

Second Quarter 2020

Earnings Presentation



Forward looking statements

When used in this presentation or other written or oral communications, statements which are not historical in nature, including those containing words such as "will," "believe," "expect," "anticipate," "estimate," "plan," "continue," "intend," "should," "could," "would," "may," the negative of these words or similar expressions, are intended to identify "forward-looking statements" within the meaning of Section 27A of the 1933 Act and Section 21E of the 1934 Act and, as such, may involve known and unknown risks, uncertainties and assumptions. These forward-looking statements include information about possible or assumed future results with respect to our business, financial condition, liquidity, results of operations, plans and objectives. Statements regarding the following subjects, among others, may be forward-looking: risks related to the ongoing spread of the novel coronavirus and the COVID-19 pandemic, including its effects on the general economy and our business, financial position and results of operations (including, among other potential effects, increased delinquencies and greater than expected losses in our whole loan portfolio); changes in interest rates and the market (i.e., fair) value of MFA's residential whole loans, MBS and other assets; changes in the prepayment rates on residential mortgage assets, an increase of which could result in a reduction of the yield on certain investments in its portfolio and could require MFA to reinvest the proceeds received by it as a result of such prepayments in investments with lower coupons, while a decrease in which could result in an increase in the interest rate duration of certain investments in MFA's portfolio making their valuation more sensitive to changes in interest rates and could result in lower forecasted cash flows, credit risks underlying MFA's assets, including changes in the default rates and management's assumptions regarding default rates on the mortgage loans in MFA's residential whole loan portfolio; MFA's ability to borrow to finance its assets and the terms, including the cost, maturity and other terms, of any such borrowings; implementation of or changes in government regulations or programs affecting MFA's business; MFA's estimates regarding taxable income, the actual amount of which is dependent on a number of factors, including, but not limited to, changes in the amount of interest income and financing costs, the method elected by MFA to accrete the market discount on residential whole loans and the extent of prepayments, realized losses and changes in the composition of MFA's residential whole loan portfolios that may occur during the applicable tax period, including gain or loss on any MBS disposals and whole loan modifications, foreclosures and liquidations; the timing and amount of distributions to stockholders, which are declared and paid at the discretion of MFA's Board of Directors and will depend on, among other things, MFA's taxable income, its financial results and overall financial condition and liquidity, maintenance of its REIT qualification and such other factors as MFA's Board of Directors deems relevant; MFA's ability to maintain its qualification as a REIT for federal income tax purposes; MFA's ability to maintain its exemption from registration under the Investment Company Act of 1940, as amended (or the Investment Company Act), including statements regarding the Concept Release issued by the Securities and Exchange Commission (SEC) relating to interpretive issues under the Investment Company Act with respect to the status under the Investment Company Act of certain companies that are engaged in the business of acquiring mortgages and mortgage-related interests; MFA's ability to continue growing its residential whole loan portfolio which is dependent on, among other things, the supply of loans offered for sale in the market; expected returns on MFA's investments in non-performing residential whole loans (NPLs), which are affected by, among other things, the length of time required to foreclose upon, sell, liquidate or otherwise reach a resolution of the property underlying the NPL, home price values, amounts advanced to carry the asset (e.g., taxes, insurance, maintenance expenses, etc. on the underlying property) and the amount ultimately realized upon resolution of the asset; targeted or expected returns on MFA's investments in recently-originated loans, the performance of which is, similar to MFA's other mortgage loan investments, subject to, among other things, differences in prepayment risk, credit risk and financing cost associated with such investments; risks associated with MFA's investments in MSR-related assets, including servicing, regulatory and economic risks, risks associated with our investments in loan originators, and risks associated with investing in real estate assets, including changes in business conditions and the general economy. These and other risks, uncertainties and factors, including those described in the annual, quarterly and current reports that MFA files with the SEC, could cause MFA's actual results to differ materially from those projected in any forward-looking statements it makes. All forward-looking statements are based on beliefs, assumptions and expectations of MFA's future performance, taking into account all information currently available. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date on which they are made. New risks and uncertainties arise over time and it is not possible to predict those events or how they may affect MFA. Except as required by law, MFA is not obligated to, and does not intend to, update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.



Executive summary

- 2020 second quarter financial results
- Apollo/Athene capital transaction
- Restructured liabilities with more durable financing
- Exited forbearance on June 26 with substantial liquidity
- Securitization of Non-QM loans
- Reinstated preferred dividends and declared common dividend



2020 second quarter financial results

- GAAP earnings of \$0.19 per common share
- GAAP book value was \$4.51, up 3.9% from \$4.34 at March 31
- Economic book value was \$4.46, up 9.1% from \$4.09 at March 31
- Elected fair value option accounting for all new and reinstated financing
- Leverage (debt to equity) was 2.0:1 as of June 30
- Investment portfolio consists of \$5.9 billion of residential whole loans (net of credit loss allowance) and \$402 million of securities and MSR-related assets
- Several large and unusual expenses were realized in the second quarter including losses on terminated interest rate swaps and expenses related to entering new financing arrangements and negotiating forbearance exit.



Apollo/Athene capital transaction

- \$500 million senior secured term loan closed June 26, 2020
 - Warrants to purchase 7.5% of MFA common stock outstanding at May 31, 2020
- \$2 billion of new non-mark-to-market term financing
 - \$1.6 billion provided by Barclays, Apollo and Athene
 - \$475 million provided by Credit Suisse, Apollo and Athene
- Commitment to purchase lesser of 4.9% or \$50 million of outstanding
 MFA common stock in the open market over 12-month period
- Athene commitment to purchase portion of MFA Non-QM securitization



Restructured liabilities with more durable financing

- \$5.0 billion of total liabilities at June 30, 2020
 - \$4.7 billion is asset-based (secured) financing
 - \$3.0 billion, or approximately 65%, is non-mark-to-market
 - \$0.8 billion is "under-levered" by approximately \$55 million, creating a margin cushion
 - \$330 million is unsecured (and non-mark-to-market)
 - \$230 million 6.25% convertible bond
 - \$100 million 8.00% senior note
- Overall leverage (debt to equity) of 2.0:1 at June 30, 2020
- Secured financing cost summary
 - Apollo/Athene senior secured term loan: 11% (1 point OID)
 - Outstanding securitizations (RPL and NPL MBS): 3.8%
 - Other secured financing: 3.6%



Exited forbearance on June 26 with substantial liquidity

- MFA exited from forbearance arrangements on June 26, 2020
 - Initial forbearance agreement on April 10, extended on April 27 and again on June 1
 - All outstanding margin calls satisfied and lenders repaid in full
- Forbearance provided meaningful strategic benefit
 - Legacy Non-Agency portfolio liquidation through orderly sales in April
 - Sales of MSR-related assets and CRTs in April, May and June
 - Marketed and completed an orderly Non-QM whole loan sale in May
 - Competitive and robust third party capital process



Substantial liquidity

MFA is well-positioned with substantial liquidity

- \$666 million in unrestricted cash and cash equivalents as of June 30
- \$55 million of additional borrowing capacity on under-levered financing

Securitization

MFA will pursue securitizations for Non-QM loan portfolio

Spreads on AAAs continue to tighten and swap levels are very low

Preferred dividends reinstated and common dividend declared

Since quarter end, MFA's Board of Directors has reinstated the payment of preferred dividends and declared a common dividend

- Series B and C Preferred stock declared on July 1, 2020 and paid July 31, 2020
- Declared \$0.05 common dividend payable on October 30, 2020 to shareholders of record on September 30, 2020.



Estimated REIT taxable income, undistributed income and implications for common dividends in 2020

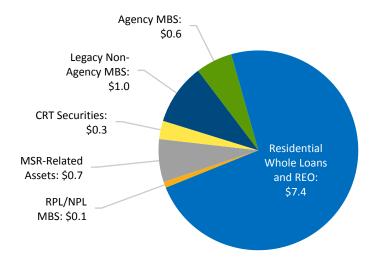
- Prior year undistributed REIT taxable income was approximately \$0.05 per share. To avoid paying corporate income tax, we are required to declare a dividend for this income prior to filing our REIT tax return in October 2020 and pay such dividend before the end of the year.
- Estimated REIT taxable income for the six months ended June 30, 2020 is approximately \$0.14 per share. In order to avoid a 4% excise tax, we are required to declare dividends (common and preferred) in 2020 for at least 85% of our estimated 2020 ordinary REIT taxable income.
- Capital losses generated from sales of residential mortgage assets to date in 2020 are carried forward and offset against future capital gains, but capital losses do not offset ordinary REIT taxable income.



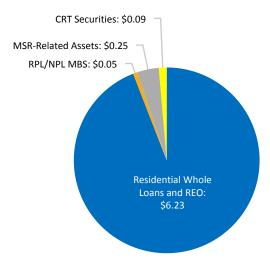
Second quarter portfolio activity

- Second quarter portfolio activity was focused on stabilizing the balance sheet, reducing leverage and generating liquidity
 - Sold \$3.2 billion of assets. Exited all Agency MBS positions and virtually all Legacy Non-Agency MBS positions in the quarter. Substantial reduction in MSR-related assets and CRT securities.
 - Residential whole loans represent 94% of investment portfolio as of June 30th 2020.
 - Patient deleveraging allowed us to preserve a substantial amount of book value.

March 31, 2020 \$10 billion of Investments, 74% whole loans



June 30, 2020 \$6.6 billion of Investments, 94% whole loans



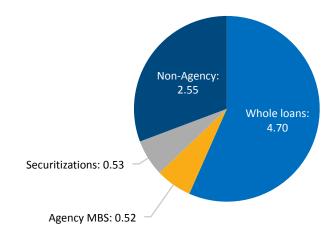


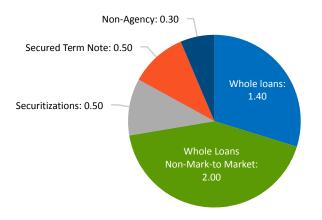
Second quarter financing activity

- Reduced mark-to-market repurchase financing by \$6.1 billion in the second quarter.
 - Paid down \$4.1 billion through asset sales as we de-levered and de-risked our portfolio.
 - Replaced \$2.0 billion of mark-to-market repurchase agreements with \$2.0 billion of term non-mark-to-market financing agreements.
 - Approximately two-thirds of asset-based financing is non-mark-to-market.
 - Entered into \$500 million senior secured term loan.
 - Majority of financing arrangements with mark-to-market collateral provisions are under-levered, providing margin cushion.

March 31, 2020 \$7.8 billion repo, \$0.5 billion securitizations (non-MTM)

June 30, 2020 \$3.0 billion non-MTM asset-based financing, \$1.7 billion MTM repo







Non-QM loans

- Origination of Non-QM loans slowed down
 materially in the second quarter, but has begun
 to pick up once again with the stabilization of the
 securitization market.
- We completed a sale of approximately \$1 billion of loans in the second quarter as part of our deleveraging process.
- We have maintained relationships with our origination partners.
- Approximately half of the portfolio is funded with non-MTM financing.
- We expect to execute programmatic securitizations should current favorable market conditions persist, which would materially lower our cost of funds.

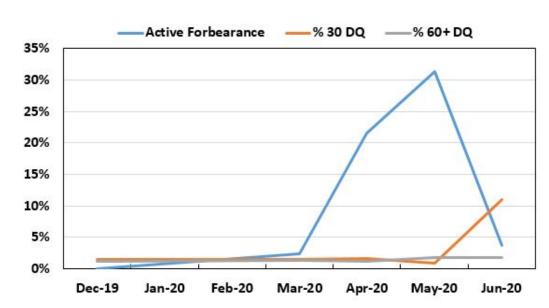
| Non-QM Portfolio Statis | stics (6/30/20) |
|-------------------------|-----------------|
| WA LTV | 63.6% |
| Total UPB (\$mm) | \$2,501.55 |
| WA FICO | 712 |
| WA Coupon | 6.19% |
| Avg Balance | \$420,640 |
| Hybrid ARM's | 70% |
| Fixed Rate | 30% |
| | |
| Current | 98.2% |
| 60+Days DQ | 1.8% |
| | |
| 3-Month CPR | 16.6% |
| | |
| Top 2 States | |
| CA | 53% |
| FL | 18% |



Non-QM COVID-19 pandemic impact

- A material percentage of our Non-QM loans have been impacted by the pandemic.
- Many of our borrowers are self employed and run small businesses.
- We executed forbearance / deferral plans for 32.3% of the Non-QM portfolio through June 30, 2020.
- The majority of loans exiting forbearance plans have continued to perform by making the next contractual payment.

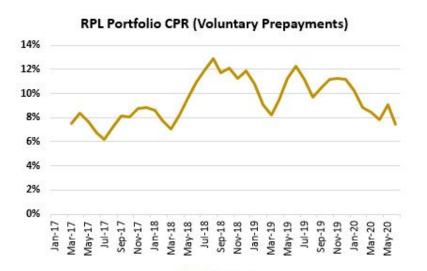
| | Dec-19 | Mar-20 | Apr -20 | May - 20 | June - 20 |
|----------------------|---------|---------|---------|----------|-----------|
| Loan Count | 7,429 | 7,871 | 7,769 | 5,947 | 5,844 |
| Total UPB (\$mm) | 3,517.3 | 3,500.9 | 3,464.1 | 2,501.4 | 2,460.1 |
| % Current | 97.2% | 97.2% | 97.2% | 97.2% | 87.2% |
| % 30 Days | 1.5% | 1.5% | 1.6% | 1.0% | 11% |
| % 60+ Days | 1.2% | 1.3% | 1.1% | 1.8% | 1.8% |
| LTV | 66.5 | 65.7 | 65.8 | 63.6 | 63.5 |
| % COVID Impact | 0.0% | 2.4% | 21.5% | 31.7% | 32.3% |
| % Active Forbearance | 0.0% | 2.4% | 21.5% | 31.4% | 3.7% |



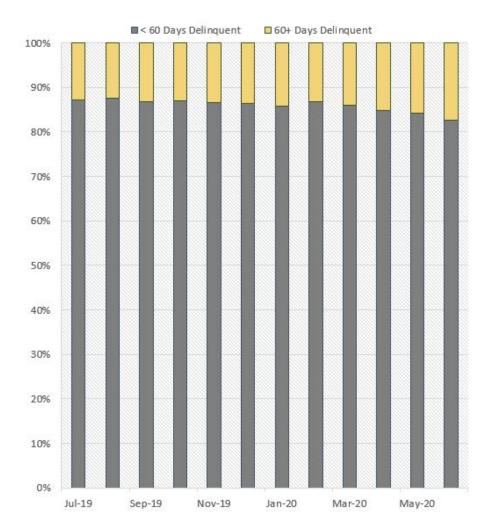


RPL portfolio delinquency characteristics as of 6/30/2020

- 83% of our RPL portfolio is less than 60 days delinquent as of 6/30/2020.
- On average, 22% of the 60+ days delinquent loans are making payments.
- Prepay speeds have maintained between 6% and 14%.
- 30% of the RPL portfolio has been granted forbearance plans related to the COVID-19 pandemic
 - Although borrowers have received forbearance plans, many continue to make payments and are contractually current



3-Month





Performance of Non-Performing⁽¹⁾ loans purchased before 6/30/19

| | Acquisition Year | | | | | | | | | |
|--------------------------------|------------------|---------|---------|---------|---------|---------|-----------|--|--|--|
| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total | | | |
| Loan Count | 743 | 2,354 | 1,069 | 3,124 | 1,848 | 721 | 9,859 | | | |
| UPB Purchased (in millions) | \$161.3 | \$619.9 | \$301.3 | \$704.7 | \$497.3 | \$124.1 | \$2,408.6 | | | |
| Status 6/30/2020 | | | | | | | | | | |
| Performing ⁽²⁾ /PIF | 34% | 26% | 25% | 38% | 44% | 36% | 34% | | | |
| Liquidation/REO | 54% | 58% | 64% | 39% | 30% | 26% | 46% | | | |
| Non-Performing | 12% | 16% | 11% | 23% | 26% | 38% | 20% | | | |
| Total | 100% | 100% | 100% | 100% | 100% | 100% | 100% | | | |

- Through diligent asset management we continue to improve outcomes for our NPL portfolio by returning loans to performing or paid-in-full status, and through other forms of resolution.
- 46% of our NPL portfolio has liquidated or reverted to REO. In addition, we have accelerated our sales of REO in the 2nd quarter selling 90% more properties vs the 2nd quarter a year ago.
- Measured by UPB at purchase, 34% (or approximately 3,700) of loans that were non-performing at purchase are either performing or have paid in full as of June 2020.
- 75% of MFA modified loans are either performing today or have paid in full.

¹Non-Performing at purchase defined as greater than or equal to 60 days delinquent

²Performing as of 6/30/2020 defined as less than 60 days delinquent or made a full P&I payment in June 2020



Business purpose loans – Rehabilitation (or Fix and Flip) loans

- Fix and Flip portfolio declined \$116 million to \$863 million at the end of the second quarter.
 - \$135 million of principal payments
 - Paydowns slowed in April and May to about 65% of pre-COVID levels but recovered in June to about 95% of pre-COVID levels.
 - \$26 million in rehab draws
 - No new investments in the quarter
- Average yield of 5.73% for the second quarter.
- Entire portfolio is financed with non-mark-to-market debt
- Fix and Flip borrowers were negatively impacted by the COVID-19 pandemic
 - Borrowers with less liquidity and in states hit hardest by COVID-19 were most negatively impacted.
 - Delinquencies increased in April and May, but appear to have stabilized in June.
 - Payment deferrals were granted to 1.5% of outstanding loans.

| Portfolio Statistics (| 6/30/20) |
|------------------------|---------------|
| WA ARV-LTV* | 63% |
| WA As-Is/Purch. LTV** | 70% |
| WA FICO | 720 |
| WA Orig Term (months) | 16mths |
| WA Loan Age | 12mths |
| WA Passthrough Rate | 7.26% |
| UPB | \$863 million |
| Undrawn commitments | \$94 million |
| 2nd Quarter Yield | 5.73% |
| Prepayment rate (CPR) | 45% |
| Current and 30 Days DQ | 79% |
| 60+ Days DQ | 21% |

^{*} WARV-LTV: Weighted average after repair loan to value at origination

^{**}WA As-Is/Purch. LTV: Weighted average As-Is value or purchase value (when available) at origination



Business purpose loans – Fix and Flip delinquency

Portfolio delinquency

- 60+ day DQ % increased during the quarter by \$70 million, or 10% to \$182 million, or 21% of UPB.
 - 7.5% of the increase was due to new loans becoming 60+ days delinquent.
 - 2.5% of the increase was due to lower UPB caused by loan payoffs.
- Approximately one-third of 60+ day delinquent loans are listed for sale and two-thirds of 60+ day delinquent loans are completed projects or loans where no/limited work was expected to be done.
- Reserves of \$30 million recorded as of June 30, 2020, for expected credit losses.

| 60+ Day DQ Loan Statistic | cs (6/30/20) |
|---------------------------|---------------|
| WA ARV-LTV* | 63% |
| WA As-Is/Purch. LTV** | 70% |
| WA FICO | 693 |
| WA Orig Term (months) | 14mths |
| WA Loan Age | 16mths |
| WA Passthrough Rate | 7.57% |
| UPB | \$182 million |
| Undrawn commitments | \$10 million |
| 60 day DQ | 8% |
| 90 day DQ | 2% |
| 120+ day DQ | 11% |

Loss mitigating factors

- Highly experienced asset management team.
- Term non-mark-to-market financing of portfolio gives us time to carefully manage delinquent assets.
- MFA has outstanding repurchase claims on \$7 million of seriously delinquent loans.
- Fiscal and monetary stimulus continue to support housing, reducing loss expectations.
- Low mortgage rates and resilient home sales support property values.
- Short term push to suburban housing due to COVID-19.

^{*} WARV-LTV: Weighted average after repair loan to value

^{**}WA As-Is/Purch. LTV: Weighted average As-Is value or purchase value (when available) at origination



Business purpose loans - Single family rental loans

- SFR portfolio declined \$12 million to \$490 million at the end of the second quarter.
 - Prepayment rates remained low due to strong prepayment protection
 - No new investments in the quarter
- Average yield of 5.80% for the second quarter
- Delinquency
 - 60+ day delinquencies increased to 5.0% at the end of the 2nd quarter, up 3.7% from the end of the first quarter.
 - 3% of SFR loans were granted a payment deferral in the quarter.
 - We have seen 60+ day delinquencies trend down post quarter end.

| SFR Portfolio Statistics | (06/30/20) |
|--------------------------|---------------|
| WA LTV | 71% |
| WA FICO | 734 |
| WA DSCR* | 1.46x |
| WA Coupon | 6.64% |
| WA Loan Age | 13 |
| 5/1 Hybrid Loans | 57% |
| UPB | \$490 million |
| Yield | 5.80% |
| Prepayment Rate (CPR) | 9% |
| DQ 60+ | 5.0% |



Summary

- Second quarter results and book value reflect the continued recovery in residential mortgage asset prices following the COVID-19 driven disruption experienced in the first quarter.
- Management's focus was to take the actions necessary to stabilize our balance sheet, generate liquidity, preserve book value, refinance our borrowing arrangements and negotiate an exit from forbearance.
- Closing the \$500 million term loan was key to facilitating our exit from forbearance and refinancing virtually all of our asset-based borrowings, with approximately two-thirds now containing non-mark-to-market collateral provisions. Our ongoing relationship with Apollo and Athene also offers opportunities for our future investment and financing strategy.
- Going forward for the short to medium term, we anticipate that normalization in our financing costs and other operating expenses, coupled with the pursuit of a loan securitization financing strategy, should drive earnings and return on equity.



Additional Information



Q2 Results reflect portfolio restructuring and impact of forbearance agreements

| Summary Income Statement | 2020 n mm | |
|-------------------------------------------------------------------------------|--------------|---------------|
| Net Interest Income: | | |
| Residential mortgage securities (1) | \$ 5.6 | \$ 31.1 |
| Residential whole loans (RWL) (2) | (2.2) | 33.8 |
| Other interest earning assets and interest bearing liabilities | (4.0) | (3.2) |
| Net Interest Income | \$ (0.6) | \$ 61.7 |
| Provision for credit losses on RWL and other financial instruments | 15.2 | (80.6) |
| Valuation adjustment RWL designated as held-for-sale | 70.2 | (70.2) |
| Provision for credit and valuation losses on RWL | \$ 85.4 | \$ (150.8) |
| Other Income, net: | | |
| Net gains on RWL measured at fair value | 20.3 | (52.8) |
| Net income impact of MBS, CRT and RWL sales (3) | 90.6 | (245.8) |
| Unrealized gain/(loss) on remaining CRT securities held at fair value | 23.3 | (73.5) |
| Impairment and other losses on securities available-for-sale and other assets | (5.1) | (419.7) |
| Other miscellaneous net investment income | (52.8) | 1.0 |
| Other (Loss)/Income, net: | \$ 76.3 | \$ (790.8) |
| Operating and Other Expenses | (24.6) | (24.6) |
| Costs associated with restructuring/forbearance agreements | (40.0) | (4.5) |
| Preferred dividend requirement | (8.1) | (5.2) |
| Net (Loss)/Income Available to Common Shareholders | \$ 88.4 | \$ (914.2) |
| Earnings Per Common Share | \$ 0.19 | \$ (2.02) |

- (1) Includes MBS, CRT securities and MSR-related assets
- (2) Includes interest expense on financing associated with all residential whole loans. Interest income received on residential whole loans held at fair value is reported in Other Income in Net gains on residential whole loans measured at fair value.
- (3) Comprised of:

 Realized (loss)/gains on MBS, CRT and RWL sold

 Reversal of previously unrealized losses/(gains) on sold securities held at fair value

 \$49.5 \$(238.4)

 \$(7.4)

 \$90.6 \$(245.8)

Key items impacting results:

- Net interest income significantly reduced due to asset sales and higher funding costs while under forbearance agreements.
- Net income impact of \$90.6 million on sales of residential mortgage securities and residential whole loans.
- Reversal of loan loss reserves of \$85.4 million.
- Unrealized gains on remaining CRT securities of \$23.3 million and net gains on fair value loans (primarily cash) of \$20.3 million.
- \$49.9 million loss related to swap hedges.
- \$40.0 million of non-recurring forbearance and portfolio restructuring expenses.

21



Second quarter portfolio activity positively impacted second quarter net income and book value

| (Amounts In Millions) | Legacy Non- Agency MBS | MSR-Related Assets | CRT Securities | RPL/NPL MBS | Agency MBS | Other | Total |
|--------------------------------------------------------------|---------------------------------|-----------------------|-------------------|-------------|------------|-------------|----------|
| Realized gains/(losses) on securities sold | \$163.8 | \$53.3 | \$(25.0) | \$(12.7) | \$3.5 | \$(5.4) | \$177.5 |
| Unrealized gains/(losses) on FVO securities for the period | \$ — | \$ — | \$64.9 | \$ — | \$(0.5) | \$ — | \$64.4 |
| Net income impact of loan sales | | | | | | | \$(57.9) |
| Net impact on Q2 net income | \$163.8 | \$53.3 | \$39.9 | \$(12.7) | \$3.0 | \$(5.4) | \$184.0 |
| Per common share | | | | | | | \$0.41 |
| Change in OCI - securities available-for- sale | \$(165.7) | \$37.6 | \$11.5 | \$22.2 | \$(5.5) | \$ — | \$(99.9) |
| Net book value impact of investment related gains and losses | \$(1.9) | \$90.9 | \$51.4 | \$9.5 | \$(2.5) | \$(5.4) | \$84.1 |
| Per common share | | | | | | | \$0.19 |

- Positive impact on net income from asset sales and valuation changes on securities on which fair value option was elected of \$184.0 million or \$0.41 per common share.
- Including the impact of changes in unrealized gains on available for sale securities, overall positive impact on book value for the second quarter of \$0.19 per common share.



Allowance for credit losses

| | Three Months Ended June 30, 2020 | | | | | | | | | | |
|------------------------------------------------------------------|----------------------------------|-----------------------------|-------------------------------|---------------------------------|----------------------------------------------|-----------|--|--|--|--|--|
| (Amounts In Millions) | Non-QM Loans | Rehabilitation Loans (1) | Single-family Rental Loans | Seasoned Performing Loans | Purchased Credit Deteriorated Loans | Totals | | | | | |
| Allowance for credit and valuation losses at beginning of period | \$103,831 | \$35,633 | \$7,431 | \$249 | \$70,867 | \$218,011 | | | | | |
| Current period provision | (2,297) | (5,213) | (500) | (25) | (2,579) | (10,614) | | | | | |
| Write-offs | _ | (420) | _ | _ | (207) | (627) | | | | | |
| Valuation adjustment on held for sale loans | (70,181) | _ | _ | _ | _ | (70,181) | | | | | |
| Allowance for credit losses at end of period | \$31,353 | \$30,000 | \$6,931 | \$224 | \$68,081 | \$136,589 | | | | | |

⁽¹⁾ In connection with purchased Rehabilitation loans, the Company had unfunded commitments of \$94.5 million, with a separately recorded liability for expected losses of \$2.1 million.

- Allowance for credit losses decreased during the quarter primarily due to the following:
 - Reversal of \$70.2 million valuation adjustment on Non QM loans designated as held for sale as of March 31, 2020, as the sale of these loans was completed during the quarter; and
 - Reduction in estimated credit losses, primarily due to changes in macro-economic assumptions.
- Changes in credit loss and valuation loss allowances are recorded in periodic GAAP earnings.
- CECL adoption and ongoing CECL accounting does not impact calculation of Economic book value.



GAAP and Economic book value increased as residential mortgage assets partially recovered, following COVID-19 related market disruptions in Q1

| | GAAP | Economic |
|----------------------------------------------------------------------------------------------------------------------------------------|--------|----------|
| Book value per common share as of 3/31/20 | \$4.34 | \$4.09 |
| Net income available to common shareholders | 0.19 | 0.19 |
| Impact of discount accretion and realization of gains on sale of Non-Agency MBS that results in a reduction of unrealized gains in OCI | (0.36) | (0.36) |
| Realization of net gains and other fair value changes attributable to other residential mortgage securities and MSR term notes | 0.16 | 0.16 |
| Losses on hedging swaps transferred from OCI to earnings | 0.14 | 0.14 |
| Impact of warrants issued in connection with capital raise transaction | 0.04 | 0.04 |
| Change in fair value of residential whole loans reported at carrying value under GAAP | - | 0.20 |
| Book value per common share as of 6/30/20 | \$4.51 | \$4.46 |



Reconciliation of GAAP book value to Economic book value

"Economic book value" is a non-GAAP financial measure of our financial position. To calculate our Economic book value, our portfolios of Residential whole loans at carrying value are adjusted to their fair value, rather than the carrying value that is required to be reported under the GAAP accounting model applied to these loans. This adjustment is also reflected in our end of period stockholders' equity in the table below. Management considers that Economic book value provides investors with a useful supplemental measure to evaluate our financial position as it reflects the impact of fair value changes for all of our residential mortgage assets, irrespective of the accounting model applied for GAAP reporting purposes. Economic book value does not represent and should not be considered as a substitute for Stockholders' Equity, as determined in accordance with GAAP, and our calculation of this measure may not be comparable to similarly titled measures reported by other companies.

The following table provides a reconciliation of GAAP book value per common share to our non-GAAP Economic book value per common share as of the end of each quarter since Q1 2019.

| (In Millions, Except Per Share Amounts) | E | 5/30/20 | 3/3 | 1/20 | 12/3 | 1/19 | 9 | /30/19 | 6 | /30/19 | 3/ | /31/19 |
|--------------------------------------------------------------------------------------------------------------------------|----|---------|---------------|---------|--------|--------|----|---------|----|---------|----|---------|
| GAAP Total Stockholders' Equity | \$ | 2,521.1 | \$ 2, | ,440.7 | \$ 3, | 384.0 | \$ | 3,403.4 | \$ | 3,403.4 | \$ | 3,404.5 |
| Preferred Stock, liquidation preference | | (475.0) | (| (475.0) | (: | 200.0) | | (200.0) | | (200.0) | | (200.0) |
| GAAP Stockholders' Equity for book value per common share | \$ | 2,046.1 | \$ 1 , | ,965.7 | \$ 3,: | 184.0 | \$ | 3,203.4 | \$ | 3,203.4 | \$ | 3,204.5 |
| Adjustments: | | | | | | | | | | | | |
| Fair value adjustment to Residential whole loans, at carrying value | | (25.3) | (| (113.5) | | 182.4 | | 145.8 | | 131.2 | | 92.1 |
| Stockholders' Equity including fair value adjustment to Residential whole loans, at carrying value (Economic book value) | \$ | 2,020.8 | \$ 1, | ,852.2 | \$ 3, | 366.4 | \$ | 3,349.2 | \$ | 3,334.6 | \$ | 3,296.7 |
| GAAP book value per common share | \$ | 4.51 \$ | \$ | 4.34 | \$ | 7.04 | \$ | 7.09 | \$ | 7.11 | \$ | 7.11 |
| Economic book value per common share | \$ | 4.46 | \$ | 4.09 | \$ | 7.44 | \$ | 7.41 | \$ | 7.40 | \$ | 7.32 |
| Number of shares of common stock outstanding | | 453.2 | | 453.1 | 4 | 452.4 | | 451.7 | | 450.6 | | 450.5 |