IVR Invesco Mortgage Capital Inc.

The Expertise. The Resources. Each step of the way.

2017 Fourth Quarter Earnings Call
February 21, 2018

Presenters:

John Anzalone
Chief Executive Officer

Jason Marshall
Chief Investment Officer

Invesco

Cautionary Notice Regarding Forward-Looking Statements

This presentation and comments made in the associated conference call may include statements and information that constitute "forward-looking statements" within the meaning of the U.S. securities laws as defined in the Private Securities Litigation Reform Act of 1995, and such statements are intended to be covered by the safe harbor provided by the same. Forward-looking statements include our views on the risk positioning of our portfolio, domestic and global market conditions (including the residential and commercial real estate market), the market for our target assets, our financial performance, including our core earnings, economic return, comprehensive income and changes in our book value, our ability to continue performance trends, the stability of portfolio yields, interest rates, credit spreads, prepayment trends, financing sources, cost of funds, our leverage and equity allocation. In addition, words such as "believes," "expects," "anticipates," "intends," "plans," "estimates," "projects," "forecasts," and future or conditional verbs such as "will," "may," "could," "should," and "would" as well as any other statement that necessarily depends on future events, are intended to identify forward-looking statements.

Forward-looking statements are not guarantees, and they involve risks, uncertainties and assumptions. There can be no assurance that actual results will not differ materially from our expectations. We caution investors not to rely unduly on any forward-looking statements and urge you to carefully consider the risks identified under the captions "Risk Factors," "Forward-Looking Statements" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our annual report on Form 10-K and quarterly reports on Form 10-Q, which are available on the Securities and Exchange Commission's website at www.sec.gov.

All written or oral forward-looking statements that we make, or that are attributable to us, are expressly qualified by this cautionary notice. We expressly disclaim any obligation to update the information in any public disclosure if any forward-looking statement later turns out to be inaccurate.

Overview

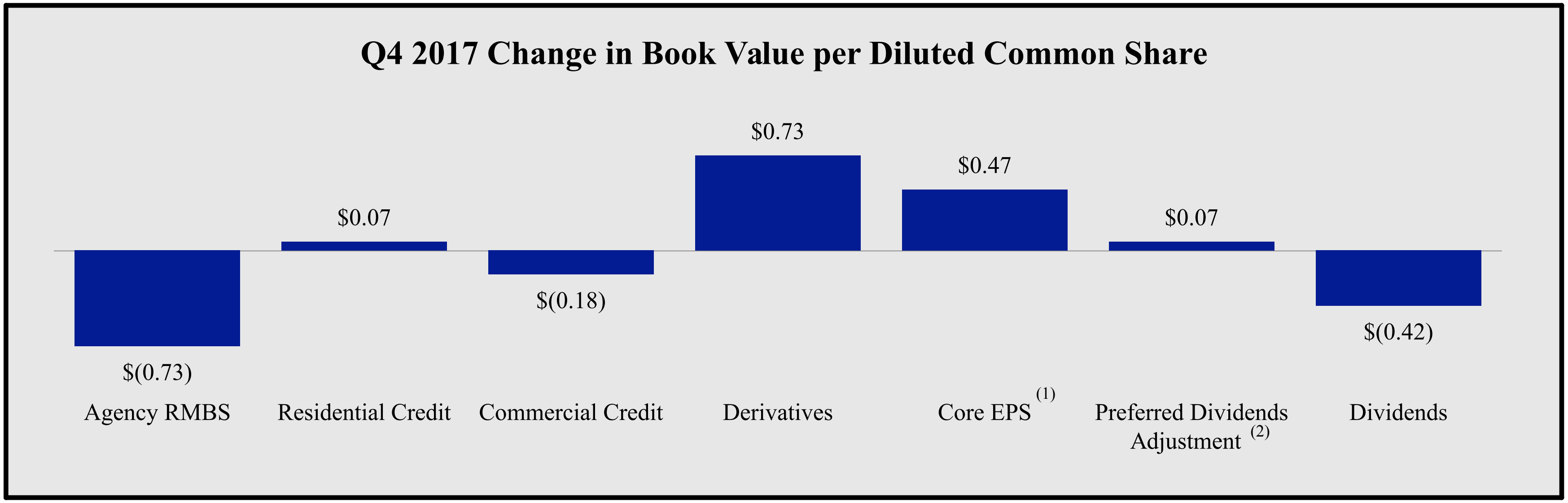
Q4 2017 Financial Highlights	
Basic EPS	$1.23
Core EPS (1)	$0.47
Book value per diluted common share (2)	$18.35
Dividend per common share	$0.42
Economic return (3)	2.3%
Equity allocation remains diversified	
45% Agency RMBS	
35% Commercial Credit	
20% Residential Credit	

- Core EPS of $0.47 for Q4 2017 compared to $0.44 for Q3 2017
  - Core EPS increased primarily due to the full quarter accretive impact of our August 2017 Series C Preferred Offering
- Q4 2017 book value per common share ("BVPS") of $18.35 compared to $18.34 at Q3 2017
- Economic return of 2.3% for the quarter and 14.3% for 2017
- Q4 2017 portfolio highlights
  - New investments were concentrated in 30 year fixed-rate Agency RMBS and CMBS
  - Asset seasoning and improved real estate valuations continue to benefit credit quality

(1) Core EPS is a non-GAAP financial measure. See Slide 15 for non-GAAP reconciliation
(2) Book value per diluted common share is calculated as total equity less the liquidation preference of our Series A Preferred Stock ($140.0 million), Series B Preferred Stock ($155.0 million) and Series C Preferred Stock ($287.5 million); divided by total common shares outstanding plus Operating Partnership Units convertible into shares of common stock (1,425,000 shares)
(3) Economic return for the three months ended December 31, 2017 is defined as the change in book value per diluted common share from September 30, 2017 to December 31, 2017 of $0.01; plus dividends declared of $0.42 per common share; divided by September 30, 2017 book value per diluted common share of $18.34. Economic return for the twelve months ended December 31, 2017 is defined as the change in book value per diluted common share from December 31, 2016 to December 31, 2017 of $0.87; plus dividends declared of $1.63 per common share; divided by December 31, 2016 book value per diluted common share of $17.48

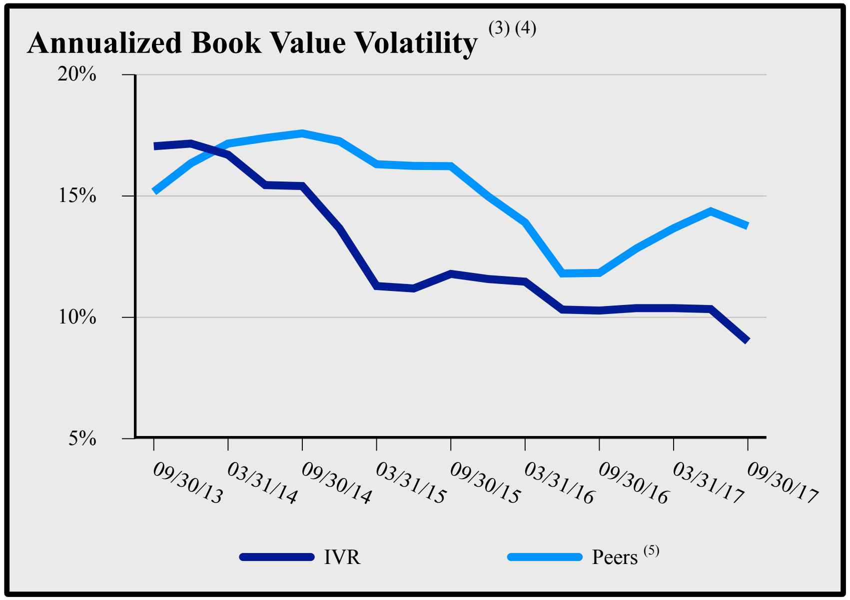
Past performance is not a guarantee of future results.

Book Value Performance



We seek to provide stockholders with attractive income and long term book value stability

- Q4 2017 BVPS increased slightly by $0.01 or 0.1%
- While our portfolio benefited from tighter spreads in Q4 2017, lower valuations on our Agency RMBS and Commercial Credit resulting from higher interest rates decreased our BVPS
- Derivatives increased our BVPS by $0.73 due to higher swap rates



(1) Core EPS is a non-GAAP financial measure. See Slide 15 for non-GAAP reconciliation
(2) Preferred dividends adjustment includes $5.2 million adjustment for Series C Preferred dividend and $2.9 million adjustment for undeclared Series B Preferred dividend
(3) Book value volatility is based on the rolling 3 year standard deviation of quarterly book value results
(4) Source: Bloomberg and Company filings. Latest financial data as of 9/30/17
(5) Peer group: AGNC, CIM, CYS, EFC, MFA, MITT, MTGE, NLY, TWO and WMC

IVR Performance Relative to Peers [1]

IVR Outperforming Peers Across Key Metrics

Economic returns [2]

- Outperformed peer group average in 2017 YTD
- Outperformed peer group average in 2015 and 2016
- Outperformed peer group average during trailing 3 and 5 year periods

Book value performance [2]

- 1, 3 and 5 year book value growth above peer group average:
  - 1 year: +1.4% v. -2.8%
  - 3 year: -4.3% v. -13.2%
  - 5 year: -12.5% v. -24.3%

Dividend performance

- Increased common stock dividend for second consecutive quarter to $0.42 in Q4 2017
- IVR is one of only five peer companies to increase its dividend in the last 12 quarters [2]
- IVR is one of only three peer companies to earn its dividend in at least ten of the last 12 quarters[2]

(1) Peer group: AGNC, CIM, CYS, EFC, MFA, MITT, MTGE, NLY, TWO and WMC
(2) Source: Bloomberg and Company filings. Latest financial data as of 9/30/17

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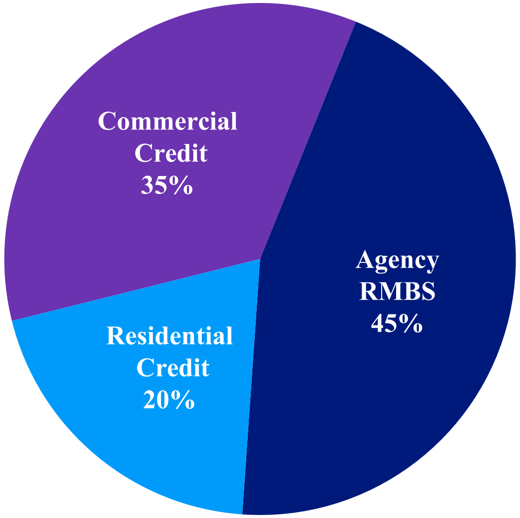
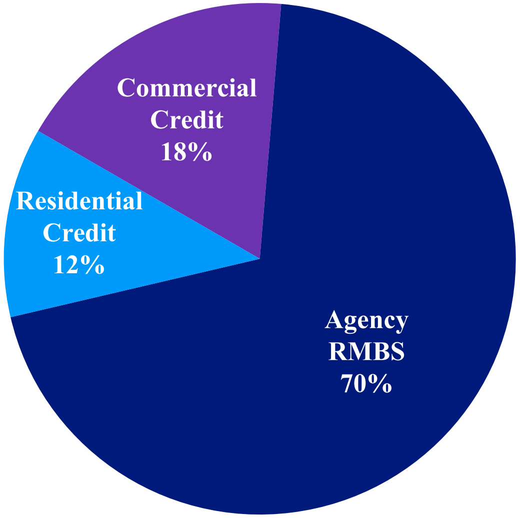
The IVR Portfolio

Q4 2017 Portfolio Update

Equity Allocation



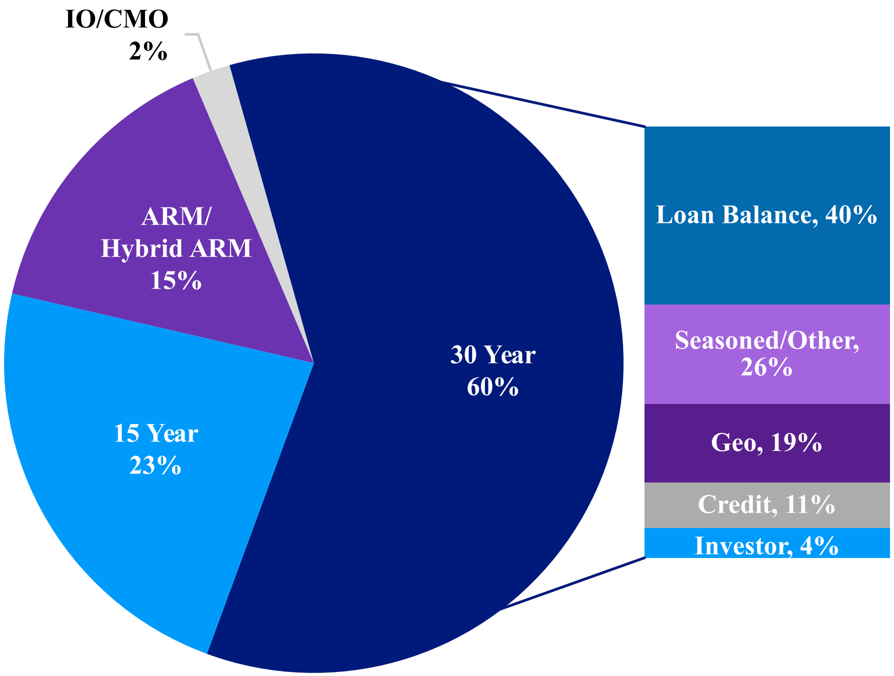
Asset Allocation



Highlights:

- Continued to invest in 30 year fixed-rate Agency RMBS and CMBS as these sectors offered the most attractive return profiles
- 55% of equity and 30% of assets are allocated to credit
  - Residential and commercial credit fundamentals remain strong
  - Credit assets exhibit significantly less convexity risk than Agency RMBS

Agency RMBS



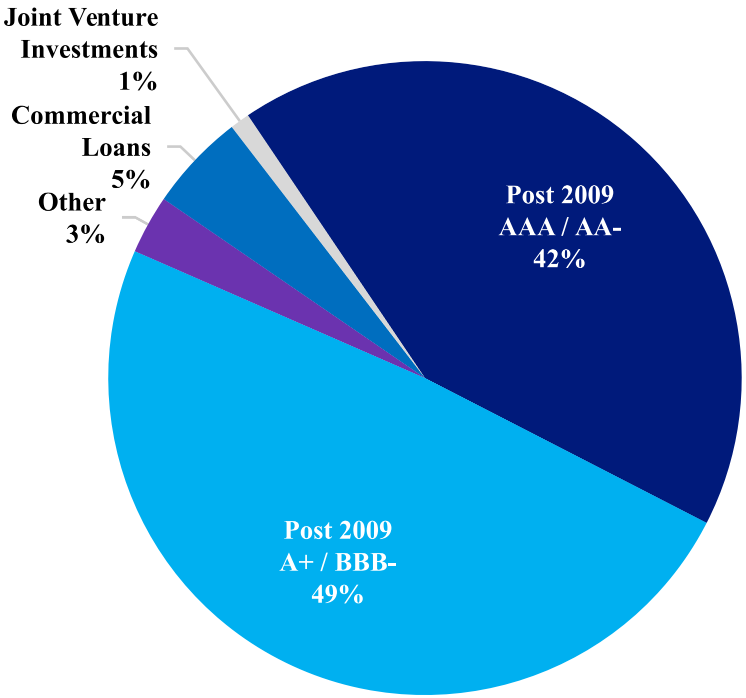
	CPR [1]	Net Wtd. Avg Coupon [2]	Period-end Wtd. Avg Yield [3]
15 Year	9.3	3.08%	2.17%
30 Year	7.9	3.72%	3.09%
Hybrid ARM	14.9	2.70%	2.54%

Highlights:

- Added $518 million of 30 year 3.0% and 3.5% coupon specified pools primarily to replace paydowns
- Hedged ROE remained attractive
- 30 year sector outperformed shorter duration alternatives on strong commercial bank demand
- Prepayments slowed during the period because of seasonal factors

(1) Constant Prepayment Rate
(2) Net weighted average coupon as of December 31, 2017 is presented net of servicing and other fees
(3) Period-end weighted average yield is based on amortized cost as of December 31, 2017 and incorporates future prepayment and loss assumptions

Commercial Credit



	Duration	Period-end Wtd Avg Yield (1)
Post 2009 AAA / AA- (2)	4.8	3.96%
Post 2009 A+ / BBB- (3)	4.6	5.55%
Other (4)	5.4	7.57%
Commercial Loans		8.73%

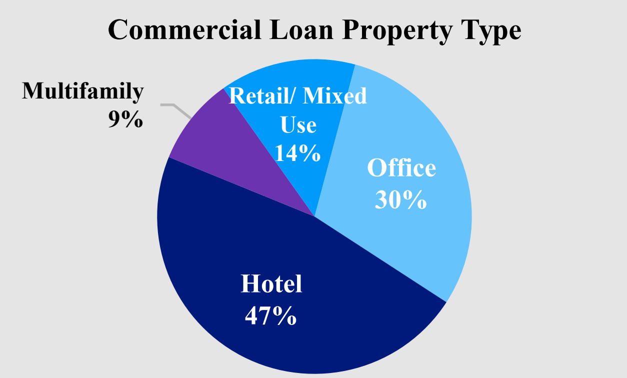
Highlights:

- Favorable real estate fundamentals provide positive support for commercial mortgage credit investments
- CMBS spreads benefited from increased investor appetite
- Increased portfolio yield by adding $162 million of CMBS during the quarter
- Commercial mortgage loan yields increased along with LIBOR

(1) Period-end weighted average yield is based on amortized cost as of December 31, 2017 and incorporates future prepayment and loss assumptions
(2) CMBS originally rated between AAA and AA- (or an equivalent/comparable ratings by a nationally recognized statistical rating organization) issued after 2009
(3) CMBS originally rated between A+ and BBB- (or an equivalent/comparable rating by a nationally recognized statistical rating organization) issued after 2009
(4) Below investment grade CMBS originally issued after 2009, including bonds issued from risk retention compliant transactions

Commercial Loan & Joint Venture Investments

Investment Type	Property Type	Location	Commitment [1]	Borrower	Rate Type	Loan Status
Mezzanine Loan	Hotel	Fort Lauderdale, FL	$21,000,000	Private REIT	Floating	Current
Mezzanine Loan	Office	Phoenix, AZ	$33,977,900	Institutional Investor	Floating	Current
Mezzanine Loan	Hotel	London, UK	$46,668,150	Institutional Investor	Fixed	Current
Mezzanine Loan	Retail/Mixed Use	Aventura, FL	$28,000,000	Institutional Investor	Floating	Current
Mezzanine Loan	Hotel	San Antonio, TX	$25,000,000	Institutional Investor	Floating	Current
Mezzanine Loan	Multifamily	Apopka, FL	$10,000,000	Institutional Investor	Floating	Current
Mezzanine Loan	Multifamily	Irving, TX	$7,000,000	Institutional Investor	Floating	Current
Mezzanine Loan	Office	Oakland, CA	$25,000,000	Institutional Investor	Floating	Current
Joint Venture Investments [2]	Various	U.S. / Ireland	$122,011,000	Various	Floating	NA
Mezzanine Loan	Retail/Mixed Use	New York, NY	$41,013,463	Public REIT	Floating	Paid Off
Mezzanine Loan	Office	Atlanta, GA	$49,700,000	Institutional Investor	Floating	Paid Off
Mezzanine Loan	Office	New York, NY	$15,000,000	Institutional Investor	Floating	Paid Off
Whole Loan	Hotel	Palm Beach, FL	$22,000,000	Regional Developer	Floating	Paid Off
Preferred Equity	Office	Chicago, IL	$23,000,000	Institutional Investor	Floating	Paid Off
B-Note	Office	London, UK	$33,892,396	Institutional Investor	Floating	Paid Off
Mezzanine Loan	Hotel	Various	$18,500,000	Institutional Investor	Floating	Paid Off



As of December 31, 2017. Joint venture investment property types are not included.

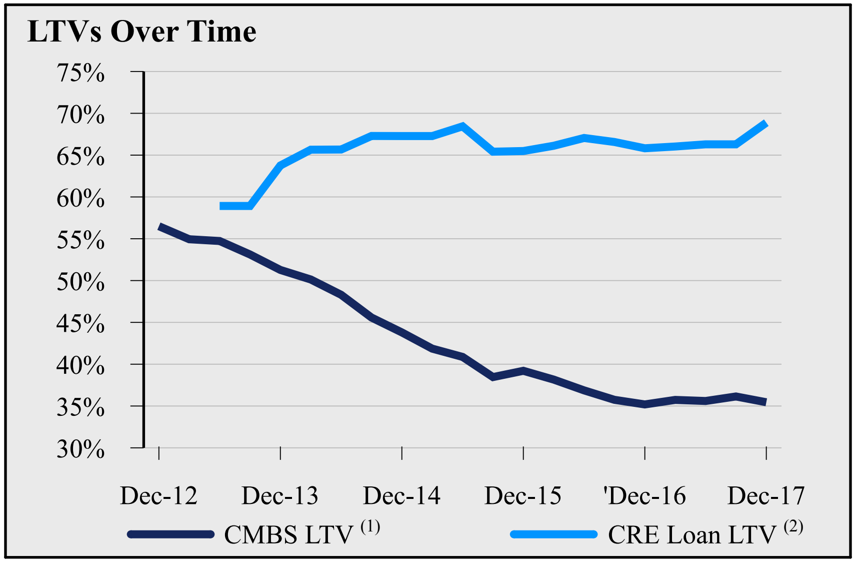
Highlights:

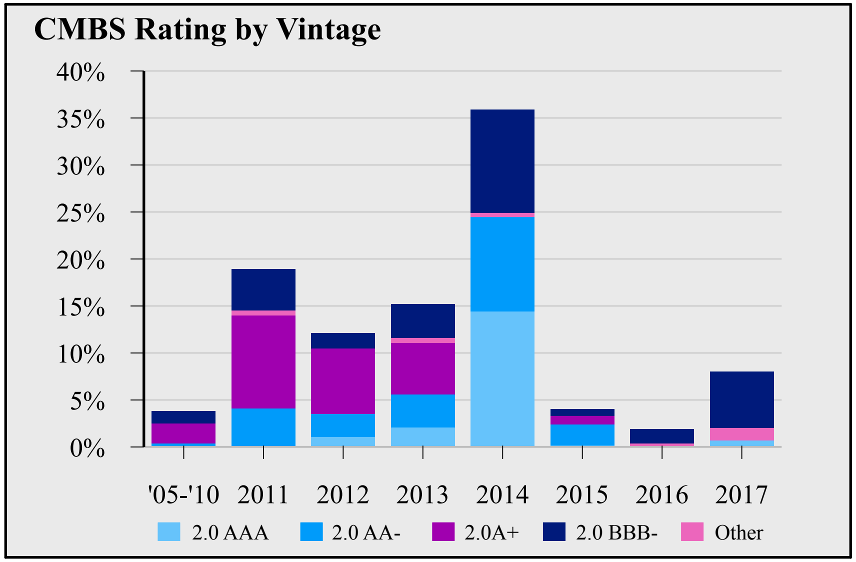
- Quarter-end commercial loan & joint venture investment portfolio of $218 million
- $203 million of principal has been returned through realization of borrower business plans
- No delinquencies as of December 31, 2017
- Investments predominantly behind balance sheet lenders

(1) As of December 31, 2017 our undrawn commitments in commercial loans and joint venture investments were $5 million and $10 million, respectively

(2) As of December 31, 2017 we have received cumulative distributions totaling $180 million from joint venture investments. As of December 31, 2017 our joint venture investment balance was $26 million

Commercial Mortgage Investment Credit Quality





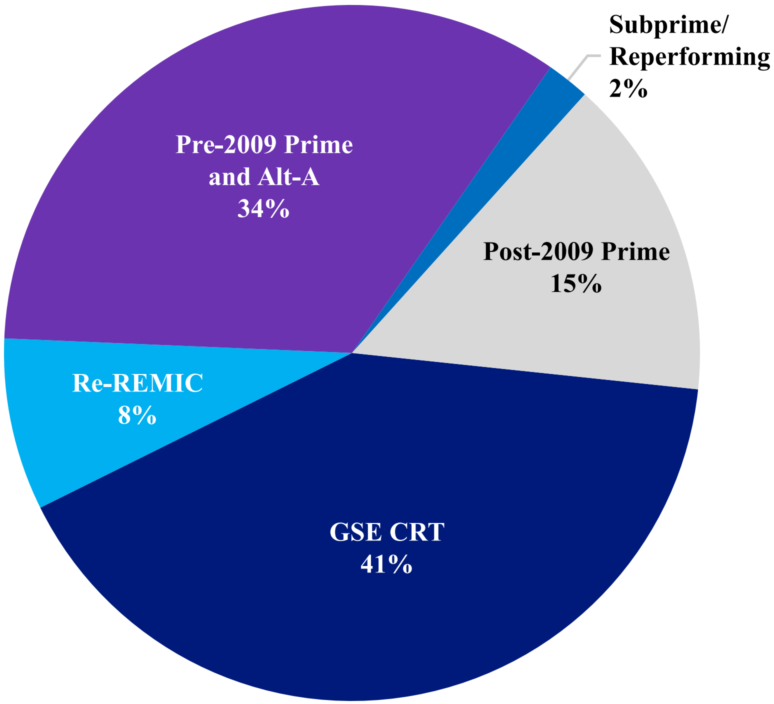
- CMBS LTV [(1)] of 35% and CRE Loan LTV [(2)] of 69%
- More than 65% of CMBS portfolio is rated single-A or higher
- Improved loan underwriting in risk retention compliant CMBS transactions has created new opportunities to invest

Source: Trepp as of December 31, 2017

(1) The product of (a) the weighted average current loan-to-value ("LTV") ratio of the CMBS collateral pool of which the value of the property is adjusted for price appreciation using Moody's/RCA CPPI, multiplied by (b) a fraction, the numerator of which is the total principal balance of the subject class and all other classes senior to such class (if any) less the aggregate balance of underlying defeased loans and the denominator of which is the total principal balance of all classes of the transaction less the aggregate balance of underlying defeased loans. Values are as of December 31, 2017

(2) The weighted average loan-to-value ratio for each commercial real estate loan investment with property values adjusted to reflect the most recently obtained appraisals

Residential Credit



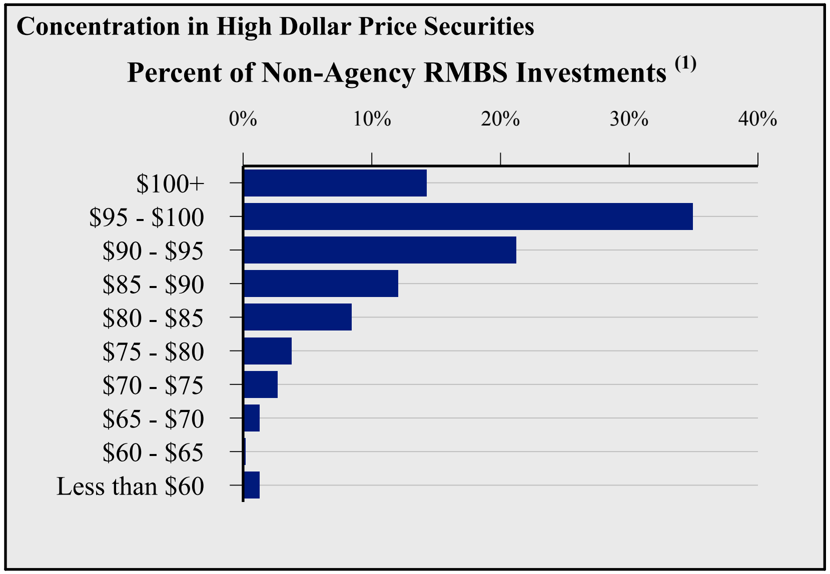
	Duration	Period-end Wtd Avg Yield (1)
Re-REMIC	0.9	6.60%
Pre-2009 Prime and Alt-A	1.4	8.93%
Subprime/Reperforming	0.1	5.21%
Post-2009 Prime	3.1	4.41%
GSE CRT (2)	0.0	5.96%

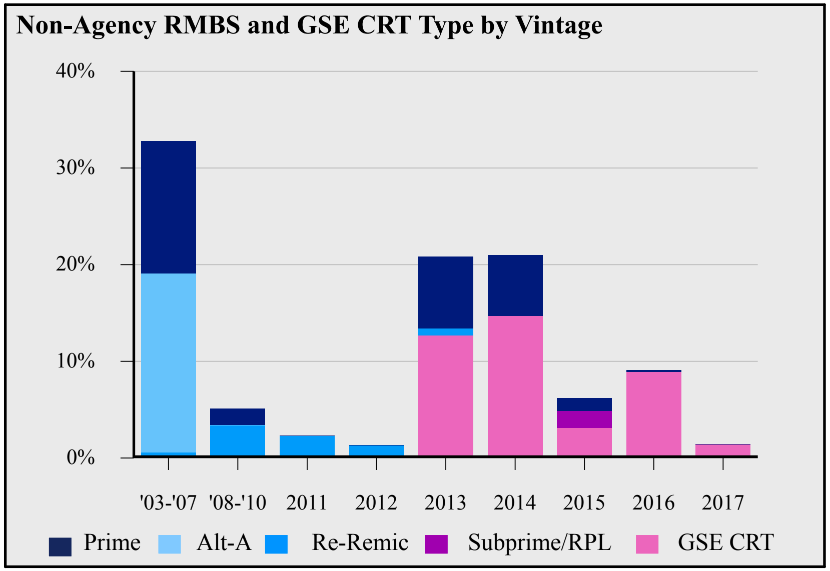
Highlights:

- Strong fundamental profile of our residential credit investments supported by accelerating home price appreciation
- Growing homeowner equity and a robust labor market are contributing to historically low default rates for recent originations
- Credit spreads continued to tighten during the quarter, positively impacting the market value of our investments
- Low level of available returns on new residential credit investments limited our activity in the sector

(1) Period-end weighted average yield is based on amortized cost as of December 31, 2017 and incorporates future prepayment and loss assumptions
(2) GSE CRT period-end weighted average yield includes embedded coupon interest recorded as realized and unrealized credit derivative income under U.S. GAAP. Excluding embedded coupon interest recorded as realized and unrealized credit derivative income, our period-end weighted average yield for GSE CRT was 2.45%

Residential Credit Investment Quality



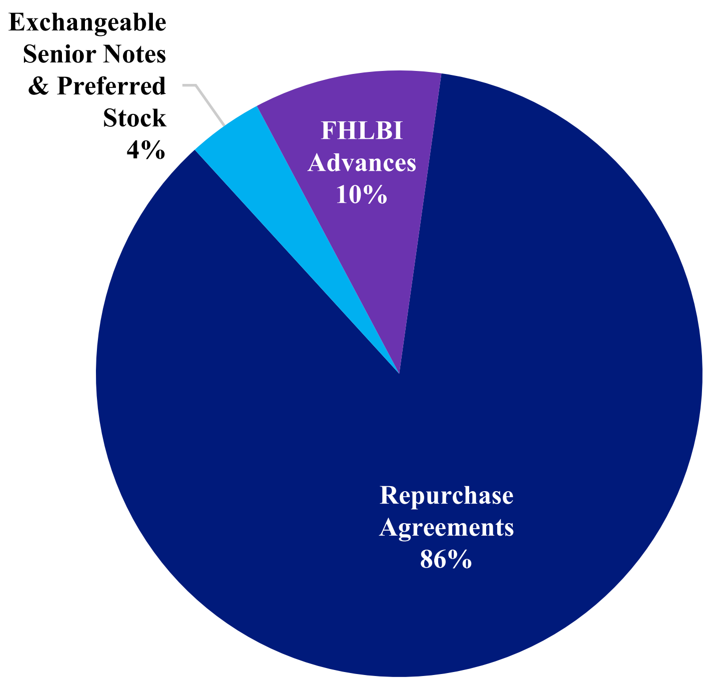


- 70% of Non-Agency RMBS holdings have dollar prices above $90, and 91% above $80
- These high dollar prices generally reflect lower exposure to collateral performance issues, demonstrate less price volatility and are more attractive to finance
- Low dollar price bonds demonstrate greater price volatility, are often unattractive to finance, and are sensitive to changes in servicer advancing and property disposition strategies

- Legacy Non-Agency RMBS investments are focused in securities backed by Prime and Alt-A loans as well as Re-REMICs
- GSE CRT holdings are concentrated in early vintages
  - Reference loans have significant embedded home price appreciation
  - Rating agencies have been active in upgrading seasoned securities

(1) Excludes GSE CRT and interest-only securities. As of December 31, 2017

Financing



Average Cost of Funds [1]	Q4 2017	Q3 2017
Agency RMBS [2]	1.40%	1.28%
CMBS [2]	2.00%	1.91%
Non-Agency RMBS	2.74%	2.67%
GSE CRT	2.71%	2.69%

Highlights:

- Funding sources included:
  - Secured financing: repurchase agreements and FHLBI advances
  - Exchangeable senior notes
  - Preferred stock
- 26 active repurchase agreement counterparties
- As of December 31, 2017, $143 million of exchangeable senior notes are outstanding. The notes mature and will be retired in March 2018

(1) Average cost of funds is calculated by dividing annualized interest expense excluding amortization of net deferred gain (loss) on de-designated interest rate swaps by average borrowings
(2) Agency RMBS and CMBS average borrowing and cost of funds include borrowings under repurchase agreements and FHLBI advances

Appendix — Non-GAAP Financial Information

We calculate core earnings as U.S. GAAP net income (loss) attributable to common stockholders adjusted for (gain) loss on investments, net; realized (gain) loss on derivative instruments, net; unrealized (gain) loss on derivative instruments, net; realized and unrealized (gain) loss on GSE CRT embedded derivatives, net; (gain) loss on foreign currency transactions, net; amortization of net deferred (gain) loss on de-designated interest rate swaps; net loss on extinguishment of debt; and cumulative adjustments attributable to non-controlling interest. We may add and have added additional reconciling items to our core earnings calculation as appropriate.

We believe the presentation of core earnings provides a consistent measure of operating performance by excluding the impact of gains and losses described above from operating results. We exclude the impact of gains and losses because gains and losses are not accounted for consistently under U.S. GAAP. Under U.S. GAAP, certain gains and losses are reflected in net income whereas other gains and losses are reflected in other comprehensive income. For example, the majority of our mortgage-backed securities are classified as available-for-sale securities, and we record changes in the valuation of these securities in other comprehensive income on our consolidated balance sheet. We elected the fair value option for our mortgage-backed securities purchased on or after September 1, 2016, and changes in the valuation of these securities are recorded in other income (loss) in our consolidated statement of operations. In addition, certain gains and losses represent one-time events.

We believe that providing transparency into core earnings enables our investors to consistently measure, evaluate and compare our operating performance to that of our peers over multiple reporting periods. However, we caution that core earnings should not be considered as an alternative to net income (determined in accordance with U.S. GAAP), or as an indication of our cash flow from operating activities (determined in accordance with U.S. GAAP), a measure of our liquidity, or as an indication of amounts available to fund our cash needs, including our ability to make cash distributions. Please refer to pages 8-10 in the Q4 2017 earnings press release for a description of the adjustments.

	Three Months Ended		
$ in thousands, except per share data	December 31, 2017	September 30, 2017	December 31, 2016
Net income (loss) attributable to common stockholders	137,436	49,127	270,105
Adjustments:			
(Gain) loss on investments, net	17,153	11,873	23,402
Realized (gain) loss on derivative instruments, net	(73,646)	(19,503)	(4,279)
Unrealized (gain) loss on derivative instruments, net	(7,368)	95	(250,774)
Realized and unrealized (gain) loss on GSE CRT embedded derivatives, net	(7,401)	8,803	2,376
(Gain) loss on foreign currency transactions, net	(387)	(1,504)	2,180
Amortization of net deferred (gain) loss on de-designated interest rate swaps	(6,438)	(6,438)	(6,177)
Net loss on extinguishment of debt	233	1,344	—
Subtotal	(77,854)	(5,330)	(233,272)
Cumulative adjustments attributable to non-controlling interest	981	67	2,942
Series B preferred stock dividend cumulative adjustment	(2,870)	—	—
Series C preferred stock dividend declared but not accumulated	(5,211)	5,211	—
Core earnings attributable to common stockholders	52,482	49,075	39,775
Basic income (loss) per common share	1.23	0.44	2.42
Core earnings per share attributable to common stockholders	0.47	0.44	0.36