net unrealized (gains) losses on financial derivatives |  | $(2,338)$ |  | $(2,803)$ |
| Net realized gains (losses) on periodic settlements of interest rate swaps |  | (648) |  | (271) |
| Change in net unrealized gains (losses) on accrued periodic settlements of interest rate swaps |  | 267 |  | (148) |
| Deferred offering costs expensed |  | - |  | 39 |
| Negative (positive) component of interest income represented by Catch-up Premium Amortization Adjustment |  | 559 |  | (405) |
| Subtotal |  | $(3,158)$ |  | $(3,352)$ |
| Core Earnings | \$ | 4,236 | \$ | 4,766 |
| Weighted Average Shares Outstanding |  | 36,088 |  | 23,044 |
| Core Earnings Per Share | \$ | 0.34 | \$ | 0.39 |

## Ellington Profile <br> As of $12 / 31 / 2020$

Founded: ..... 1994
Employees: ..... >150
Investment Professionals: ..... 61
Global offices: ..... 2

## Ellington and its Affiliated Management Companies

- Our external manager Ellington Residential Mortgage Management LLC is part of the Ellington family of SEC-registered investment advisors ${ }^{(3)}$. Ellington Management Group and its affiliates manage Ellington Residential Mortgage REIT (EARN), Ellington Financial Inc. (EFC), multi-investor hedge funds, separately managed accounts, and opportunistic private funds
- Time-tested infrastructure and proprietary resources in trading, research, risk management, and operational support
- Founding partners each have advanced academic training in mathematics and engineering, including among them several Ph.D.'s and Master's degrees


## Industry-Leading Research \& Trading Expertise

- Sophisticated proprietary models for prepayment and credit analysis
- Approximately $25 \%$ of employees dedicated to research and infrastructure development
- Structured credit trading experience and analytical skills developed since the firm's founding 26 years ago
- Ellington's portfolio managers are among the most experienced in the MBS sector and the firm's analytics have been developed over its 26 -year history

Slide 3 - Fourth Quarter Market Update
(1) Source: Bloomberg
(2) Source: Mortgage Bankers Association via Bloomberg
(3) LIBOR-based Option Adjusted Spread measures the additional yield spread over LIBOR that an asset provides at its current market price after taking into account any interest rate options embedded in the asset.
(4) LIBOR-based Zero-volatility spread (Z-spread) measures the additional yield spread over LIBOR that the projected cash flows of an asset provide at the current market price of the asset.

Slide 4 - Fourth Quarter Highlights
(1) Core Earnings is a non-GAAP financial measure. See slide 25, endnote 1 for an explanation regarding the calculation of Core Earnings and the Catch-up Premium Amortization Adjustment.
(2) Net interest margin excludes the effect of the Catch-up Premium Amortization Adjustment.
(3) As of December 31, 2020.
(4) We define our net mortgage assets-to-equity ratio as the net aggregate market value of our mortgage-backed securities (including the underlying market values of our long and short TBA positions) divided by total shareholders' equity. As of December 31, 2020 the market value of our mortgage-backed securities and our net short TBA position was $\$ 1.08$ billion and $\$(156.3$ ) million, respectively, and total shareholders' equity was $\$ 166.4$ million.

Slide 5-2020 Highlights
(1) Assumes reinvestment of dividends in additional shares.

Slide 6 - Economic Return Relative to Agency Peers, 2019-2020
(1) Cumulative dividends declared for the period are added back to ending book value per share.

## Slide 7 - Summary of Financial Results

(1) Total Other Gain (Loss) represents net realized and unrealized gains (losses) on periodic settlements of interest rate swaps.
(2) See slide 25, endnote 1 for definition of Catch-up Premium Amortization Adjustment.
(3) Core Earnings is a non-GAAP financial measure. See slide 25 for a reconciliation of Core Earnings to Net Income (Loss).
(4) Shareholders' Equity per share is calculated using shares outstanding at the end of the period. All other per share amounts a re calculated using the weighted average shares outstanding for the quarter.
(5) Weighted Average Yield excludes the effect of the Catch-up Premium Amortization Adjustment.
(6) Net interest margin excludes the effect of the Catch-up Premium Amortization Adjustment.

Slide 8 - Consolidated Balance Sheet
(1) Derived from audited financial statements as of December 31, 2019.

Slide 9 - Portfolio Summary
(1) Represents the dollar amount (not shown in thousands) per $\$ 100$ of current principal of the price or cost for the security.
(2) Excludes Agency IOs.

Slide 10 - Interest Rate Hedging Portfolio
(1) "10-year equivalents" for a group of positions represent the amount of 10-year U.S. Treasury securities that would be expected to experience a similar change in market value under a standard parallel move in interest rates.

## Slide 11 - Dynamic Hedging Strategy

(1) Net short TBA positions represents the current market value of the underlying Agency RMBS (on a forward delivery basis) as of December 31, 2020 and September 30, 2020. The net carrying value of the TBA positions as of December 31, 2020 and September 30, 2020 on the Consolidated Balance Sheet was $\$ 1.02$ million and $\$ 0.36$ million, respectively.
(2) We define our net mortgage assets-to-equity ratio as the net aggregate market value of our mortgage-backed securities (including the underlying market values of our long and short TBA positions) divided by total shareholders' equity.

Slide 12 - Relative Yield Spreads
(1) As of date is December 31, 2020 except for the below securitized products as follows:

12/18/2020 for EUR CLO 2.0 AAA; 12/24/2020 for US CMBS AAA and US CMBS BBB; 1/4/2021 for US CLO 2.0 AAA and US CLO 2.0 BBB
Slide 13 - Spread Differential: 3-mo. LIBOR vs. Repo Funding Rate
(1) Chart compares LIBOR on each day to the average rate of EARN's repo financing outstanding on that day. Because repo financing may be entered into for an extended term at a rate fixed at the beginning of the term, the average outstanding repo rate on a given day may reflect rates set in a rate environment weeks or months before that day. The average rate on outstanding repo financing on a day may differ materially from the rate available to establish repo financing on that day.

Slide 17 - Agency Portfolio Summary
(1) Does not include long TBA positions with a notional value of $\$ 317.9$ million and a market value of $\$ 332.4$ million as of December 31, 2020. Does not include long TBA positions with a notional value of $\$ 359.4$ million and a market value of $\$ 375.5$ million as of September 30, 2020
(2) Fair value shown in millions.
(3) Represents weighted average net pass-through rate.

Slide 18 - CPR Breakout of Agency Fixed Long Portfolio
(1) Does not include long TBA positions, reverse mortgage pools, or fixed rate IOs.
(2) Classification methodology may change over time as market practices change.
(3) Fair value shown in millions.
(4) "MHA" indicates those pools where underlying borrowers have participated in the Making Homes Affordable program.

Slide 20 - Repo Borrowings
(1) As of December 31, 2020 and September 30, 2020, the Company had no outstanding borrowings other than under repurchase agreements.

Slide 21 - Interest Rate Sensitivity Analysis
(1) Based on the market environment as of December 31, 2020. Results are based on forward-looking models, which are inherently imperfect, and incorporate various simplifying assumptions. Therefore, the table above is for illustrative purposes only and actual changes in interest rates would likely cause changes in the actual value of our portfolio that would differ from those presented above, and such differences might be significant and adverse.

Slide 22 - Financial Derivatives as of December 31, 2020
(1) Notional amount represents the principal balance of the underlying Agency RMBS.
(2) Cost basis represents the forward price to be paid for the underlying Agency RMBS.
(3) Market value represents the current market value of the underlyingAgency RMBS (on a forward delivery basis) as of December 31, 2020.
(4) Net carrying value represents the difference between the market value of the TBA contract as of December 31, 2020 and the cost basis, and is included in Financial derivatives-assets, at fair value and Financial derivatives-liabilities, at fair value on the Consolidated Balance Sheet.

Slide 24 - Consolidated Balance Sheet
(1) Derived from audited financial statements as of December 31, 2019.

Slide 25 - Reconciliation of Core Earnings to Net Income (Loss)
(1) Core Earnings consists of net income (loss), excluding realized and change in net unrealized gains and (losses) on securities and financial derivatives, and excluding, if applicable, any nonrecurring items of income or loss. Core Earnings also excludes the effect of the Catch-up Premium Amortization Adjustment on interest income. The Catch-up Premium Amortization Adjustment is a quarterly adjustment to premium amortization triggered by changes in actual and projected prepayments on our Agency RMBS (accompanied by a corresponding offsetting adjustment to realized and unrealized gains and losses). The adjustment is calculated as of the beginning of each quarter based on our then-current assumptions about cashflows and prepayments, and can vary significantly from quarter to quarter. Core Earnings includes net realized and change in net unreal ized gains (losses) associated with periodic settlements on interest rate swaps. Core Earnings is a supplemental non-GAAP financial measure. We believe that Core Earnings provides information useful to investors because it is a metric that we use to assess our performance and to evaluate the effective net yield provided by the portfolio. Moreover, one of our objectives is to generate income from the net interest margin on the portfolio, and Core Earnings is used to help measure the extent to which this objective is being achieved. In addition, we believe that presenting Core Earnings enables our investors to measure, evaluate and compare our operating performance to that of our peer companies. However, because Core Earnings is an incomplete measure of our financial results and differs from net income (loss) computed in accordance with GAAP, it should be considered as supplementary to, and not as a substitute for, net income (loss) computed in accordance with GAAP. The table above reconciles, for the three-month periods ended December 31, 2020 and September 30, 2020, our Core Earnings to the line on our Consolidated Statement of Operations entitled Net Income (Loss), which we believe is the most directly comparable GAAP measure.

## Slide 26 - About Ellington Management Group

(1) $\$ 11.3$ billion in assets under management includes approximately $\$ 1.4$ billion in Ellington-managed CLOs. For these purposes, the Ellington-managed CLO figure represents the aggregate outstanding balance of CLO notes and market value of CLO equity, excluding any notes and equity held by other Ellington-managed funds and accounts.
(2) Does not include partners formerly employed by Ellington who may have residual capital balances but who no longer have voting rights in the partnership.
(3) Registration with the SEC does not imply that the firm or any of its principals or employees possess a particular level of skill or training in the investment advisory or any other business.

## E A R N

ELLINGTON RESIDENTIAL MORTGAGE REIT



[^0]:    - Decreased non-Agency RMBS holdings by 28\% as we continued to monetize gains during the fourth quarter
    - We expect to continue to vary our allocation to non-Agency RMBS as market opportunities change over time

