



# First Quarter 2017 Earnings Call

MAY 4, 2017



**TWO HARBORS**  
Investment Corp.

A Pine River Capital Managed Company



# Safe Harbor Statement

## FORWARD-LOOKING STATEMENTS

This presentation includes “forward-looking statements” within the meaning of the safe harbor provisions of the United States Private Securities Litigation Reform Act of 1995. Actual results may differ from expectations, estimates and projections and, consequently, readers should not rely on these forward-looking statements as predictions of future events. Words such as “expect,” “target,” “assume,” “estimate,” “project,” “budget,” “forecast,” “anticipate,” “intend,” “plan,” “may,” “will,” “could,” “should,” “believe,” “predicts,” “potential,” “continue,” and similar expressions are intended to identify such forward-looking statements. These forward-looking statements involve significant risks and uncertainties that could cause actual results to differ materially from expected results, including, among other things, those described in our Annual Report on Form 10-K for the year ended December 31, 2016, and any subsequent Quarterly Reports on Form 10-Q, under the caption “Risk Factors.” Factors that could cause actual results to differ include, but are not limited to: the state of credit markets and general economic conditions; changes in interest rates and the market value of our assets; changes in prepayment rates of mortgages underlying our target assets; the rates of default or decreased recovery on the mortgages underlying our target assets; the occurrence, extent and timing of credit losses within our portfolio; the concentration of credit risks we are exposed to; declines in home prices; our ability to establish, adjust and maintain appropriate hedges for the risks in our portfolio; the availability and cost of our target assets; the availability and cost of financing; changes in the competitive landscape within our industry; our ability to effectively execute and to realize the benefits of strategic transactions and initiatives we have pursued or may in the future pursue; our ability to manage various operational risks and costs associated with our business; interruptions in or impairments to our communications and information technology systems; our ability to acquire mortgage servicing rights (MSR) and successfully operate our seller-servicer subsidiary and oversee our subservicers; the impact of any deficiencies in the servicing or foreclosure practices of third parties and related delays in the foreclosure process; the state of commercial real estate markets and our ability to acquire or originate commercial real estate loans or related assets; our exposure to legal and regulatory claims; legislative and regulatory actions affecting our business; the impact of new or modified government mortgage refinance or principal reduction programs; our ability to maintain our REIT qualification; and limitations imposed on our business due to our REIT status and our exempt status under the Investment Company Act of 1940.

Readers are cautioned not to place undue reliance upon any forward-looking statements, which speak only as of the date made. Two Harbors does not undertake or accept any obligation to release publicly any updates or revisions to any forward-looking statement to reflect any change in its expectations or any change in events, conditions or circumstances on which any such statement is based. Additional information concerning these and other risk factors is contained in Two Harbors’ most recent filings with the Securities and Exchange Commission (SEC). All subsequent written and oral forward-looking statements concerning Two Harbors or matters attributable to Two Harbors or any person acting on its behalf are expressly qualified in their entirety by the cautionary statements above.

This presentation may include industry and market data obtained through research, surveys, and studies conducted by third parties and industry publications. We have not independently verified any such market and industry data from third-party sources. This presentation is provided for discussion purposes only and may not be relied upon as legal or investment advice, nor is it intended to be inclusive of all the risks and uncertainties that should be considered. This presentation does not constitute an offer to purchase or sell any securities, nor shall it be construed to be indicative of the terms of an offer that the parties or their respective affiliates would accept.

Readers are advised that the financial information in this presentation is based on company data available at the time of this presentation and, in certain circumstances, may not have been audited by the company’s independent auditors.



# Financial Summary<sup>(1)</sup>

## ON TRACK TO DELIVER STRONGER EARNINGS IN 2017

### QUARTERLY HIGHLIGHTS

- Total return on book value of 3.9%<sup>(2)</sup>
  - Book value of \$9.91 per common share and cash dividend of \$0.25 per common share
- Comprehensive Income of \$145.7 million, or \$0.42 per common share
- GAAP net income of \$72.0 million, or \$0.21 per common share
- Core Earnings (revised)<sup>(3)</sup> of \$95.0 million, or \$0.27 per common share
- Completed underwritten public offering of \$287.5 million aggregate principal amount of 6.25% convertible senior notes due 2022
- Issued 5,750,000 shares of 8.125% Series A fixed-to-floating rate cumulative redeemable preferred stock for proceeds, net of offering costs, of \$138.9 million

(1) Except as otherwise indicated in this presentation, reported data is as of or for the period ended March 31, 2017.

(2) See Appendix slide 14 for calculation of Q1-2017 return on book value.

(3) Core Earnings is a non-GAAP measure. Please see slide 17 for a discussion of an update to the company's Core Earnings calculation as of March 31, 2017. Please see Appendix slide 17 of this presentation for a definition of Core Earnings and a reconciliation of GAAP to non-GAAP financial information.



# Strategic Overview

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## INCREASING EARNINGS POTENTIAL WHILE MAINTAINING RISK MANAGEMENT APPROACH

- Attractive investment opportunities in target assets
- More efficient business model
- Sophisticated approach to risk management
- Opportunistic expansion of capital structure



# Book Value

(Dollars in millions, except per share data)	Q4-2016 Book Value	Q4-2016 Book Value per share	Q1-2017 Book Value	Q1-2017 Book Value per share
<b>Beginning common stockholders' equity</b>	<b>\$3,478.2</b>	<b>\$10.01</b>	<b>\$3,401.1</b>	<b>\$9.78</b>
GAAP Net Income:				
Core Earnings (revised), net of tax <sup>(1)</sup>	86.6		95.0	
Realized gains and losses, net of tax	(64.7)		42.4	
Unrealized mark-to-market gains and losses, net of tax	319.5		(65.4)	
Other comprehensive (loss) income	(339.2)		73.7	
Dividend declaration	(83.4)		(87.2)	
Other	4.0		4.0	
Balance before capital transactions	3,401.0		3,463.6	
Preferred stock issuance costs	—		(4.9)	
Issuance of common stock, net of offering costs	0.1		0.1	
<b>Ending common stockholders' equity</b>	<b>\$3,401.1</b>	<b>\$9.78</b>	<b>\$3,458.8</b>	<b>\$9.91</b>
Series A preferred stock liquidation preference	n/a		143.8	
<b>Ending total stockholders' equity</b>	<b>\$3,401.1</b>		<b>\$3,602.6</b>	

**Comprehensive  
Income (GAAP)**

Q1-2017  
Comprehensive  
Income of \$145.7  
million.

Declared Q1-2017  
dividend of \$0.25  
per common share.

(1) Please see slide 17 for a discussion of an update to the company's Core Earnings calculation as of March 31, 2017. Please see Appendix slide 18 for a definition of Core Earnings and a reconciliation of GAAP to non-GAAP financial information.



# Core Earnings Summary<sup>(1)</sup>

## Q1-2017 FINANCIAL SUMMARY

(Dollars in millions)	Q4-2016	Q1-2017	Variance (\$)
Interest income	\$179.1	\$191.6	\$12.5
Interest expense	66.2	75.4	(9.2)
Net interest income	112.9	116.2	3.3
Loss on swaps and swaptions	(2.9)	(7.9)	(5.0)
Gain on other derivatives	4.1	3.8	(0.3)
Servicing income, net of amortization on MSR	(0.4)	13.2	13.6
Other	1.7	1.5	(0.2)
Total other income	2.5	10.6	8.1
Expenses	32.3	32.0	0.3
Benefit from income taxes	(3.5)	(0.2)	(3.3)
Core Earnings (revised) <sup>(1)</sup>	<b>\$86.6</b>	<b>\$95.0</b>	<b>\$8.4</b>
<b>Basic and diluted weighted average Core EPS</b>	<b>\$0.25</b>	<b>\$0.27</b>	<b>\$0.02</b>

- Net interest income increased quarter-over-quarter
  - RMBS purchases at higher yields
  - CRE portfolio growth
  - Higher average leverage
- Higher net servicing revenue driven primarily by portfolio growth and lower prepayments
- Other operating expenses decreased quarter-over-quarter
  - Expect expense ratio to stabilize in 1.6%-1.8% range
- Revised core earnings definition excludes non-cash equity compensation expense

**Increase of 9.7%**

	Core Earnings (unrevised)	Core Earnings (revised)
Q1-2017	\$ 0.26	\$ 0.27
Q4-2016	\$ 0.24	\$ 0.25

(1) Core Earnings is a non-GAAP measure. Please see slide 17 for a discussion of an update to the company's Core Earnings calculation as of March 31, 2017. Please see Appendix slide 18 for a definition of Core Earnings and a reconciliation of GAAP to non-GAAP financial information.



# Diversified Financing Profile

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## REPURCHASE AGREEMENTS

- Outstanding borrowings of \$13.6 billion with 24 active counterparties; 31 total counterparties
- Repo markets functioning efficiently for RMBS

## FEDERAL HOME LOAN BANK OF DES MOINES

- Outstanding secured advances of \$3.6 billion
- Weighted average borrowing rate of 1.04%

## FINANCING FOR MSR

- Outstanding borrowings of \$15.0 million under revolving credit facilities
- Additional available capacity of \$55.0 million as of March 31, 2017
- Post quarter-end, additional \$20.0 million of capacity added

## FINANCING FOR COMMERCIAL REAL ESTATE ASSETS

- Outstanding borrowings under repurchase agreements of \$478.8 million with three financing facilities
  - Expanded the maximum borrowing capacity of one facility from \$250 million to \$400 million
  - Subsequent to quarter-end, closed on additional financing facility

## CONVERTIBLE DEBT ISSUANCE

- \$287.5 million principal amount of unsecured senior convertible notes due 2022
- Majority of proceeds used to help fund MSR

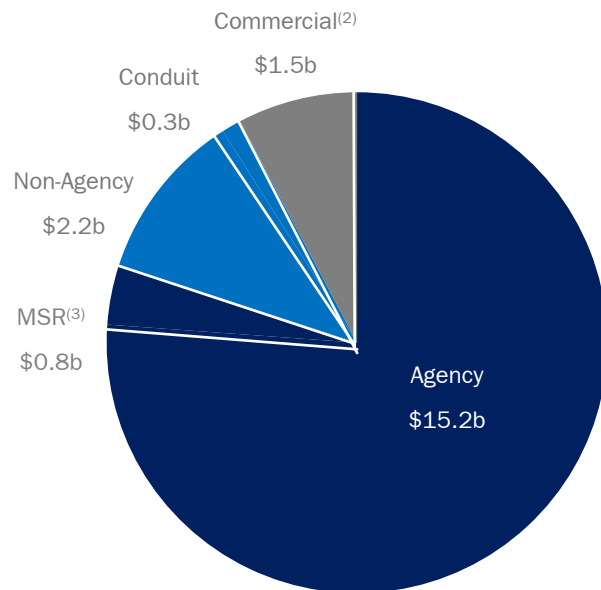


# Portfolio Composition

## DIVERSIFIED CAPITAL ALLOCATION

### PORTFOLIO COMPOSITION<sup>(1)</sup>

\$20.0 BILLION PORTFOLIO AS OF MARCH 31, 2017



### HISTORICAL CAPITAL ALLOCATION

	March 31, 2016	December 31, 2016	March 31, 2017
<b>Rates<sup>(4)</sup></b>	56%	58%	58%
<b>Credit<sup>(5)</sup></b>	33%	27%	27%
<b>Commercial<sup>(2)</sup></b>	11%	15%	15%

- (1) For additional detail on the portfolio, see Appendix slides 19-24.
- (2) Commercial consists of senior, mezzanine and B-note commercial real estate debt and related instruments.
- (3) MSR includes Ginnie Mae buyout residential mortgage loans.
- (4) Assets in "Rates" include Agency RMBS, Agency Derivatives, MSR and Ginnie Mae buyout residential mortgage loans.
- (5) Assets in "Credit" include non-Agency MBS, net economic interests in securitization trusts, prime jumbo residential mortgage loans and credit sensitive residential mortgage loans.





# Portfolio Performance

## DRIVING SUPERIOR PORTFOLIO PERFORMANCE

### Q1-2017 PERFORMANCE SUMMARY

#### RATES

- Interest rates less volatile
- Agency RMBS prices relatively flat
- MSR benefited from seasonally lower prepayment speeds

#### CREDIT

- Mortgage credit spreads tightened
- Underlying residential credit environment continued to improve

#### COMMERCIAL

- Continued strong portfolio performance

### PORTFOLIO METRICS

Three Months Ended	December 31, 2016	March 31, 2017
<b>Annualized portfolio yield during the quarter</b>	<b>3.54%</b>	<b>3.99%</b>
<b>Rates</b>		
Agency RMBS, Agency Derivatives and MSR	2.6%	3.1%
<b>Credit</b>		
Non-Agency RMBS, Legacy <sup>(1)</sup>	9.1%	9.2%
Non-Agency MBS, New issue <sup>(1)</sup>	6.4%	7.1%
Net economic interest in securitization trusts	12.0%	11.4%
Residential mortgage loans held-for-sale	4.0%	4.3%
<b>Commercial<sup>(3)</sup></b>	<b>6.1%</b>	<b>6.2%</b>
<b>Annualized cost of funds on average repurchase and advance balance during the quarter<sup>(2)</sup></b>	<b>1.17%</b>	<b>1.52%</b>
<b>Annualized interest rate spread for aggregate portfolio during the quarter</b>	<b>2.37%</b>	<b>2.47%</b>

(1) "Legacy" non-Agency RMBS includes non-Agency bonds issued up to and including 2009. "New issue" non-Agency MBS includes bonds issued after 2009.

(2) Cost of funds includes interest spread expense associated with the portfolio's interest rate swaps.

(3) Commercial consists of senior, mezzanine and B-note commercial real estate debt and related instruments.



# Rates Update

## MSR INTEGRAL COMPONENT OF RATES STRATEGY

### SENSIBLE APPROACH TO RISK MANAGEMENT

- Low interest rate exposure
- Utilize a combination of hedging tools
- MSR is a key component of hedging strategy

### PORTFOLIO SUMMARY

- Agency RMBS holdings of \$15.2 billion
  - Increase in Agency RMBS from initially deploying proceeds from the capital raises in the first quarter; plan to redeploy those proceeds into MSR and commercial real estate assets
- MSR portfolio of approximately \$750 million in fair market value
  - Added \$7.4 billion UPB of new issue, high quality MSR from flow-sale arrangements in the first quarter
  - Expect near-term flow MSR volume of approximately \$2.0-2.5 billion UPB per month
  - Subsequent to quarter-end, agreed to purchase approximately \$12 billion UPB of new issue, conventional MSR subject to GSE transfer approval



# Credit Update

## CONTINUED IMPROVEMENT OF UNDERLYING RESIDENTIAL CREDIT ENVIRONMENT

### RESIDENTIAL CREDIT TAILWINDS

- Legacy RMBS prices increased in the first quarter but significant opportunity remains
- Home prices continue to improve; CoreLogic Home Price Index up 7.0% on a rolling 12-month basis<sup>(1)</sup>
- Prepayments higher year-over-year
  - TWO's 1Q-17 three month CPR of 6.7%, compared to 1Q-16 three month CPR of 5.3%
- Future upside driven by increasing prepays, lower delinquencies/defaults and severities

### PORTFOLIO SUMMARY

- Legacy non-Agency RMBS holdings of \$2.2 billion
- Opportunistically purchased approximately \$340 million of legacy non-Agency RMBS
- Average market price of \$75.38 allows ability to capture upside opportunity<sup>(2)</sup>

(1) Source: CoreLogic Home Price Index rolling 12-month change as of February 2017.

(2) Weighted average market price utilized current face for weighting purposes. Please see slide 23 in the Appendix for more information on our non-Agency RMBS portfolio.



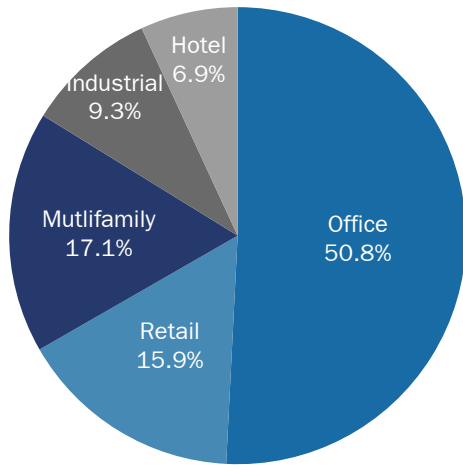
# Commercial Real Estate Update

## SIGNIFICANT OPPORTUNITY FOR LENDING

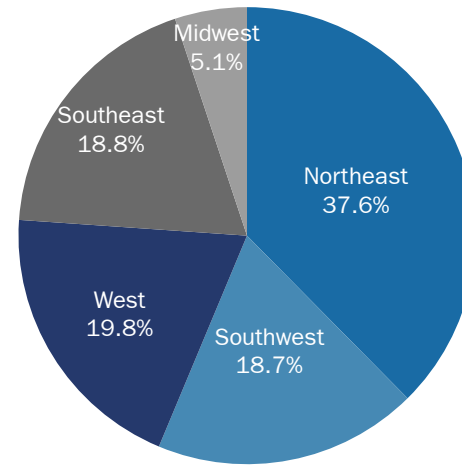
### PORTFOLIO SUMMARY

- Aggregate portfolio carrying value of \$1.5 billion at March 31, 2017
  - 40 assets with an average loan size of \$39.0 million
- Weighted average stabilized loan-to-value (LTV) of 64.0%<sup>(1)</sup>; weighted average spread of LIBOR plus 478 basis points
- Strong pipeline of loans; subsequent to quarter-end approximately \$300 million<sup>(2)</sup> UPB closed or under contract

### PORTFOLIO BY PROPERTY TYPE

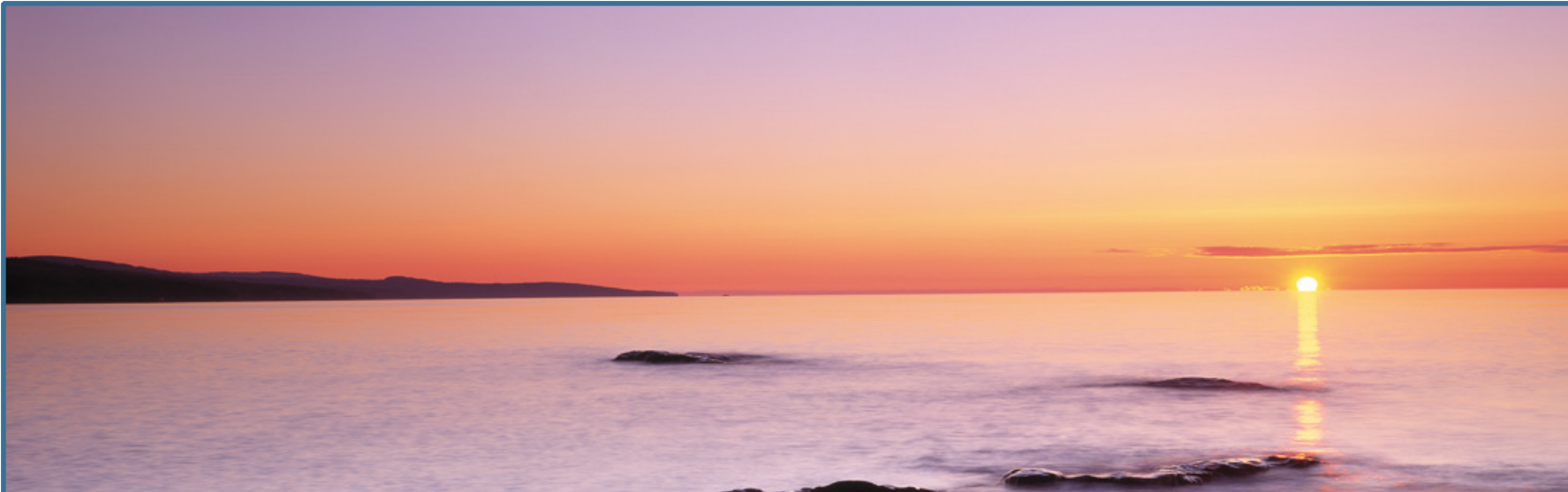


### PORTFOLIO BY GEOGRAPHY



(1) Stabilized LTV considers the prospective market value "as stabilized" which reflects the property's market value as of the time the property is projected to achieve stabilized occupancy. Stabilized occupancy is the occupancy level that a property is expected to achieve after the property is exposed to the market for lease over a reasonable period of time and at comparable terms and conditions to other similar properties.

(2) As of May 1, 2017.



# Appendix



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# Return on Book Value

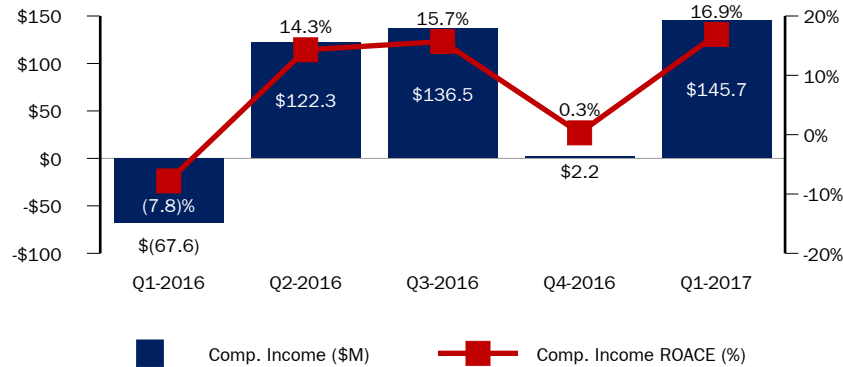
Return on common book value Q1-2017	
(Per common share amounts, except for percentage)	
Book value at December 31, 2016	\$9.78
Book value at March 31, 2017	9.91
Increase in book value	0.13
Dividends declared in Q1-2017	0.25
Return on book value Q1-2017	\$0.38
Percent return on book value Q1-2017 <sup>(1)</sup>	3.9%

(1) Return on book value for three-month period ended March 31, 2017 is defined as the increase in book value per common share from December 31, 2016 to March 31, 2017 of \$0.13 per common share, plus dividends declared of \$0.25 per common share, divided by December 31, 2016 book value of \$9.78 per common share.

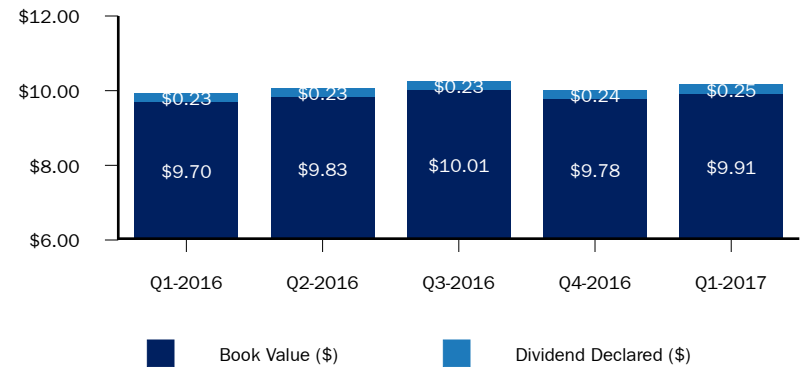


# Financial Performance

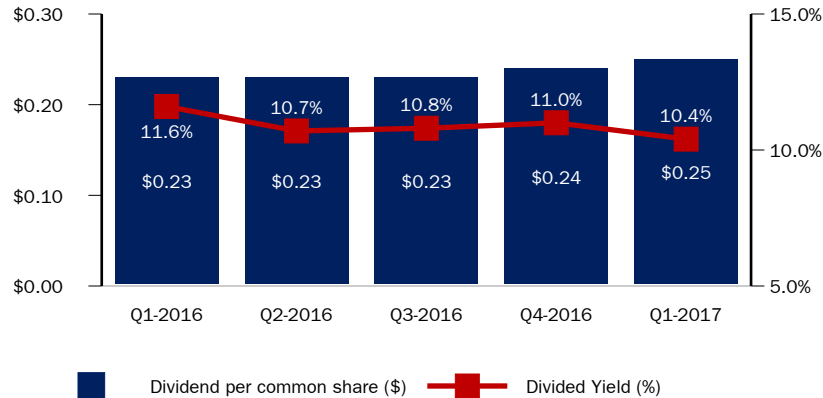
## COMPREHENSIVE (LOSS) INCOME



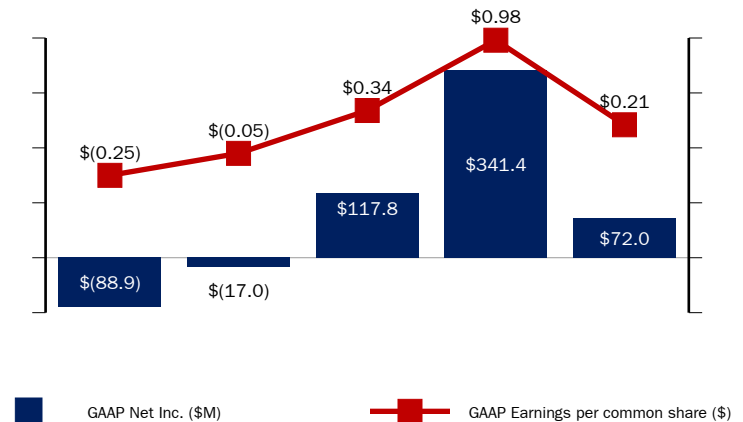
## BOOK VALUE AND DIVIDEND PER COMMON SHARE<sup>(1)</sup>



## DIVIDENDS<sup>(1)</sup>



## GAAP NET INCOME (LOSS)



(1) Historical dividends may not be indicative of future dividend distributions. The company ultimately distributes dividends based on its taxable income per common share, not GAAP earnings. The annualized dividend yield on the company's common stock is calculated based on the closing price of the last trading day of the relevant quarter.

# Operating Performance



(In millions, except for per common share data)	Q4-2016				Q1-2017			
	Core Earnings (revised) <sup>(1)</sup>	Realized Gains (Losses)	Unrealized MTM	Total	Core Earnings (revised) <sup>(1)</sup>	Realized Gains (Losses)	Unrealized MTM	Total
Interest income	\$179.1	\$—	\$—	\$179.1	\$191.6	\$—	\$—	\$191.6
Interest expense	66.2	—	—	66.2	75.4	—	—	75.4
Net interest income	112.9	—	—	112.9	116.2	—	—	116.2
Gain (loss) on investment securities	—	(189.6)	16.1	(173.5)	—	(50.4)	(1.9)	(52.3)
(Loss) gain on interest rate swaps and swaptions	(2.9)	37.6	143.3	178.0	(7.9)	66.0	(48.2)	9.9
Gain (loss) on other derivative instruments	4.1	99.8	39.5	143.4	3.8	28.1	(59.8)	(27.9)
Servicing income	35.0	—	—	35.0	39.8	—	—	39.8
(Loss) gain on servicing asset	(35.4)	(2.7)	166.0	127.9	(26.6)	0.3	11.7	(14.6)
Gain (loss) on residential mortgage loans held-for-sale	—	0.4	(2.0)	(1.6)	—	1.4	0.1	1.5
Other income (loss)	1.7	(5.6)	(1.1)	(5.0)	1.5	(2.0)	8.5	8.0
Total other income (loss)	2.5	(60.1)	361.8	304.2	10.6	43.4	(89.6)	(35.6)
Management fees & other operating expenses	32.3	5.0	—	37.3	32.0	1.1	—	33.1
Net income (loss) before income taxes	83.1	(65.1)	361.8	379.8	94.8	42.3	(89.6)	47.5
Income tax (benefit) expense	(3.5)	(0.4)	42.3	38.4	(0.2)	(0.1)	(24.2)	(24.5)
<b>Net income (loss)</b>	<b>\$86.6</b>	<b>(\$64.7)</b>	<b>\$319.5</b>	<b>\$341.4</b>	<b>\$95.0</b>	<b>\$42.4</b>	<b>(\$65.4)</b>	<b>\$72.0</b>
Weighted average earnings per common share	\$0.25	(\$0.19)	\$0.92	\$0.98	\$0.27	\$0.12	(\$0.18)	\$0.21

(1) Core Earnings (revised) is a non-GAAP measure. Please see slide 17 for a discussion of an update to our Core Earnings calculation as of March 31, 2017. Please see Appendix slide 18 of this presentation for a definition of Core Earnings and a reconciliation of GAAP to non-GAAP financial information.





# Updated Disclosure of Non-GAAP Financial Measures

## Updated Disclosure of Non-GAAP Financial Measures

One of the company's principal business objectives is to generate net income by earning a net interest spread on its investment portfolio, which is a function of interest income from its investment portfolio less financing, hedging and operating costs. Historically, the company has presented Core Earnings as a non-GAAP measure that is defined as Comprehensive Income, excluding realized and unrealized gains or losses on the aggregate portfolio, impairment losses, amortization of business combination intangible assets, servicing reserve expenses on MSR, certain upfront costs related to securitization transactions and restructuring charges. As historically defined, Core Earnings includes interest income or expense and premium income or loss on derivative instruments and servicing income, net of estimated amortization on MSR. The company believes this presentation of Core Earnings provides investors greater transparency into the company's period-over-period financial performance and facilitates comparisons to peer mortgage REITs.

Beginning with this reporting period, the company's Core Earnings metrics will exclude the non-cash equity compensation expense associated with unvested restricted stock awards. The company believes this adjustment will provide a better reflection of the cash earnings power of the company. While non-cash equity compensation expense at times may be material, the company believes the removal of this expense from Core Earnings is appropriate because it is a non-cash expense that fluctuates quarterly based on the share price of the company's common stock. In addition, all unvested shares of the restricted stock awards granted by the company will continue to be included in the diluted share amount used to calculate Core Earnings per common share, which reflects the dilution resulting from the existence of such unvested shares.

When the company sets its dividend, management and its Board of Directors evaluate multiple factors, including near-term sustainability, Core Earnings, the ability to generate comprehensive and taxable income, and REIT compliance considerations as well as the ability to protect and grow book value per common share. Over time, dividends will be a reflection of the economic return of the business.

### Condensed Table for Historical Periods Core Earnings (unaudited)

(dollars in thousands, except per common share data)

For the Three Months Ended	Core Earnings (Unrevised)		Core Earnings (Revised)		Change per weighted common share
	Earnings	Per weighted common share	Earnings	Per weighted common share	
March 31, 2017	\$ 91,003	\$ 0.26	\$ 94,958	\$ 0.27	\$ 0.01
December 31, 2016	\$ 83,392	\$ 0.24	\$ 86,557	\$ 0.25	\$ 0.01
September 30, 2016	\$ 82,529	\$ 0.24	\$ 85,525	\$ 0.25	\$ 0.01
June 30, 2016	\$ 76,162	\$ 0.22	\$ 80,491	\$ 0.23	\$ 0.01
March 31, 2016	\$ 71,844	\$ 0.21	\$ 74,695	\$ 0.21	\$ —
December 31, 2015	\$ 72,133	\$ 0.20	\$ 73,713	\$ 0.20	\$ —
September 30, 2015	\$ 79,416	\$ 0.22	\$ 81,078	\$ 0.22	\$ —
June 30, 2015	\$ 80,157	\$ 0.22	\$ 82,713	\$ 0.23	\$ 0.01
March 31, 2015	\$ 94,075	\$ 0.26	\$ 96,764	\$ 0.26	\$ —



# GAAP to Core Earnings Reconciliation<sup>(1)</sup>

Reconciliation of GAAP to non-GAAP Information (In thousands, except for per common share data)	Three Months Ended December 31, 2016	Three Months Ended March 31, 2017
Reconciliation of Comprehensive income to Core Earnings (revised):		
<b>Comprehensive income</b>	<b>\$2,187</b>	<b>\$145,747</b>
Adjustment for other comprehensive (income) loss:		
Unrealized (gain) loss on available-for-sale securities	339,216	(73,762)
<b>Net income</b>	<b>\$341,403</b>	<b>\$71,985</b>
Adjustments for non-core earnings (revised):		
Losses on sale of securities and residential mortgage loans, net of tax	158,026	28,018
Unrealized (gain) loss on securities and residential mortgage loans held-for-sale, net of tax	(14,794)	1,879
Unrealized (gain) loss on interest rate swaps and swaptions hedging interest rate exposure (or duration), net of tax	(138,488)	37,642
Realized gains on termination or expiration of swaps and swaptions, net of tax	(40,793)	(56,001)
(Gain) loss on other derivative instruments, net of tax	(87,772)	23,081
Realized and unrealized loss (gain) on financing securitizations, net of tax	6,661	(6,614)
Realized and unrealized gains on mortgage servicing rights, net of tax	(142,677)	(11,503)
Securitization deal costs, net of tax	(58)	—
Change in servicing reserves, net of tax	83	(1,835)
Non-cash equity compensation expense <sup>(2)</sup>	3,165	3,955
Tax valuation allowance	—	4,351
Restructuring charges	1,801	—
<b>Core Earnings (revised)</b>	<b>\$86,557</b>	<b>\$94,958</b>
Weighted average common shares outstanding	347,643,257	348,563,930
Core Earnings (revised) per weighted average common share outstanding	\$0.25	\$0.27

(1) Core Earnings is a non-U.S. GAAP measure that the company defines as Comprehensive Income (Loss), excluding "realized gains and losses" (impairment losses, realized gains or losses on the aggregate portfolio, reserve expense for representation and warranty obligations on MSR, certain upfront costs related to securitization transactions, compensation expense related to restricted common stock and restructuring charges) and "unrealized mark-to-market gains and losses" (unrealized gains and losses on the aggregate portfolio). As defined, Core Earnings includes interest income or expense and premium income or loss on derivative instruments and servicing income, net of estimated amortization on MSR. Beginning with this reporting period, Core Earnings also excludes non-cash compensation expense related to restricted common stock, as the company believes this adjustment will provide a better reflection of the cash earnings power of the Company. We believe the presentation of Core Earnings provides investors greater transparency into the Company's period-over-period financial performance and facilitates comparisons to peer REITs. Please see slide 17 for a discussion of an update to our Core Earnings calculation as of March 31, 2017.

(2) This non-cash equity compensation expense was included in Core Earnings for periods ending prior to March 31, 2017. Please see slide 17 for a further discussion of an update to the company's Core Earnings calculation beginning with the quarter ended March 31, 2017.



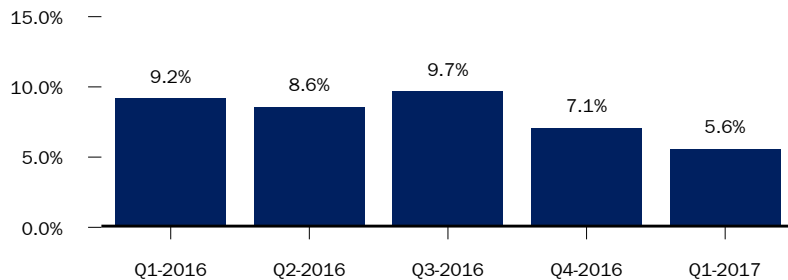
# Rates: Agency RMBS Metrics

## AGENCY PORTFOLIO YIELDS AND METRICS

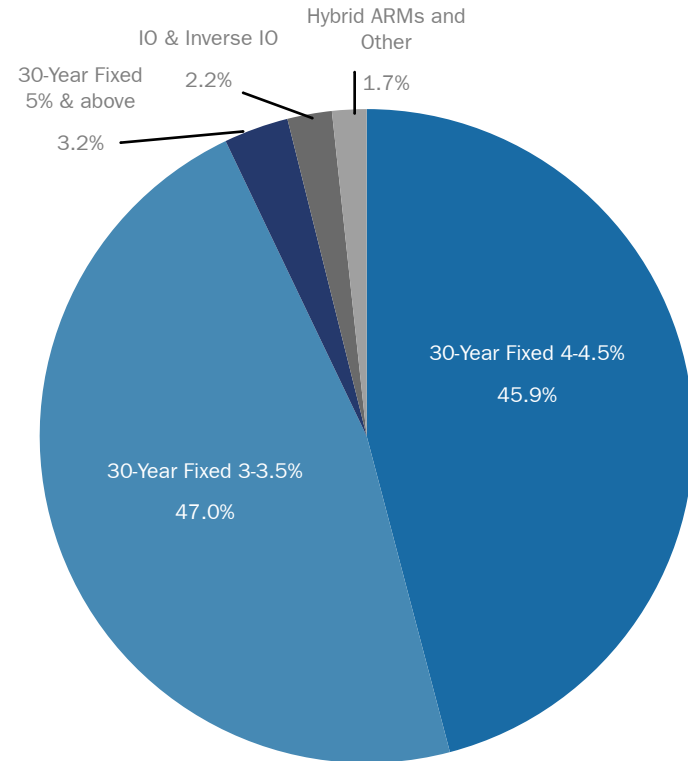
Portfolio Yield	Realized Q4-2016	At December 31, 2016	Realized Q1-2017	At March 31, 2017
Agency yield	3.0%	3.1%	3.1%	3.1%
Repo and FHLB costs	0.8%	0.9%	1.0%	1.1%
Swap costs	0.1%	0.2%	0.3%	0.2%
Net interest spread	2.1%	2.0%	1.8%	1.8%

Portfolio Metrics	Q4-2016	Q1-2017
Weighted average 3-month CPR <sup>(1)</sup>	7.1%	5.6%
Weighted average cost basis <sup>(2)</sup>	\$105.9	\$105.9

## AGENCY RMBS CPR<sup>(1)</sup>



## AGENCY PORTFOLIO COMPOSITION



(1) Agency weighted average 3-month Constant Prepayment Rate (CPR) includes IIOs (or Agency Derivatives).

(2) Weighted average cost basis includes RMBS principal and interest securities only. Average purchase price utilized carrying value for weighting purposes.



## Rates: Agency RMBS

As of March 31, 2017	Par Value (\$M)	Market Value (\$M)	% Prepay Protected <sup>(1)</sup>	Amortized Cost Basis (\$M)	Weighted Average Coupon	Weighted Average Age (Months)
<b>30-Year fixed</b>						
3.0-3.5%	\$7,005	\$7,150	53.2%	\$7,244	3.4%	6
4.0-4.5%	6,542	6,995	96.2%	7,008	4.2%	23
≥ 5.0%	434	487	100.0%	468	5.5%	99
	13,981	14,632	75.3%	14,720	3.9%	17
<b>Hybrid ARMs</b>	27	28	—%	28	5.0%	157
<b>Other</b>	238	235	0.7%	232	4.7%	144
<b>IOs and IIOs</b>	3,747	338 <sup>(2)</sup>	—%	347	3.3%	96
<b>Total</b>	<b>\$17,993</b>	<b>\$15,233</b>	<b>72.4%</b>	<b>\$15,327</b>		

(1) Includes securities with implicit or explicit protection including lower loan balances (securities collateralized by loans less than or equal to \$175K of initial principal balance), higher LTVs (securities collateralized by loans with greater than or equal to 80% LTV), certain geographic concentrations and lower FICO scores.

(2) Represents market value of \$224.5 million of IOs and \$113.2 million of Agency Derivatives.



## Rates: Mortgage Servicing Rights<sup>(1)</sup>

	As of December 31, 2016	As of March 31, 2017
<b>Fair value (\$M)</b>	\$693.8	\$747.6
<b>Unpaid principal balance (\$M)</b>	\$62,828.0	\$68,128.0
<b>Weighted average coupon</b>	3.8%	3.9%
<b>Original FICO score<sup>(2)</sup></b>	756	755
<b>Original LTV</b>	73%	73%
<b>60+ day delinquencies</b>	0.3%	0.2%
<b>Net servicing spread</b>	25.3 basis points	25.3 basis points
<b>Vintage:</b>		
Pre-2009	0.5%	0.4%
2009-2012	23.4%	20.9%
Post 2012	76.1%	78.7%
<b>Percent of MSR portfolio:</b>		
Conventional	99.9%	99.9%
Government FHA	0.1%	0.1%

(1) Excludes residential mortgage loans held-for-investment in securitization trusts for which the company is the named servicing administrator.

(2) FICO represents a mortgage industry accepted credit score of a borrower.



# Credit: Non-Agency MBS Metrics

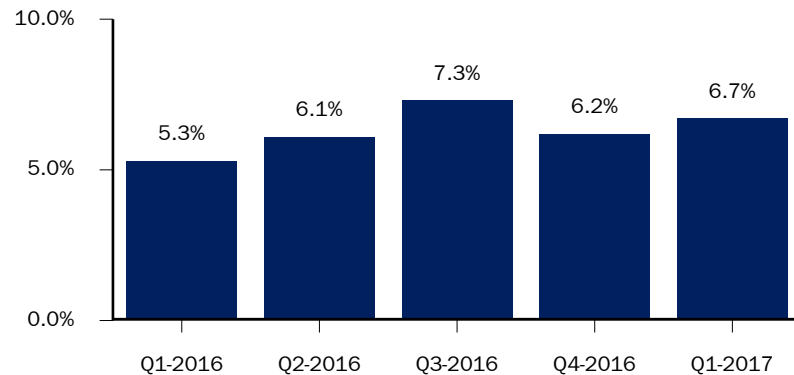
## NON-AGENCY PORTFOLIO YIELDS AND METRICS

Portfolio Yield	Realized Q4-2016	At December 31, 2016	Realized Q1-2017	At March 31, 2017
Non-Agency yield	8.7%	9.3%	9.0%	9.0%
Repo and FHLB costs	2.7%	2.6%	2.8%	2.8%
Swap costs	0.2%	0.2%	0.1%	0.1%
Net interest spread	5.8%	6.5%	6.1%	6.1%

## NON-AGENCY PORTFOLIO COMPOSITION

Non-Agency: Loan Type	December 31, 2016	March 31, 2017
Sub-prime	71%	74%
Option-ARM	7%	8%
Prime	3%	2%
Alt-A	8%	8%
Other	11%	8%
Portfolio Metrics	Q4-2016	Q1-2017
Weighted average 3-month CPR	6.2%	6.7%
Weighted average cost basis <sup>(1)</sup>	\$57.9	\$59.5

## NON-AGENCY MBS CPR



(1) Weighted average cost basis includes MBS principal and interest securities only. Average purchase price utilized carrying value for weighting purposes. If current face were utilized for weighting purposes, total non-Agency MBS excluding the company's non-Agency interest-only portfolio would have been \$56.93 at March 31, 2017.



# Credit: Non-Agency MBS

As of March 31, 2017	Senior Bonds	Mezzanine Bonds	Total P&I
<b>Portfolio characteristics:</b>			
Carrying value (\$M)	\$1,410.6	\$784.3	\$2,194.9
% of non-Agency portfolio	64.3%	35.7%	100.0%
Average purchase price <sup>(1)</sup>	\$55.95	\$65.84	\$59.48
Average coupon	2.8%	2.1%	2.5%
Weighted average market price <sup>(2)</sup>	\$75.91	\$74.45	\$75.38
<b>Collateral attributes:</b>			
Average loan age (months)	127	136	133
Average loan size (\$K)	\$360	\$338	\$363
Average original Loan-to-Value	70.4%	69.6%	72.1%
Average original FICO <sup>(3)</sup>	633	598	640
<b>Current performance:</b>			
60+ day delinquencies	23.9%	21.0%	23.6%
Average credit enhancement <sup>(4)</sup>	9.3%	17.9%	12.3%
3-Month CPR <sup>(5)</sup>	6.0%	8.1%	6.7%

(1) Average purchase price utilized carrying value for weighting purposes. If current face were utilized for weighting purposes, the average purchase price for senior, mezzanine and total non-Agency MBS, excluding our non-Agency interest-only portfolio, would have been \$53.20, \$63.52 and \$56.93, respectively.

(2) Weighted average market price utilized current face for weighting purposes.

(3) FICO represents a mortgage industry accepted credit score of a borrower.

(4) Average credit enhancement remaining on our non-Agency MBS portfolio, which is the average amount of protection available to absorb future credit losses due to defaults on the underlying collateral.

(5) 3-Month CPR is reflective of the prepayment speed on the underlying securitization; however, it does not necessarily indicate the proceeds received on our investment tranche. Proceeds received for each security are dependent on the position of the individual security within the structure of each deal.

# Commercial Real Estate Portfolio



\$ in millions	Type	Origination Date	Principal Balance	Book Value	Cash Coupon <sup>(4)</sup>	Yield <sup>(2)</sup>	Original Term (Years)	State	Property Type	Initial LTV <sup>(3)</sup>	Stabilized LTV <sup>(4)</sup>
Asset 1	Senior	12/15	\$120.0	\$119.9	L + 4.20%	5.91%	4	LA	Mixed-Use	65.5%	60.0%
Asset 2	Senior	09/15	105.0	105.1	L + 3.42%	4.76%	3	CA	Retail	70.9%	66.9%
Asset 3	Senior	07/16	95.5	94.3	L + 4.45%	5.89%	4	Multi-state	Office	62.8%	61.5%
Asset 4	Senior	04/16	82.0	81.4	L + 4.75%	6.09%	3	NY	Industrial	75.9%	55.4%
Asset 5	Senior	11/15	77.1	77.0	L + 4.20%	5.80%	3	NY	Office	66.4%	68.7%
Asset 6	Senior	10/16	73.8	73.0	L + 4.37%	5.85%	4	NC	Office	72.4%	68.1%
Asset 7	Senior	12/16	62.3	60.6	L + 4.11%	6.76%	4	FL	Office	73.3%	63.2%
Asset 8	Senior	01/17	51.1	50.4	L + 4.75%	6.90%	4	SC	Office	67.6%	67.1%
Asset 9	Senior	06/16	50.7	50.3	L + 4.49%	5.95%	4	HI	Retail	76.2%	57.4%
Asset 10	Mezzanine	03/15	45.9	45.9	L + 6.75%	7.94%	5	Multi-state	Hotel	70.3%	63.5%
Asset 11	Mezzanine	11/15	45.6	45.6	L + 7.25%	8.15%	3	Multi-state	Office	77.6%	77.5%
Asset 12	Senior	12/15	44.5	44.5	L + 4.65%	6.43%	4	PA	Office	74.5%	67.5%
Asset 13	Senior	12/15	43.5	43.5	L + 4.5%	5.61%	3	TX	Multifamily	82.3%	76.8%
Asset 14	Senior	04/16	43.5	43.0	L + 4.40%	6.11%	3	NY	Office	66.9%	62.1%
Asset 15	Senior	02/16	42.9	42.6	L + 4.30%	5.63%	3	TX	Office	72.9%	70.4%
Assets 16-40	Various	Various	576.5	571.5	L + 5.21%	6.83%	4	Various	Various	70.3%	62.7%
<b>Total/Weighted Average</b>			<b>\$ 1,560.0</b>	<b>\$ 1,548.6</b>	<b>L + 4.78%</b>	<b>6.37%</b>	<b>4</b>			<b>70.6%</b>	<b>64.0%</b>

(1) Cash coupon does not include origination or exit fees.

(2) Yield includes net origination fees and exit fees, but does not include future fundings.

(3) Initial LTV considers the original appraisal at the time of origination.

(4) Stabilized LTV considers the prospective market value "as stabilized" which reflects the property's market value as of the time the property is projected to achieve stabilized occupancy. Stabilized occupancy is the occupancy level that a property is expected to achieve after the property is exposed to the market for lease over a reasonable period of time and at comparable terms and conditions to other similar properties.



# Financing



\$ in millions						
Outstanding Borrowings and Maturities <sup>(1)</sup>	Repurchase Agreements	FHLB Advances	Revolving Credit Facilities	Convertible Notes	Total Outstanding Borrowings	Percent (%)
Within 30 days	\$ 3,090.1	\$ 60.0	\$ —	\$ —	\$ 3,150.1	18.0%
30 to 59 days	2,232.0	163.0	—	—	2,395.0	13.7%
60 to 89 days	2,993.3	—	—	—	2,993.3	17.1%
90 to 119 days	2,029.2	—	—	—	2,029.2	11.6%
120 to 364 days	3,080.8	—	15.0	—	3,095.8	17.7%
One to three years	215.3	815.0	—	—	1,030.3	5.9%
Three to five years	—	—	—	282.3	282.3	1.6%
Ten years and over <sup>(2)</sup>	—	2,533.8	—	—	2,533.8	14.4%
	\$ 13,640.7	\$ 3,571.8	\$ 15.0	\$ 282.3	\$ 17,509.7	100.0%
Collateral Pledged for Borrowings <sup>(3)</sup>	Repurchase Agreements	FHLB Advances	Revolving Credit Facilities <sup>(4)</sup>	Convertible Notes	Total Collateral Pledged	Percent (%)
Available-for-sale securities, at fair value	\$ 14,053.0	\$ 3,096.8	\$ —	n/a	\$ 17,149.8	89.6%
Derivative assets, at fair value	113.0	—	—	n/a	113.0	0.6%
Commercial real estate assets	756.8	728.6	—	n/a	1,485.4	7.8%
Mortgage servicing rights, at fair value	—	—	175.4	n/a	175.4	0.9%
Net economic interests in consolidated securitization trusts	215.5	2.0	—	n/a	217.5	1.1%
	\$ 15,138.3	\$ 3,827.4	\$ 175.4	n/a	\$ 19,141.1	100.0%

(1) Weighted average of 3.0 years to maturity.

(2) Includes FHLB advances of \$2.5 billion with original maturities of 20 years.

(3) Excludes FHLB membership and activity stock totaling \$148.1 million.

(4) Revolving credit facilities over-collateralized due to operational considerations.



# Interest Rate Swaps

Maturities	Notional Amounts (\$B) <sup>(1)</sup>	Average Fixed Pay Rate <sup>(2)</sup>	Average Receive Rate <sup>(2)</sup>	Average Maturity Years <sup>(2)</sup>
<b>Payers</b>				
2017	\$1.9	0.776%	1.077%	0.4
2018	5.3	1.232%	1.102%	1.3
2019	0.3	1.283%	1.039%	2.2
2020	1.5	1.481%	1.076%	3.5
2021 and after	5.1	1.907%	1.091%	6.6
	\$14.1	1.413%	1.090%	3.1
Maturities	Notional Amounts (\$B)	Average Pay Rate	Average Fixed Receive Rate	Average Maturity (Years)
<b>Receivers</b>				
2018	\$0.6	1.052%	1.440%	1.6
2019	0.5	1.041%	1.042%	1.8
2020	0.5	1.034%	1.580%	3.3
2021 and after	2.6	1.073%	2.173%	6.1
	\$4.2	1.062%	1.863%	4.6

(1) Notional amount includes \$788.5 million in forward starting interest rate swaps as of March 31, 2017.

(2) Weighted averages exclude forward starting interest rate swaps. As of March 31, 2017, the weighted average fixed pay rate on interest rate swaps starting in 2017 was 1.8%.



# Interest Rate Swaptions

Option					Underlying Swap			
Swaption	Expiration	Cost (\$M)	Fair Value (\$M)	Average Months to Expiration	Notional Amount (\$M)	Average Pay Rate	Average Receive Rate	Average Term (Years)
Purchase Contracts:								
Payer	<6 Months	\$70.9	\$30.3	4.6	\$6,700	2.43%	3M LIBOR	4.8
Payer	≥6 Months	—	8.5	6.4	825	2.17%	3M LIBOR	5.0
Total Payer		\$70.9	\$38.8	5.2	\$7,525	2.40%	3M LIBOR	4.8
Receiver	<6 Months	\$2.7	\$2.1	5.1	\$1,400	3M LIBOR	1.76%	10.0
Receiver	≥6 Months	—	1.8	6.4	600	3M LIBOR	1.82%	5.0
Total Receiver		\$2.7	\$3.9	5.9	\$2,000	3M LIBOR	1.78%	8.5
Sale Contracts:								
Payer	<6 Months	(\$86.9)	(\$4.6)	5.1	(\$2,200)	3.17%	3M LIBOR	10.0
Payer	≥6 Months	—	(3.4)	6.4	(600)	2.42%	3M LIBOR	5.0
Total Payer		(\$86.9)	(\$8.0)	5.9	(\$2,800)	3.01%	3M LIBOR	8.9
Receiver	<6 Months	(\$20.6)	(\$22.7)	4.0	(\$9,105)	3M LIBOR	1.90%	5.7
Receiver	≥6 Months	(1.6)	(6.3)	6.4	(1,500)	3M LIBOR	1.92%	5.0
Total Receiver		(\$22.2)	(\$29.0)	4.7	(\$10,605)	3M LIBOR	1.90%	5.6



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