## Sandler O'Neill East Coast Financial Services Conference

November 10, 2011

## 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 forwardlooking statements are intended to be subject to the safe harbor protection provided by the Reform Act. Actual outcomes and results could differ materially from those forecast due to the impact of many factors beyond the control of American Capital Agency Corp. ("AGNC"). 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 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 our 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, including our quarterly report on Form 10-Q for the quarter ended September 30, 2011. Historical results discussed in this presentation are not indicative of future results.

## Current Market Conditions

- Mortgage rates continue to be near record lows
- Most borrowers who took out mortgages over the past several years qualify to refinance irrespective of the changes to the HARP program
$\checkmark$ Speeds on newer, generic mortgages have increased significantly over the past few months
- The enhancements to the HARP program (outlined on Oct 24 ${ }^{\text {th }}$ ) add significant risk to seasoned higher coupon mortgages (pre-2009), which would otherwise be expected to have benign prepayments
$\checkmark$ More details are likely to be released over the next week by FHFA
$\checkmark$ These impacts will not be visible until the $1^{\text {st }}$ quarter of 2012 at the earliest
- The Federal Reserve has indicated that increased large scale purchases of agency mortgage-backed securities are "a viable option" if conditions in the economy do not improve or worsen from here.
$\checkmark$ If implemented, these purchases would increase the prices of MBS but put further pressure on prepayments
$\checkmark$ They also increase reinvestment risk as new acquisitions would offer considerably lower yields


## Prepayment Risk is Real But Not Uniform

## Prepayment speeds jumped significantly over the past few months




- Prepayment speeds have increased significantly over the past few months for generic (TBA) mortgages
- In contrast, pools backed by lower loan balance mortgages and HARP loans remained slow


## Prepayments Drive ROE

| Hypothetical Yield Sensitivity Analysis* |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 30 Year 4.5\% MBS |  |  |  | 15 Year 3.5\% MBS |  |  |  |
|  | 10 CPR | 20 CPR | 30 CPR | 40 CPR | 10 CPR | 20 CPR | 30 CPR | 40 CPR |
| Asset Yield ${ }^{(1)}$ | 3.48\% | 2.81\% | 2.06\% | 1.19\% | 2.49\% | 2.05\% | 1.51\% | 0.89\% |
| Cost of Funds ${ }^{(2)}$ | (0.85)\% | (0.85)\% | (0.85)\% | (0.85)\% | (0.70)\% | (0.70)\% | (0.70)\% | (0.70)\% |
| Net Margin | 2.63\% | 1.96\% | 1.21\% | 0.34\% | 1.79\% | 1.35\% | 0.81\% | 0.19\% |
| ROE (8x Lev) | 24.5\% | 18.5\% | 11.7\% | 3.9\% | 16.8\% | 12.8\% | 8.0\% | 2.4\% |

- ROE is very sensitive to prepayments given current market prices and record low interest rates
- With recent prepayment information, 2010 experience and the HARP changes, outcomes anywhere on the above spectrum are feasible depending on specific security attributes

[^0]
# AGNC is Well Positioned for the Current Landscape 

## Q3 2011 Portfolio Update

- Maintained diversified and balanced portfolio
- Reduced exposure to higher coupon, seasoned fixed-rate and ARM securities in light of current environment
- Average prepayment speeds on the portfolio remained stable at 8\% CPR for the 3rd quarter
- Average projected prepayment speeds on the portfolio increased to 13\% CPR from 10\% as of June 30, 2011
$\checkmark$ The projected CPR drives asset yields and premium amortization costs



## AGNC Well Positioned Against Both "Organic" and "Policy" Prepayment Risk

Newer vintages (2009-2011) are most exposed to "organic" prepay risk while the enhancements to the HARP program elevate the risk level substantially for higher coupon, seasoned mortgages

- To minimize "organic" prepayment risk:
$\checkmark$ Approximately $93 \%$ of our 15 year securities and $86 \%$ of our 30 year securities are backed by lower loan balance or HARP securities

| $\leq 15$ Year - \$22.0 B Portfolio (52\% of Total) as of 9/30/11 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ( I In Millions) | MV | \% | Coupon | WALA | CPR |
| Lower Loan Balance ${ }^{(1)}$ | \$19,320 | 88\% | 3.83\% | 10 | 9\% |
| HARP ${ }^{(2)}$ | \$1,057 | 5\% | 3.96\% | 7 | 2\% |
| Other ${ }^{(3)}$ | \$1,630 | 7\% | 3.67\% | 10 | 13\% |
| Total $\leq 15$ Year | \$22,007 | 100\% | 3.82\% | 10 | 9\% |

- To limit "policy" prepayment risk:
$\checkmark$ Less than $2.0 \%$ of our portfolio was comprised of fixed-rate collateral issued prior to 2009
$\checkmark$ Approximately $1 \%$ of our portfolio was comprised of single-family ARMs issued prior to 2009

| 30 Year - \$16.3 B Portfolio (37\% of Total)(4) as of 9/30/11 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (s In M Milions) | MV | \% | Coupon | WALA | CPR |
| HARP ${ }^{(2)}$ | \$8,906 | 55\% | 4.60\% | 7 | 4\% |
| Lower Loan Balance ${ }^{(1)}$ | \$5,066 | 31\% | 4.52\% | 12 | 7\% |
| Other 2009-2011 | \$1,546 | 9\% | 4.41\% | 6 | 11\% |
| Other (Pre 2009) | \$753 | 5\% | 5.62\% | 70 | 15\% |
| Total 30 Year | \$16,271 | 100\% | 4.61\% | 11 | 6\% |

(1) Lower loan balance securities, defined as pools back by max original loan balances of up to $\$ 150 \mathrm{~K}$. Weighted average original loan balance of $\$ 104 \mathrm{~K}$ and $\$ 100 \mathrm{~K}$ for 15 year and 30 year securities, respectively, as of Sept 30
(2) HARP securities, defined as $100 \%$ refinance loans with original LTVs $\geq 80 \%$ and $\leq 125 \%$. Weighted average original LTV of $95 \%$ and $100 \%$ for 15 year and 30 year securities, respectively, as of Sept 30 .
(3) Includes $\$ 643 \mathrm{MM}$ of securities backed by loans with original loan balances $\leq 175 \mathrm{~K}$
(4) Includes $\$ 841 \mathrm{MM}$ of 20 year and $\$ 87 \mathrm{MM}$ of 40 year securities

## Prepayment Speeds Impact Leverage Capacity

Timing difference between prepayment factor releases ("paydown") and cash payments act as additional haircut requirements with slower prepayments facilitating greater leverage for a given amount of equity

Percent of NAV Required to Support Repo Haircuts \& Mortgage Prepayments


|  | Leverage Assuming 50\% NAV Threshold |  |  |
| :--- | :---: | :---: | :---: |
| $10 \%$ CPR $\rightarrow 8.4 \mathrm{x}$ | $20 \%$ CPR $\rightarrow 7.5 \mathrm{x}$ | $30 \%$ CPR $\rightarrow 6.6 \mathrm{x}$ | $40 \%$ CPR $\rightarrow 6.0 \mathrm{x}$ |

## Financing Summary

## Access to repo funding remained strong throughout the quarter

- Discontinued hedge accounting in order to provide greater funding flexibility and access to longer term repo
- Increased the original contractual weighted average maturity of our repo funding to 57 days at the end of $3^{\text {rd }}$ quarter from 47 days at the end of $2^{\text {nd }}$ quarter
- Expanded our repo counterparties from 26 to 29
- Less than 4\% of our equity at risk with any one counterparty and less than $15 \%$ at risk with top 5 counterparties
- Repo book well diversified geographically
- Maintained excess capacity with most of our counterparties

|  | AGNC Repos (1)(2) <br> (\$ in millions - as of September 30, 2011) |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Original <br> Repo <br> Maturities | Repo <br> Outstanding | Interest <br> Rate | Remaining <br> Days <br> to Maturity | Original Days <br> to Maturity |
| 1 Month or less | $\$ 18,946$ | $0.27 \%$ | 12 | 28 |
| 1-2 Months | 8,111 | $0.28 \%$ | 22 | 40 |
| 2-3 Months | 4,789 | $0.26 \%$ | 26 | 80 |
| 3-6 Months | 5,663 | $0.25 \%$ | 34 | 92 |
| 6-9 Months | 279 | $0.41 \%$ | 215 | 231 |
| 9-12 Months | 1,054 | $0.50 \%$ | 348 | 355 |
| Total / Wtd Avg | $\$ 38,842$ | $0.28 \%$ | 30 | 57 |

financing transaction under GAAP.
(1) Excludes other debt which consists of other variable rate debt outstanding at Libor +25 bps in connection with the consolidation of a structured transaction recorded as a
(2) Amounts represent the weighted average for each group

## Hedging Summary

## We increased the size of our swap book given the significant decline in interest rates observed during the quarter

## - Interest Rate Swaps

$\checkmark \$ 26.95$ B notional swap book as of Sept 30 ${ }^{(1)}$

- 3.4 years average maturity
- $69 \%$ of repo balance and other debt hedged, excluding benefits of other hedges
- Increases to 71\% when incorporating net unsettled trades
$\checkmark$ Discontinued hedge accounting for all interest rate swaps as of Sept 30
- Interest Rate Swaptions
$\checkmark$ \$3.3 B notional payer swaptions
- \$1.05 B payer swaptions expired for a net loss of \$8.3 MM during the quarter
- \$4.5 MM total market value as of Sept 30


## - Other Hedge Positions

$\checkmark$ \$0.6 B net short mortgage TBAs positions
$\checkmark$ \$0.3 B notional net short Markit IOS total return swaps ${ }^{(2)}$

- Underlying index value of \$40.6 MM
- AGNC carry value of $\$ 4.7 \mathrm{MM}$ (unrealized gain)

| Interest Rate Swaps (1) <br> (\$ in millions - as of September 30, 2011) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Maturity | Notional <br> Amount | Pay <br> Rate | Receive <br> Rate | Years to <br> Maturity |
| 2011 | $\$ 300$ | $1.28 \%$ | $0.23 \%$ | 0.1 |
| 2012 | 750 | $2.01 \%$ | $0.23 \%$ | 0.9 |
| 2013 | 3,050 | $1.06 \%$ | $0.23 \%$ | 1.8 |
| 2014 | 7,300 | $1.22 \%$ | $0.24 \%$ | 2.8 |
| 2015 | 7,700 | $1.51 \%$ | $0.28 \%$ | 3.7 |
| 2016 | 7,550 | $2.17 \%$ | $0.23 \%$ | 4.7 |
| 2018 | 100 | $1.79 \%$ | $0.37 \%$ | 7.1 |
| 2021 | 200 | $2.00 \%$ | $0.37 \%$ | 10.1 |
| Total / Wtd Avg | $\$ 26,950$ | $1.58 \%$ | $0.25 \%$ | 3.4 |


| Interest Rate Swaptions <br> (\$ in millions - as of September 30, 2011) |  |  |  |  |  |  |
| :---: | ---: | :---: | :---: | :---: | :---: | :---: |
| Swaption | Cost | Weighted <br> Average <br> Expiration | Notional <br> Amount | Pay <br> Rate | Receive <br> Rate | Term <br> (Years) |
| Payer | $\$ 7.0$ | $<3$ Months | $\$ 1,200$ | $3.08 \%$ | 1M Libor | 7.0 |
| Payer | 38.5 | $>3$ Months | 2,050 | $3.88 \%$ | 1M Libor | 6.8 |
| Total Payer | $\$ 45.5$ | 6 Months | $\$ 3,250$ | $3.59 \%$ | 1M Libor | 6.9 |

(1) Includes $\$ 1.9$ B of forward starting swaps as of September 30, 2011 starting through December 2011. Amounts represent the weighted average for each group
(2) Short swap position on the Markit IOS index synthetically replicates a short position of an interest only security funded at 1 month LIBOR.

## NAV Interest Rate Sensitivity

## Given the negative convexity of our mortgage assets, an instantaneous parallel shock to interest rates will adversely impact the market value of our equity

- The duration of a mortgage changes with interest rates and tends to increase when rates rise and decrease when rates fall
- This negative convexity generally increases the interest rate exposure of a mortgage portfolio over what would be indicated by the duration gap alone
- The estimated impact on the market value of the asset portfolio, net of hedges, is based on model predictions and assumes that no

| Interest Rate Sensitivity <br> (based on instantaneous parallel change in interest rates) |  |  |
| :---: | :---: | :---: |
| Interest Rate <br> Shock (bps) | Estimated <br> Change in Portfolio <br> Market Value (1) | Estimated <br> Cquange <br> Equity NAV (2) |
| -100 | $-0.8 \%$ | $-6.7 \%$ |
| -50 | $-0.2 \%$ | $-1.7 \%$ |
| +50 | $-0.2 \%$ | $-2.0 \%$ |
| +100 | $-0.8 \%$ | $-7.0 \%$ | portfolio rebalancing actions are taken

- The estimated change to equity (NAV) includes the impact of leverage and incorporates the dual effects of both duration and convexity

The estimated change in our NAV due to interest rate changes is derived from models that are dependent on inputs and assumptions provided by third parties as well as by our investment team and accordingly actual results could differ materially from these estimates. In addition, different models could generate materially different estimates using similar inputs and assumptions. Management uses judgment to address the limitations and weaknesses inherent in model calculations as it seeks to balance the protection of book value with the generation of attractive returns. Please also refer to slide 30 and our related disclosures in our 10-K's and 10-Q's for a more complete discussion of duration (interest rate risk).

## Protecting Book Value

Our book value has grown in 10 of 11 quarters since the beginning of 2009, increasing by $\$ 9.70$ (56\%) since Dec 31, 2008, from $\$ 17.20$ to $\$ 26.90$. During the same period, we have paid or declared \$14.95 per share in dividends

10 Year U.S. Treasury Rate

- Through prudent asset and hedge portfolio selection, we seek to protect book value regardless of the direction of interest rate changes
- Despite extremely volatile interest rate and prepayment environments over the last several years, our book value has consistently increased
- Book value has increased 10 out of the last 11 quarters:


Capital
Agency
Note: Historical performance is not an indicator of future results and we would fully expect to have quarters with book value declines going forward. Source: 10 Year UST - Capital IQ. Change represents peak to trough change during the time period.

## AGNC Economic Returns vs. Peer Group



[^1]
## Conclusion

## We believe that AGNC can continue to produce attractive returns in the current market environment despite some downward pressure on margins

- We believe our portfolio is optimally position versus the dual challenges presented by "organic" and "policy" oriented prepayment risk
- Our asset yields and margins already incorporate projections for faster prepayments, which are around $30 \%$ above our most recent portfolio CPR
- Our funding and hedging costs are likely to remain low for an extended period of time
$\checkmark$ We have swaps covering approximately $70 \%$ of our repo balance in addition to other hedges
$\checkmark$ The absolute level of swap rates mitigates book value risk resulting from the further unrealized losses on current swap portfolio
- We currently have \$0.85 per share (\$156 million) of undistributed taxable income
- Slow prepayment speeds allow us to continue to generate attractive returns while maintaining substantial excess liquidity


[^0]:    *The hypothetical ROEs listed above are intended for illustrative purposes only to show the effect of prepayment speeds on ROEs and are calculated at TBA prices. Specified collateral, such as lower loan balance securities, are now priced at significant premiums to generic mortgages and thus yields at the given speeds listed above will be materially lower

[^1]:    1. Source: Company filings; Peer Average comprised of the following peers on an unweighted basis: ANH, CMO, CYS, HTS, NLY. NAV for selected peers have been adjusted to reflect the impact of dividends that are declared shortly after the closing of a quarter
