DYNEX CAPITAL INC.

Third Quarter 2016 Earnings Presentation

November 1, 2016

Safe Harbor Statement

NOTE:

This presentation contains certain statements that are not historical facts and that constitute "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Statements in this presentation addressing expectations, assumptions, beliefs, projections, estimates, future plans, strategies, and events, developments that we expect or anticipate will occur in the future, and future operating results or financial condition are forward-looking statements. Forward-looking statements in this presentation may include, but are not limited to, statements about projected future investment strategies, investment opportunities, future government or central bank actions and the impact of such actions, financial performance, dividends, leverage ratios, capital raising activities, share issuances and repurchases, the use or impact of NOL carryforwards, and interest rates. The words "will," "believe," "expect," "forecast," "anticipate," "intend," "estimate," "assume," "project," "plan," "continue," and similar expressions also identify forward-looking statements. These forward-looking statements reflect our current beliefs, assumptions and expectations based on information currently available to us, and are applicable only as of the date of this presentation. Forward-looking statements are inherently subject to risks, uncertainties, and other factors, some of which cannot be predicted or quantified and any of which could cause the Company's actual results and timing of certain events to differ materially from those projected in or contemplated by these forward-looking statements. Not all of these risks, uncertainties and other factors are known to us. New risks and uncertainties arise over time, and it is not possible to predict those risks or uncertainties or how they may affect us. The projections, assumptions, expectations or beliefs upon which the forward-looking statements are based can also change as a result of these risks and uncertainties or other factors. If such a risk, uncertainty, or other factor materializes in future periods, our business, financial condition, liquidity and results of operations may differ materially from those expressed or implied in our forward-looking statements.

While it is not possible to identify all factors, some of the factors that may cause actual results to differ from historical results or from any results expressed or implied by our forward-looking statements, or that may cause our projections, assumptions, expectations or beliefs to change, include the risks and uncertainties referenced in our Annual Report on Form 10-K for the year ended December 31, 2015 and subsequent filings with the Securities and Exchange Commission, particularly those set forth under the caption "Risk Factors".

Third Quarter 2016 Highlights

- **Comprehensive income to common shareholders of $13.1 million, or $0.27 per common share, and GAAP net income of $12.4 million, or $0.25 per common share**
- **Core net operating income[1] of $0.20 per common share**
  - Decline of $0.01 per common share from the second quarter of 2016 principally from faster prepayment speeds on Agency RMBS and declines in net interest income due to smaller earning asset base
- **Net interest spread of 1.90% and adjusted net interest spread[1] of 1.87% in 3Q16 versus 1.94% and 1.87%, respectively, in 2Q16**
  - Adjusted net interest spread remained steady as lower net periodic interest costs from hedges offset decline in asset yields and increase in borrowing costs
- **Book value per common share of $7.76 as of September 30, 2016, an increase of $0.07, or 1% from June 30, 2016**
  - Impact of spread tightening on investments offset impact of higher rates
- **Total economic return[2] to common shareholders for 3Q16 of $0.28 per share or 3.6%, and 8.8% 2016 YTD**
- **Overall leverage of 5.8x at September 30, 2016 versus 6.1x at June 30, 2016**

(1) Reconciliations for non-GAAP measures are presented in the Appendix.
(2) Computed as dividends of $0.21 per common share plus book value increase of $0.07 per common share divided by beginning book value per common share of $7.69

Long Term Macroeconomic and Policy Factors

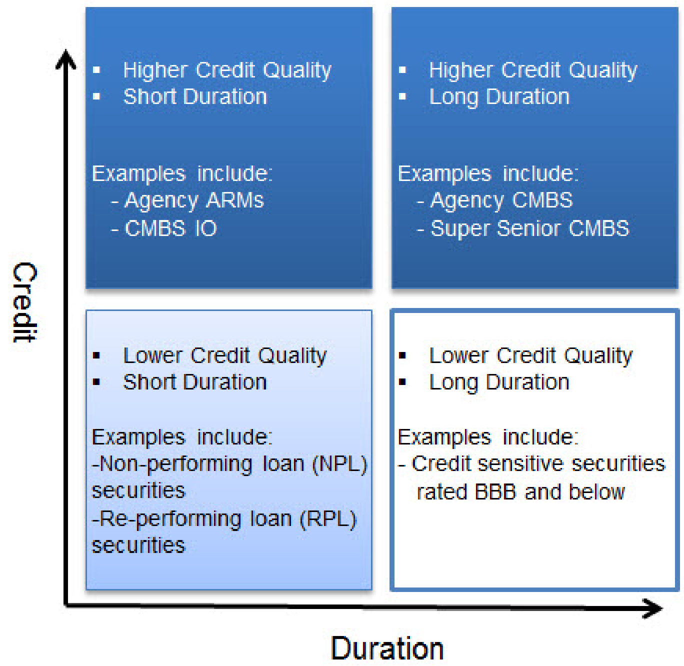
- **Fundamentally, global economic growth is fragile**
- **Global leverage is at an all time high and is a destabilizing factor on global growth**
  - Inability of many countries to stimulate aggregate demand without debt
- **Global inflationary pressures are limited despite moderate increases in the U.S.**
  - Long term factors impacting inflation pressures include excess capacity, low global growth
- **Complex, interconnected, fragile global environment**
  - Global currency war with unintended consequences
  - Geopolitical risks remain high
- **Uncertain regulatory environment is weighing on global growth**
- **Private demand for fixed income assets is supported by long-term demographic trends**

Current Investment Environment

- **Central banks remain a dominant force in the market and policy is evolving**
  - Coordinated and integrated central bank actions designed to impact yield curves could create additional volatility
- **Government policy will continue to drive returns. Global yields are low or negative, asset returns have declined, and yield curves across the globe are historically flat**
  - A flatter yield curve may put downward pressure on net interest spread
  - Fiscal policy, tax policy, and stimulus could change the trajectory of future growth and thereby the shape of yield curves
  - Regulation is redefining risk appetite and liquidity in the markets
- **In the near term inflation appears to be stabilizing in the U.S. and could rise, but still limited by fundamental macroeconomic factors in the long-term**
  - Currency and commodity prices will impact inflation
- **Federal Reserve appears poised to raise rates in December**
  - Lack of significant progress towards growth and inflation goals of central banks globally could limit the number and frequency of future rate increases by the Fed
- **Global economic environment, political environment, and markets are all fragile and as a result we continue to manage our risk posture conservatively**

Investment Strategy

Diversified investment approach that performs in a variety of market environments



- Maintaining a long duration portfolio position with appropriate adjustments to reflect changing market conditions
  - High levels of global debt, moderate inflation, and mediocre global demand limit how far interest rates can rise
  - Fragile and complex environment could result in interest rate shocks to lower levels
- Investing in a high quality, liquid asset portfolio of primarily Agency investments, structured to mitigate prepayment and credit risk
  - 94% AAA rated/84% Agency guaranteed
- Diversification of investments is a key benefit to our portfolio
  - High quality CMBS/CMBS IO are intended to limit credit exposure and prepayment volatility vs. lower rated tranches
  - Agency Hybrid RMBS intended to protect the portfolio from extension risk and benefit as short-term rates rise

Investment Outlook

- **Our investment strategy is consistent with our view of an uncertain and complex global macroeconomic environment**
  - Concentrated in high quality, liquid assets
  - Lower risk and leverage profile
- **We are seeing better investment opportunities today versus the last several quarters**
  - Higher rate environment has resulted in modestly improved returns on invested capital
  - Expect to maintain, or grow, interest earning assets during the fourth quarter
- **Funding costs have increased as markets price in a higher likelihood of tightening Fed policy in the very near term and short-term LIBOR has been impacted by technical issues related to money fund reform**
- **Long term, we see opportunities for investments in both residential and commercial assets and in markets previously dominated by the Fed/GSEs**

Long-Term Outlook

- **Above average dividend yields can be a major driver of returns for our investors in a stagnant, low return global environment**
    - Dividends should help to cushion potential volatility in book value resulting from a complex and uncertain macroeconomic environment

- **Changing demographics will drive long-term investment opportunities in the housing finance system**
    - Our diversified investment portfolio where our capital recycles over the medium term puts us in position to take advantage of these opportunities

- **Need for yield as the world ages supports demand for yield oriented vehicles which generate current income**
    - Provides a significant tailwind for investors in mortgage REITs

- **The complexity of the market environment requires vigilance in managing risk and disciplined capital allocation consistent with our long-term philosophy**
    - We are positioned to take advantage of market dislocations with our portfolio construction

Long-Term Value is Driven by Above Average Dividends

Total Return (%) January 1, 2008 - October 18, 2016

Source: SNL Financial

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Historical MREIT Performance

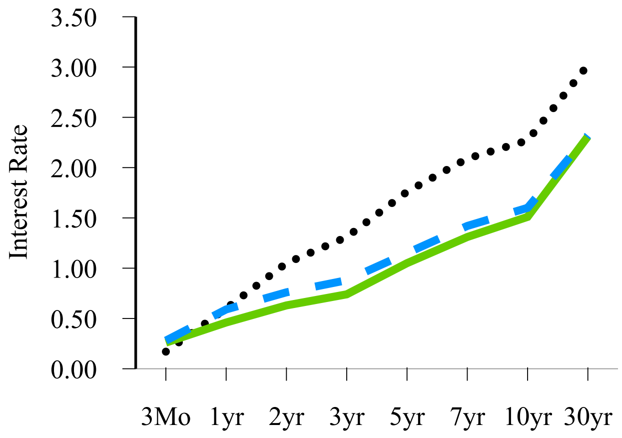
Total Return (%) January 1, 2003 - October 18, 2016

Source: SNL Financial

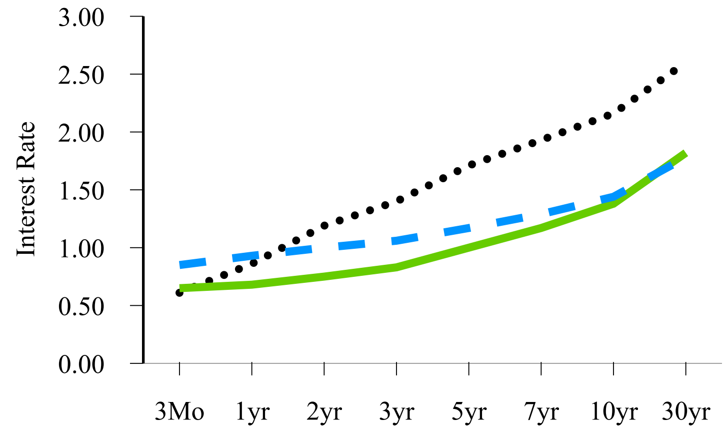
Appendix

Interest Rate Environment

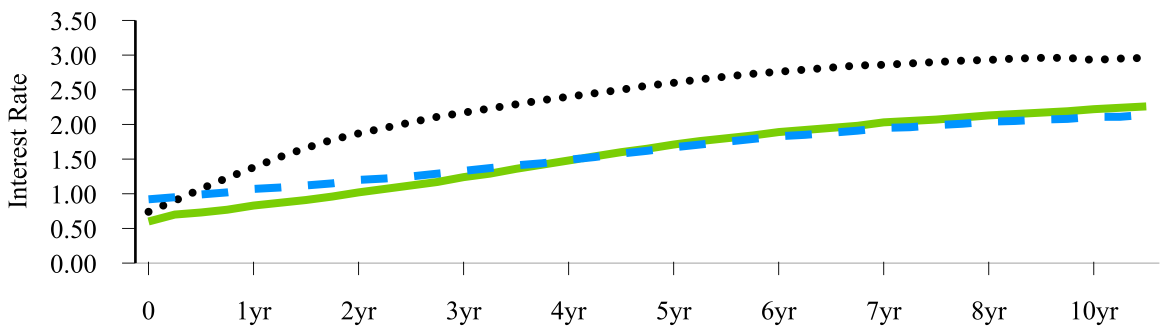
Treasury Curve



Swaps



Eurodollars Futures



09/30/16 06/30/16 12/31/15

Source: Bloomberg

Credit Spread Environment *(in bps)*

	Asset Class	12/31/14	06/30/15	12/31/15	06/30/16	9/30/16
Dynex Portfolio	**Agency ARM 5/1**	**21**	**16**	**22**	**38**	**32**
Dynex Portfolio	**Agency DUS**	**59**	**60**	**89**	**94**	**80**
Dynex Portfolio	**Freddie K AAA IO**	**155**	**150**	**225**	**255**	**230**
Dynex Portfolio	**AAA CMBS IO**	**165**	**175**	**240**	**240**	**215**
Dynex Portfolio	**Freddie K B**	**170**	**157**	**350**	**325**	**265**
Dynex Portfolio	**Freddie K C**	**250**	**228**	**480**	**540**	**490**
	IG Corporates	**132**	**146**	**172**	**157**	**159**
	High Yield	**562**	**521**	**746**	**628**	**558**
	AAA CMBS	**88**	**92**	**138**	**104**	**100**
	AA CMBS	**141**	**163**	**223**	**186**	**160**
	A CMBS	**203**	**230**	**348**	**304**	**255**
	BBB CMBS	**358**	**388**	**562**	**604**	**560**
	FN CC nominal/tsy	**74**	**84**	**82**	**92**	**91**
	10y swap spreads	**11.8**	**9.8**	**(8.5)**	**(10.6)**	**(14.0)**
	CRT.M3-2014	**475**	**425**	**478**	**415**	**311**

Source: JP Morgan and Company data

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Book Value Rollforward

($ in thousands, except per share amounts)	$ Amount	Per Common Share
Common shareholders' equity, June 30, 2016 [1]	$377,776	$7.69
GAAP net income:		
Core net operating income [2]	9,709	0.20
Other	133	—
Unrealized gains on derivatives	2,564	0.05
Unrealized gains on MBS	769	0.02
Dividends declared	(10,321)	(0.21)
Stock transactions, net	539	0.01
Common shareholders' equity, September 30, 2016 [1]	$381,169	$7.76

Attribution of net unrealized gains:
+ $ 0.41 - tighter spreads
- $(0.34) - higher interest rates
= $ 0.07 - total impact

(1) Common shareholders' equity represents total shareholders' equity less the liquidation value of preferred stock of $113.8 million.
(2) Reconciliations for non-GAAP measures are presented in the Appendix

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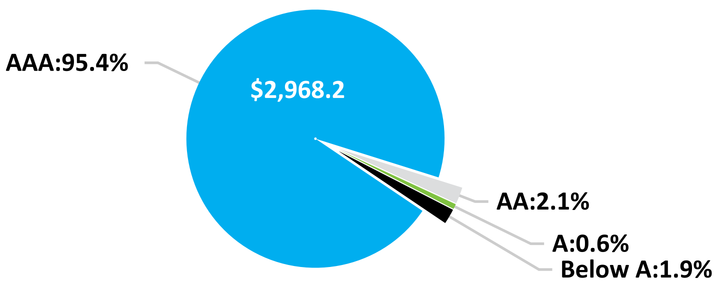
Portfolio Details* *(as of September 30, 2016)*

Credit Quality

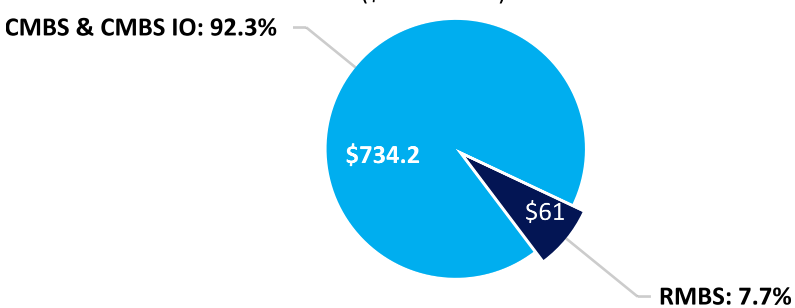
($ in millions)



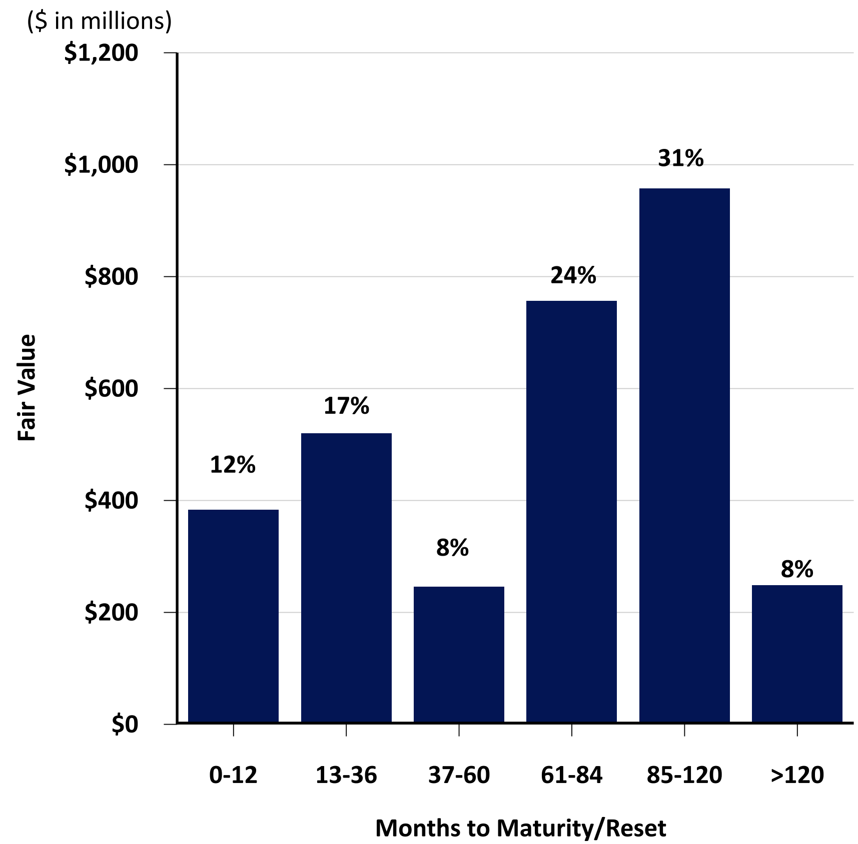
Agency MBS are considered AAA-rated for purposes of this chart.

Net Premium by Asset Type

($ in millions)



Portfolio Expected Maturity/Reset Distribution

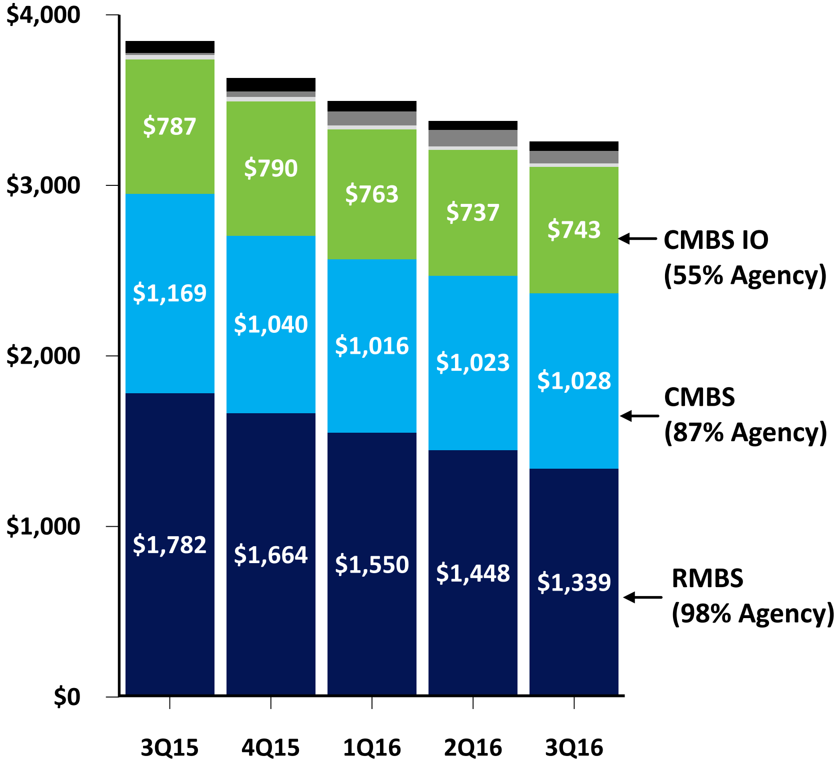


** MBS investments only, excludes loans held for investment.*

Asset and Equity Allocations *(Comparison at Quarter End)*

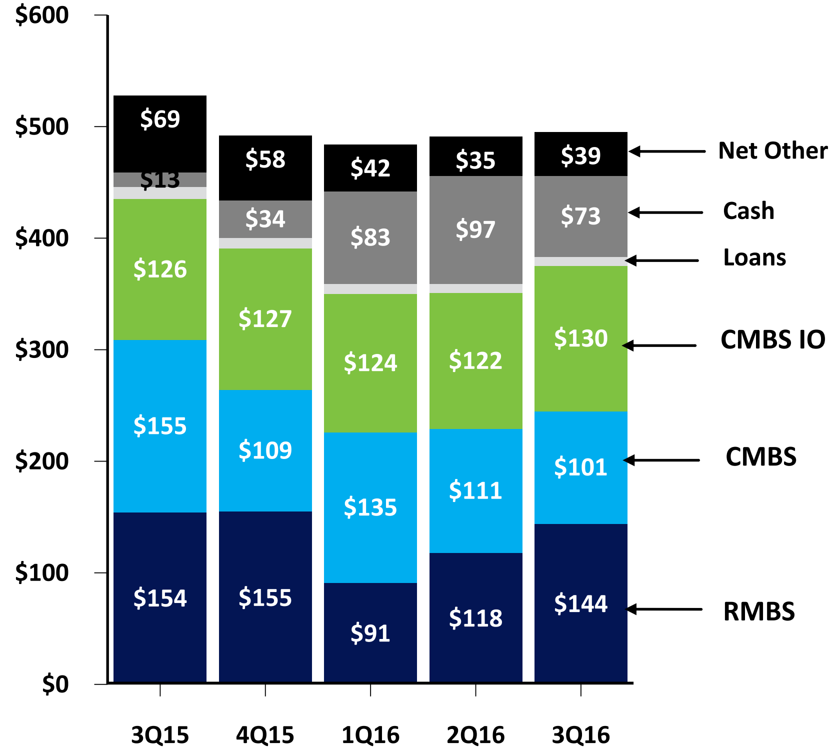
Asset Allocation

($ in millions)



Equity Allocation [(1)]

($ in millions)



- Approximately 79% of our invested capital is allocated to Agency
- Equity allocation decreased for CMBS and increased on RMBS on a trend basis as a result of management of the financing for the investment

(1) Equity allocation is computed as asset basis less associated financing, where applicable. Net Other includes all non-investment assets/financing liabilities. All amounts are computed using amounts included in the Company's quarterly/annual reports filed with the SEC.

Capital Deployment

($ in thousands)

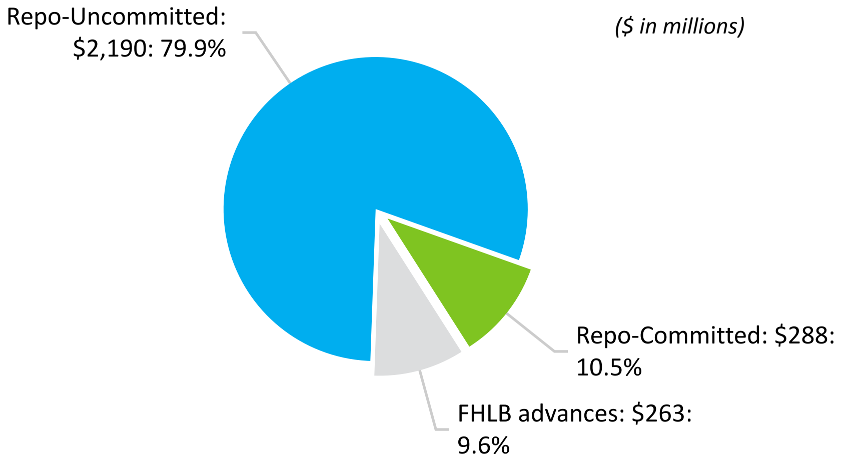
	9/30/2016	6/30/2016	QoQ Change
Investments	$3,130,833	$3,230,550	($99,717)
Financing	2,748,303	2,871,000	(122,697)
Leverage [(1)]	5.8x	6.1x	(0.3)x
Financing			
Original Days to Maturity	58 days	52 days	6 days
Remaining Days to Maturity	18 days	21 days	(3) days

Asset Type	QoQ Change in Investments
Agency RMBS	($95,485)
Non-Agency RMBS	(13,688)
Agency CMBS	40,892
Non-Agency CMBS	(35,764)
Agency CMBS IO	955
Non-Agency CMBS IO	4,822
Loans and other investments	(1,449)
Total	($99,717)

[(1)] *Leverage is based on total liabilities divided by stockholders' equity.*

Funding Sources *(as of September 30, 2016)*

($ in millions)



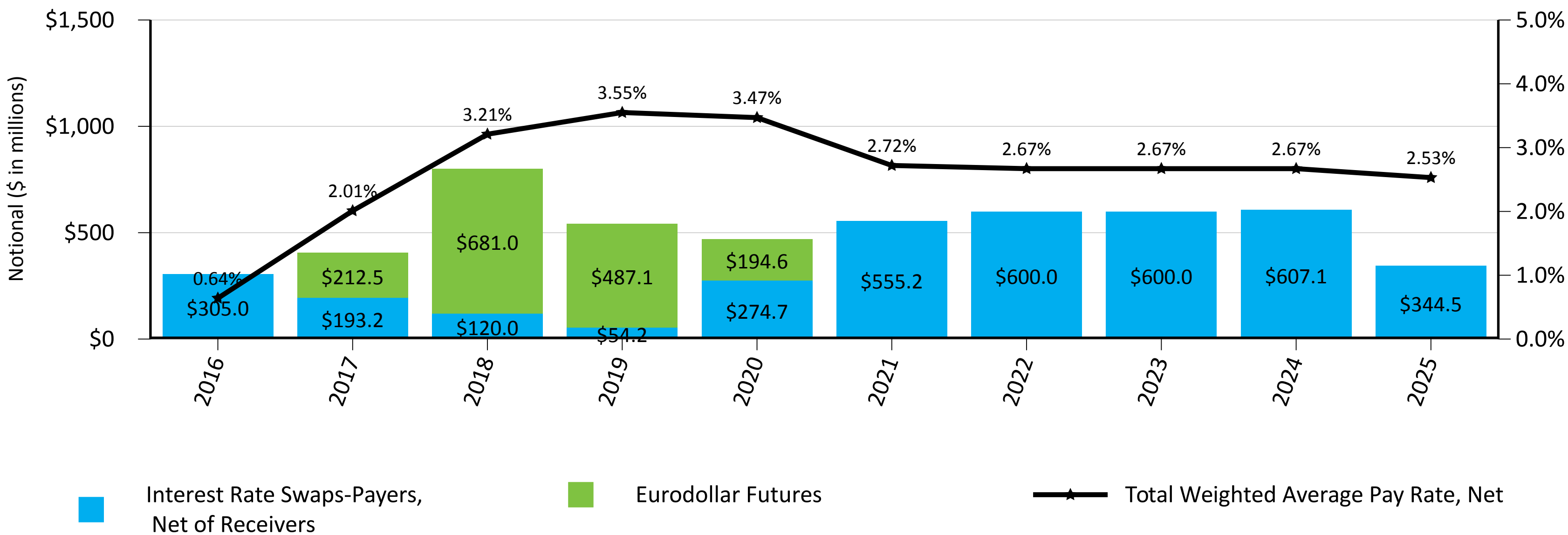
Active Counterparty by Region	#	% of all REPO
North America	13	72.3%
Asia	4	18.0%
Europe	2	9.7%
Total	19	100%

Active Counterparty by Type	#	% of all REPO
Broker/Dealers	6	39.4%
Domestic Banks	8	37.6%
Foreign Banks	5	23.0%
Total	19	100%

- **We maintain a diversified funding platform with over 30 established counterparties, currently active with 19 counterparties including FHLB**
- **Our funding is well diversified by counterparty and geography**
- **Repo markets remain highly liquid**

Hedging Details

As of September 30, 2016



- We did not make any changes to our hedging portfolio during the third quarter of 2016.

Risk Position

Treasury Yields [1]	As of September 30, 2016	As of June 30, 2016
2Y	0.76%	0.58%
5Y	1.15%	1.00%
10Y	1.60%	1.47%
30Y	2.32%	2.29%

Parallel Change in Treasury Yields (bps)	Percentage Change in Projected Market Value of Assets Net of Hedges	
	As of September 30, 2016	As of June 30, 2016
+100	(1.40)%	(1.28)%
+50	(0.64)%	(0.57)%
+25	(0.31)%	(0.28)%
-25	0.27%	0.27%

Curve Shift 2 year Treasury (bps)	Curve Shift 10 year Treasury (bps)	Percentage Change in Projected Market Value of Assets Net of Hedges	
		As of September 30, 2016	As of June 30, 2016
0	+25	0.05%	0.09%
+10	+50	(0.02)%	0.06%
+25	+75	(0.16)%	(0.05)%
+25	0	(0.25)%	(0.26)%
+50	0	(0.49)%	(0.52)%
-10	-50	(0.01)%	(0.10)%

Parallel Change in Market Credit Spreads	Percentage Change in Projected Market Value of Assets Net of Hedges	
	As of September 30, 2016	As of June 30, 2016
+50	(1.94)%	(1.93)%
+25	(0.98)%	(0.97)%
-25	0.99%	0.99%
-50	2.00%	1.99%

[1] *Treasury yields source: Bloomberg*

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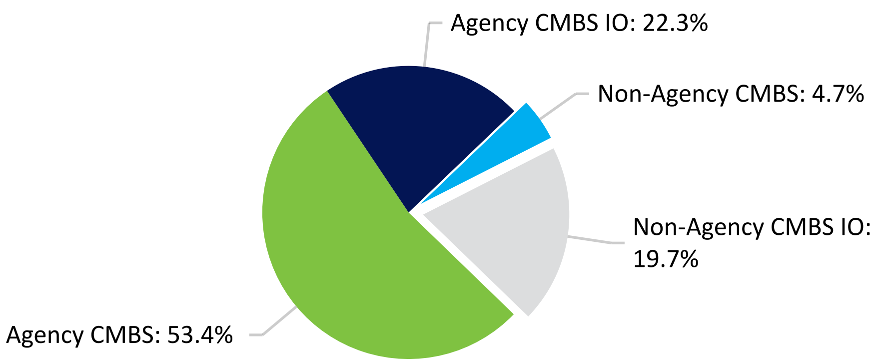
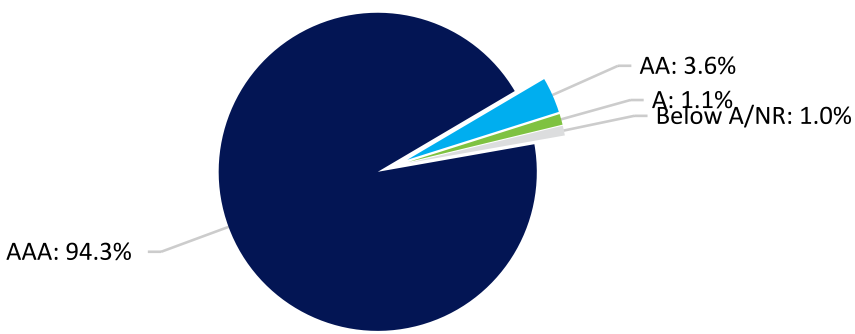
CMBS and CMBS IO Portfolio Details *(as of September 30, 2016)*

Asset Type



Credit Quality

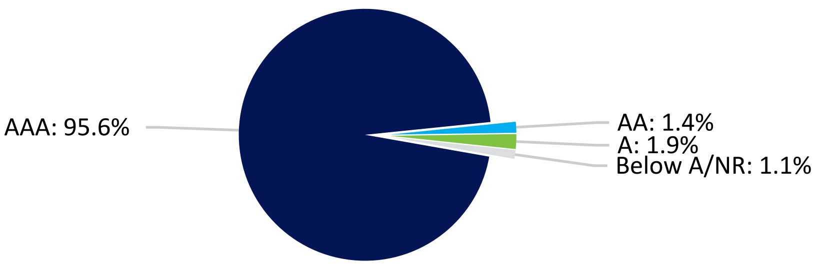


The majority of our assets continue to be rated AAA or are Agency guaranteed, reflecting our up in liquidity and up in credit strategy.

Agency MBS are considered AAA-rated for purposes of this chart.

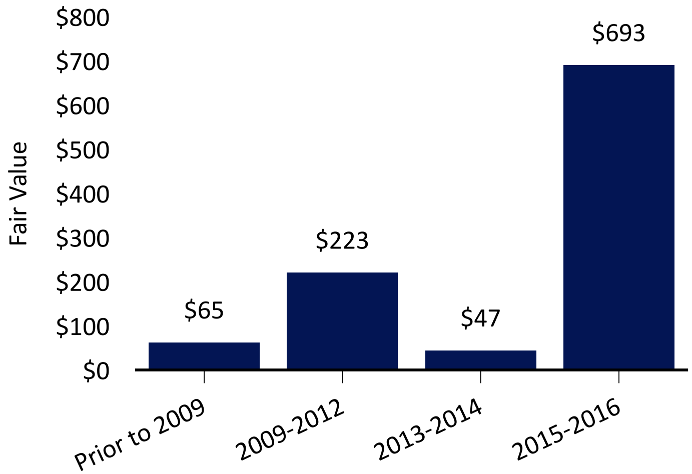
CMBS
(as of September 30, 2016)

Credit Quality



Vintage

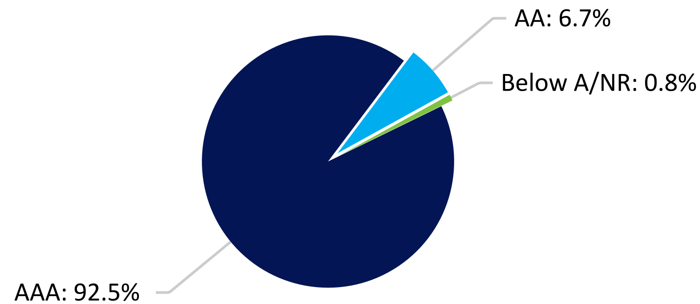
By Year of Origination



($ in millions)

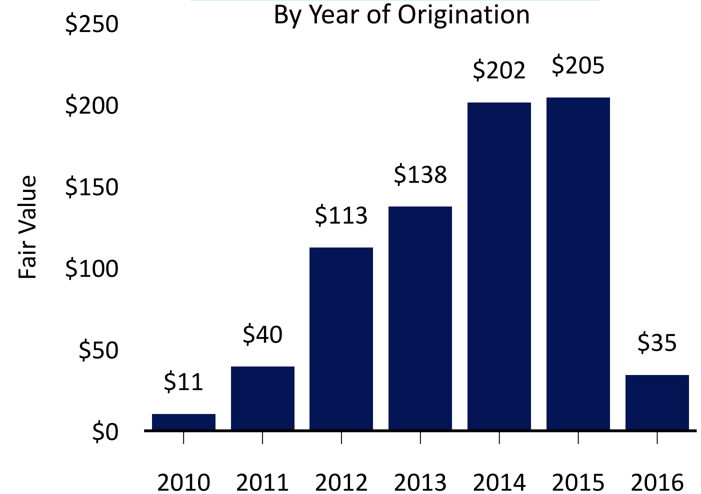
CMBS IO
(as of September 30, 2016)

Credit Quality



Vintage

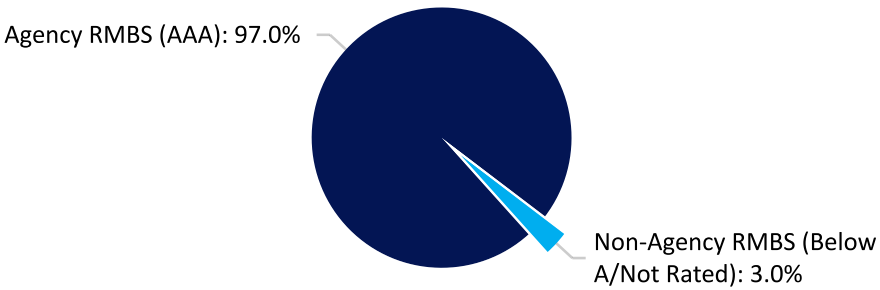
By Year of Origination



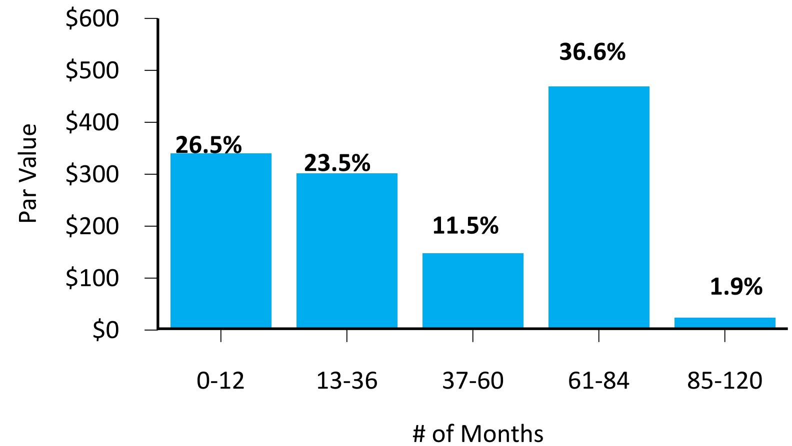
RMBS *(as of September 30, 2016)*

($ in millions)

Credit Quality

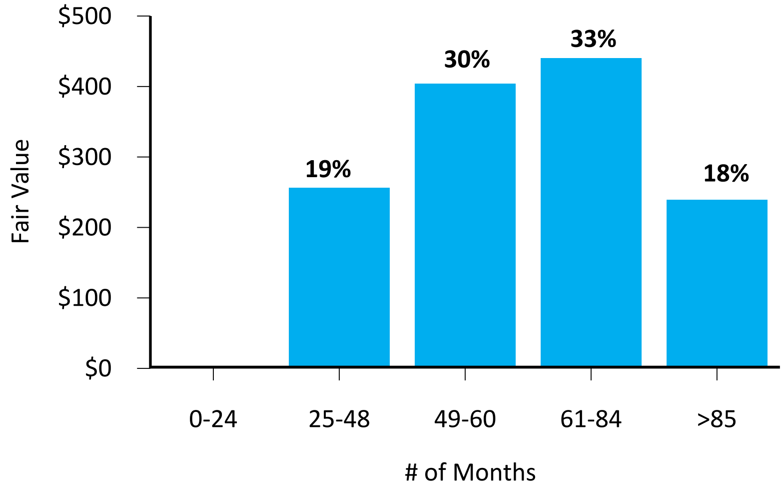


Months to Maturity/Reset For ARMs/Hybrids



Weighted Average Loan Age

Prepayment protection in the form of seasoning, interest only (IO) features reduces the incentive to refinance. 33% of the ARM portfolio has an IO feature with a weighted average remaining IO period of approximately 47 months.



Financial Performance - Comparative Quarters

($ in thousands, except per share amounts)	3Q2016 Income (Expense)	3Q2016 Per Common Share	2Q2016 Income (Expense)	2Q2016 Per Common Share
Interest income	$21,135	$0.43	$22,816	$0.46
Interest expense	(6,068)	(0.12)	(6,100)	(0.12)
GAAP net interest income	15,067	0.31	16,716	0.34
Less: accretion of de-designated hedges	99	—	80	—
Plus: net periodic interest costs (1)	(155)	—	(486)	(0.01)
Adjusted net interest income (2)	14,813	0.31	16,150	0.33
Other income, net	545	0.01	290	—
G & A expenses	(3,355)	(0.07)	(3,671)	(0.07)
Preferred stock dividends	(2,294)	(0.05)	(2,294)	(0.05)
Core net operating income to common shareholders (2)	9,709	0.20	10,475	0.21
Change in fair value of derivatives (1)	2,564	0.05	(15,811)	(0.32)
Realized loss on sale of investments, net	—	—	(297)	—
Amortization of de-designated hedges	99	—	80	—
Fair value adjustments, net	34	—	28	—
GAAP net income (loss) to common shareholders	12,406	0.25	(5,525)	(0.11)
Unrealized gains on MBS	769	0.02	23,027	0.46
Amortization of de-designated hedges	(99)	—	(80)	—
Total comprehensive income	$13,076	$0.27	$17,422	$0.35

(1) Net periodic interest costs and change in fair value of derivatives are components of the "gain (loss) on derivative instruments, net" reported in the comprehensive income statement.

(2) Reconciliations for non-GAAP measures are presented in the Appendix.

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Comparable Total Return

Index	Q3 2016 (annualized)	LTM*
DX (total shareholder return)	47.29%	29.39%
Bloomberg Mortgage REIT Index	20.66%	17.40%
S&P 500	16.18%	15.37%
1-3 Year Treasury ETF	(0.60)%	0.72%
7-10 Year Treasury ETF	(2.10)%	3.51%
Real Estate ETF	(5.04)%	18.49%
Utilities ETF	(21.25)%	17.09%
Hedge Fund ETF - macro	(3.24)%	(1.29)%
IG Corporate ETF	4.67%	9.69%
HY Corporate ETF	18.73%	10.89%
Emerging Markets ETF	40.73%	16.87%
Infrastructure ETF	6.80%	11.98%

**LTM: Last Twelve Months*

Source: Bloomberg

Dividend Character - YTD 2016 *(Estimated)*

($ in thousands)		
GAAP net loss to common shareholders	$	(32,844)
GAAP net income on taxable REIT subsidiary		457
GAAP net loss to common shareholders excluding taxable REIT subsidiary		(33,301)
Differences between GAAP net loss and taxable income:		
Change in fair value of derivative instruments		59,831
Loss on sale of investments		(1,674)
Tax amortization on terminated derivative instruments		(23,787)
Other		2,279
Taxable income		3,348
Add back: Capital losses		5,911
Taxable income - ordinary income		9,259
Common dividends paid deduction		32,403
Common dividend representing return of capital		$23,144
% of common dividend representing non-taxable return of capital		71.4%

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Reconciliation of GAAP Measures to Non-GAAP Measures

($ in thousands except per share data)

	Quarter Ended				
	9/30/16	06/30/16	3/31/16	12/31/15	9/30/15
Net (loss) income to common shareholders	**$12,406**	**($5,525)**	**($39,725)**	**$30,237**	**($39,271)**
Adjustments:					
Amortization of de-designated cash flow hedges (1)	(99)	(80)	27	727	857
Change in fair value on derivatives instruments, net	(2,564)	15,811	46,584	(19,177)	50,997
Loss (gain) on sale of investments, net	—	297	3,941	908	(113)
Fair value adjustments, net	(34)	(28)	(24)	6	(16)
Core net operating income to common shareholders	**$9,709**	**$10,475**	**$10,803**	**$12,701**	**$11,613**
Core net operating income per common share	**$0.20**	**$0.22**	**$0.22**	**$0.25**	**$0.24**

	Quarter Ended									
	9/30/016		06/30/16		3/31/16		12/31/15		9/30/15	
GAAP interest income/annualized yield	$21,135	2.75%	$22,816	2.77%	$25,089	2.78 %	$25,522	2.74 %	$26,096	2.69 %
GAAP interest expense/annualized cost of funds (2)	6,068	0.85%	6,100	0.83%	6,310	0.81 %	5,833	0.70 %	5,859	0.67 %
GAAP net interest income/spread	**$15,067**	**1.90%**	**$16,716**	**1.94%**	**$18,779**	**1.97 %**	**$19,689**	**2.04 %**	**$20,237**	**2.02 %**
GAAP interest expense/cost of funds (2)	$6,068	0.85%	$6,100	0.83%	$6,310	0.81 %	$5,833	0.70 %	$5,859	0.67 %
Amortization of de-designated cash flow hedges (1)	99	0.01%	80	—%	(27)	— %	(727)	(0.08)%	(857)	(0.10)%
Net periodic interest costs of derivatives	155	0.02%	486	0.07%	1,680	0.21 %	1,323	0.16 %	1,752	0.21 %
Adjusted interest expense/adjusted cost of funds	**$6,322**	**0.88%**	**$6,666**	**0.90%**	**$7,963**	**1.02 %**	**$6,429**	**0.78 %**	**$6,754**	**0.78 %**
Adjusted net interest income/spread	**$14,813**	**1.87%**	**$16,150**	**1.87%**	**$17,126**	**1.76 %**	**$19,093**	**1.96 %**	**$19,342**	**1.91 %**

(1) Amount recorded as a portion of "interest expense" in accordance with GAAP related to the amortization of the balance remaining in accumulated other comprehensive loss as of June 30, 2013 as a result of the Company's discontinuation of hedge accounting.
(2) Cost of funds is calculated by dividing annualized interest expense by the average balance of borrowings outstanding during the period.

DYNEX CAPITAL INC.

MREIT Glossary of Terms

Commercial Mortgage-Backed Securities (CMBS) are a type of mortgage-backed security that is secured by the loan on a commercial property.

Credit Risk is the risk of loss of principal stemming from a borrower's failure to repay a loan.

Curve Twist Terms:

- **Bull Flattener:** If the yield curve is exhibiting bull flattener behavior, the spread between the long-term rate and the short-term rate is getting smaller because long-term rates are decreasing as short-term rates are increasing. This could occur as more investors choose long-term bonds relative to short-term bonds, which drives long-term bond prices up and reduces yields.
- **Bear Flattener:** A yield-rate environment in which short-term interest rates are increasing at a faster rate than long-term interest rates. This causes the yield curve to flatten as short-term and long-term rates start to converge.
- **Bear Steepener:** Widening of the yield curve caused by long-term rates increasing at a faster rate than short-term rates. This causes a larger spread between the two rates as the long-term rate moves further away from the short-term rate.
- **Bull Steepener:** A change in the yield curve caused by short-term rates falling faster than long-term rates, resulting in a higher spread between the two rates.

Duration is a measure of the sensitivity of the price of a fixed-income investment to a change in interest rates. Duration is expressed as a number of years.

Interest Only Securities (IOs) are the interest only strips of mortgage, Treasury, or bond payments, which are separated and sold individually from the principal portions.

DYNEX CAPITAL INC.

MREIT Glossary of Terms

Interest Rate Risk is the risk that an investment's value will change due to a change in the absolute level of interest rates, in the spread between two rates, in the shape of the yield curve or in any other interest rate relationship.

Leverage is the use of borrowed money to finance assets.

Prepayment Risk is the risk associated with the early unscheduled return of principal.

Repurchase Agreements are a short-term borrowing that uses loans or securities as collateral. The lender advances only a percentage of the value of the asset (the advance rate). The inverse of the advance rate is the equity contribution of the borrower (the haircut).

Residential Mortgage-Backed Securities (RMBS) are a type of mortgage-backed debt obligation whose cash flows come from residential debt, such as mortgages, home-equity loans and subprime mortgages.

Spread Risk is the uncertainty in pricing resulting from the expansion and contraction of the risk premium over the benchmark or the risk of how the spread of a security will react over the benchmarked security. treasury curve.


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