

BARCLAYS GLOBAL FINANCIAL SERVICES CONFERENCE

SEPTEMBER 13, 2016



SAFE HARBOR STATEMENT

SAFE HARBOR STATEMENT UNDER THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995

This presentation contains statements that, to the extent they are not recitations of historical fact, constitute "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995 (the "Reform Act"). All such forward-looking statements are intended to be subject to the safe harbor protection provided by the Reform Act. Actual outcomes and results could differ materially from such forecasts due to the impact of many factors beyond the control of American Capital Agency Corp. ("AGNC" or the "Company"). All forward-looking statements included in this presentation are made only as of the date of this presentation and are subject to change without notice. Certain important factors that could cause actual results to differ materially from those contained in the forward-looking statements are included in our periodic reports filed with the Securities and Exchange Commission ("SEC"). Copies are available on the SEC's website at www.sec.gov. AGNC disclaims any obligation to update such forward-looking statements unless required by law.

The following slides contain summaries of certain financial and statistical information about AGNC. They should be read in conjunction with our periodic reports that are filed from time to time with the SEC. Historical results discussed in this presentation are not indicative of future results.



Presentation Overview

The AGNC Value Proposition

◆ AGNC offers a compelling value proposition to its shareholders as the largest internally-managed residential mortgage REIT with one of the lowest operating cost structures in the industry¹ and a proven track record of strong performance since inception²

Favorable Tailwinds for AGNC

- We believe the agency-focused model is well-positioned to generate attractive returns against the likely backdrop of a sustained "lower for longer" interest rate environment
- Significantly improved funding environment dynamics, coupled with the creation of AGNC's wholly-owned broker-dealer subsidiary with direct access to the Fixed Income Clearing Corporation (FICC), are expected to provide significant support to agency MBS returns
- ♦ AGNC has a highly efficient operating cost structure as a result of its recent internalization

AGNC's Investment Strategy and Outlook

- AGNC's agency-focused investment model has proven to be resilient through a wide range of market conditions
- To further strengthen and diversify its portfolio, AGNC has broadened its investment guidelines to include investments in credit-based assets with an initial focus on GSE credit risk transfer (CRT) securities



THE AGNC VALUE PROPOSITION

AS THE LARGEST INTERNALLY-MANAGED RESIDENTIAL MORTGAGE REIT, AGNC OFFERS A COMPELLING VALUE PROPOSITION TO ITS SHAREHOLDERS

Industry-Leading Performance

Since our 2008 IPO, AGNC has delivered industryleading performance as measured by total stock return¹ and total economic return² 17% Annualized Stock Return¹ 16% Annualized Economic Return²

Highly Efficient Operating Cost Structure

With an operating expense structure of under 0.90% of total equity capital, AGNC has one of the lowest cost structures as a percentage of stockholders' equity in the residential mortgage REIT space³

< 0.90%

Operating Expense Structure as a % of Stockholders' Equity³

Disciplined Risk Management

AGNC utilizes a comprehensive risk management framework that is predicated on careful asset selection, disciplined hedging, and diversified funding

Limited

Duration Gap⁴ 37
Funding
Counterparties

Stockholder Focus

AGNC has consistently been recognized as an industry leader for its financial disclosure, transparency and shareholder-focused approach to capital management

Monthly

Dividend Payment & NAV Disclosure

Liquidity and Scale

AGNC is the largest internally-managed residential mortgage REIT and one of only two residential mortgage REITs with a market cap over \$5 billion

\$6.5 Billion

Market Capitalization as of August 31, 2016



"LOWER FOR LONGER" EXPECTED TO BE A TAILWIND FOR AGNC

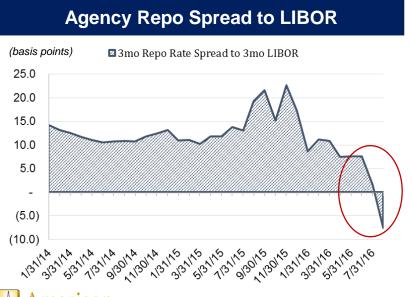
- Since the financial crisis in 2008, global central banks have reacted to weak global growth by lowering interest rates and making substantial asset purchases
- Despite massive quantitative easing (QE) and negative interest rates in many parts of the world, growth remains subdued, and inflation has remained well below central bank objectives for many years
- We believe the headwinds to global growth and inflation are mostly secular in nature and thus sustainable for the foreseeable future
 - Technological advances have reduced the cost of producing, marketing and selling goods and services and have reduced the employment opportunities for middle class workers in many parts of the world
 - Additionally, global competition continues to increase as local demand can be met by suppliers and workers across the globe
- The resulting "lower for longer" interest rate outlook is supportive of AGNC's business model over the intermediate to long-term
 - Low interest rate volatility reduces the need for portfolio rebalancing
 - ✓ AGNC's careful asset selection and disciplined approach to risk management have positioned its portfolio to mitigate negative effects of faster prepayments
 - ✓ Low rates tend to reduce bank funding advantages versus other market participants

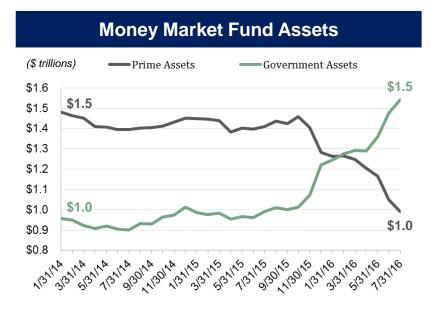


AGENCY MBS FUNDING MARKET UPDATE

AMPLE LIQUIDITY FOR AGENCY SECURITIES AND FAVORABLE FUNDING DYNAMICS

- Recent money market reform policies have caused a shift in asset holdings from prime funds to government funds
 - The shift to government assets is supportive of the agency MBS market and thus favorable to AGNC's business model
 - Since mid-2015, government funds have gained approximately \$500 billion in assets, while prime funds have lost a corresponding amount
- In turn, AGNC's funding costs have benefitted from a decreased repo spread to LIBOR
 - This spread has decreased over 30 bps from a high near 25 bps to a negative spread of almost 10 bps today
- Bethesda Securities, AGNC's wholly-owned broker-dealer subsidiary with direct access to the FICC, is expected to further enhance AGNC's funding opportunities





Post-Internalization Operating Cost Structure

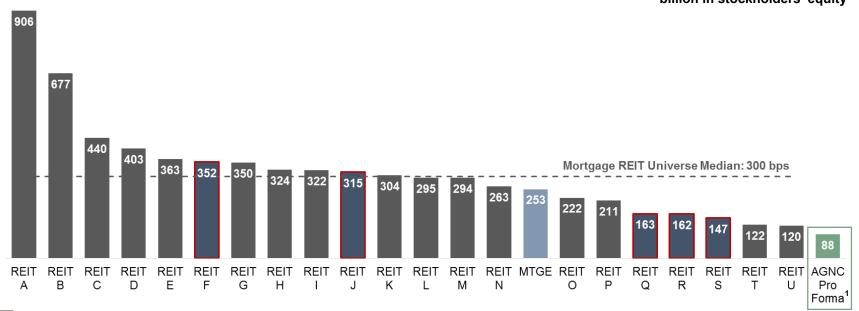
AGNC IS EXPECTED TO HAVE ONE OF THE LOWEST RUN-RATE OPERATING COST STRUCTURES AS A PERCENTAGE OF STOCKHOLDERS' EQUITY OF ANY RESIDENTIAL MORTGAGE REIT¹

- In a sustained lower interest rate environment, an efficient cost structure is critical to drive strong returns for shareholders
- AGNC's favorable cost structure complements its investment philosophy, which is centered around careful asset selection and disciplined risk management, to drive returns

Operating Cost Structure Comparison Across Residential Mortgage REIT Universe¹

(Operating expenses as a percentage of stockholders' equity, in basis points)

■ Denotes REIT with over \$2.5 billion in stockholders' equity





8

OVERVIEW OF CREDIT RISK TRANSFER SECURITIES

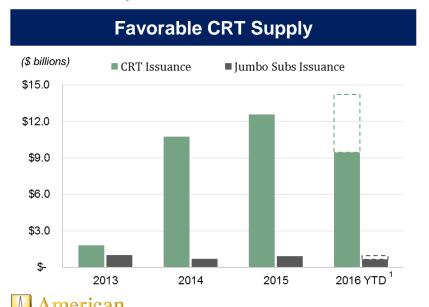
- Prior to 2013, the GSEs retained virtually all prime conforming credit exposure¹ for mortgages that they securitized
 - ✓ As a result, private investors did not have an ability to access prime conforming credit in any material or sustainable fashion
- Beginning in 2013, the GSEs, at the direction of the Federal Housing Finance Agency (FHFA), began to transfer a portion of the credit risk associated with conforming mortgages to private investors via credit risk sharing transactions
 - Credit risk transfer (CRT) securities have been the dominant transaction structure utilized to satisfy the FHFA's strategic objective of reducing the GSEs' credit risk exposure through private investor participation
 - ✓ Since the launch of the CRT programs, the GSEs have sold approximately \$34.6 billion of credit risk on mortgages with an aggregate underlying loan balance of approximately \$1.0 trillion under the CRT securities structure
 - ✓ The volume of CRT issuance is expected to dwarf that of other credit-oriented products in the residential mortgage market, including subordinate classes of jumbo securitizations
- CRT securities are structured as GSE debt obligations with cash flows that track the credit risk performance of a notional reference pool of mortgage loans
 - ✓ The notional reference pools represent diverse cross sections of mortgages acquired by the GSEs, thereby eliminating the risk of adverse selection and allowing investors to acquire a diversified pool of credit exposure
 - More stringent underwriting requirements and favorable macroeconomic conditions have resulted in strong underlying credit fundamentals and projected performance
- Residential mortgage market investors have long had the ability to take conforming MBS interest rate and prepayment risk through agency MBS; CRT securities provide the opportunity to acquire meaningful credit exposure on the same underlying assets

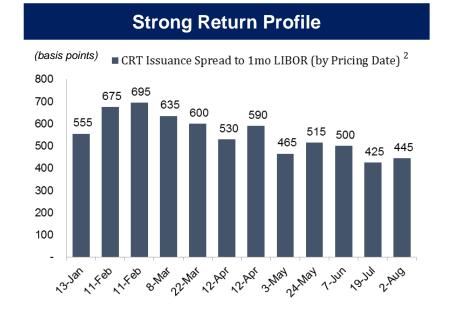


^{1.} Other than a portion of the credit exposure on loans with loan-to-value ratios in excess of 80%, which require loan-level credit enhancement such as mortgage insurance.

THE CRT INVESTMENT OPPORTUNITY FOR AGNC

- The emergence of CRT securities offers AGNC the opportunity to diversify its portfolio by investing in a credit-centric asset based on a cross section of the conforming mortgage market
 - Programmatic issuance of CRT securities by the GSEs should create favorable supply dynamics for opportunistic investors such as AGNC
 - Financing is available and improving for CRT investments
 - ✓ Floating rate CRT investments complement AGNC's largely fixed rate agency investment portfolio
- Investments in CRT securities, as currently structured, would be limited by REIT income rules among other constraints
 - The income associated with CRT securities does not qualify as "good" REIT income for purposes of the 75% gross income test







[.] Dotted lines reflect annualization of 2016 YTD volumes.

Source: Bloomberg.

^{2.} All pricing dates are during 2016.

CONCLUSION AND OUTLOOK

- AGNC's agency-focused investment model provides a strong foundation to generate attractive returns
- The recent internalization provides AGNC with a highly efficient operating cost structure, further enhancing AGNC's return potential and more closely aligning management and shareholder interests over the long-term
- We believe the addition of certain credit assets to AGNC's portfolio will complement its existing business model
 - ✓ Such diversification will provide greater investment flexibility and the ability to shift asset allocations as appropriate in response to varying market conditions
 - ✓ The CRT investment opportunity allows AGNC to gain credit exposure to a diverse cross section of the conforming mortgage market that was historically only available to the GSEs
- We anticipate the growth of non-agency securities within AGNC's investment portfolio to be opportunistic and gradual
 - Over the long-term, we expect the majority of AGNC's capital will continue to be deployed in agency MBS



APPENDIX

ENDNOTES

ENDNOTES

Endnotes to Slide 3

- 1) Mortgage REIT universe comprised of AJX, ANH, ARR, CHMI, CIM, CMO, CYS, DX, EARN, IVR, MFA, MITT, MTGE, NLY, NRZ, NYMT, OAKS, ORC, PMT, RWT, TWO and WMC. Mortgage REIT cost structures based on last twelve months' operating expenses and average stockholders' equity over the same period as publicly reported by such REITs. Operating costs include expenses for compensation and benefits, management fees and G&A and may include one-time or nonrecurring expenses. Operating costs exclude direct costs associated with operating activities, such as loan acquisition costs, securitization costs, servicing expenses, etc. to the extent publicly disclosed by such REITs. AGNC's ratio is based on total stockholders' equity as of June 30, 2016 and excludes nonrecurring transaction-related charges and non-cash expenses, such as non-cash amortization charges, associated with the internalization transaction. AGNC's ratio also excludes the net economic benefit associated with receipt of the MTGE management fee and incremental G&A expenses associated with AGNC's management of MTGE that will be reimbursed by MTGE.
- Performance as measured by total stock return and total economic return. Total stock return measured from IPO through August 31, 2016. Total stock return over a period includes price appreciation and dividend reinvestment; dividends are assumed to be reinvested at the closing price of the security on the ex-dividend date. Total economic return measured from December 31, 2008 through June 30, 2016. Total economic return represents the change in net asset value (NAV) per common share and dividends declared on common stock during the period over the beginning NAV per common share. For agency-focused residential mortgage REIT peer comparison purposes, AGNC's peer group is comprised of ANH, ARR, CMO, CYS, HTS and NLY (ARR and CYS are included following the date that each company went public in 2009; HTS is included prior to its sale to NLY in 2016).

Endnotes to Slide 4

- 1) Stock return measured from IPO through August 31, 2016. See Endnote #2 to Slide 3 above for further details.
- 2) Economic return measured from December 31, 2008 through June 30, 2016. See Endnote #2 to Slide 3 above for further details.
- 3) See Endnote #1 to Slide 3 above for further details.
- 4) The duration of an asset or liability measures how much its price is expected to change if interest rates move in a parallel manner; it is a model estimate and is measured in years as of a point in time. Duration gap is a measure of the difference in the interest rate exposure, or estimated price sensitivity, of our assets and our liabilities (including hedges). AGNC uses a risk management system and models provided by BlackRock Solutions to generate these calculations and as a tool for helping us to measure other exposures, including exposure to larger interest rate moves and yield curve changes. The inputs and results from these models are not audited by our independent auditors.

Endnotes to Slide 7

See Endnote #1 to Slide 3 above for further details.

