

# PennyMac Mortgage Investment Trust

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# Forward-Looking Statements

This presentation contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, regarding management's beliefs, estimates, projections and assumptions with respect to, among other things, the Company's financial results, future operations, business plans and investment strategies, as well as industry and market conditions, all of which are subject to change. Words like "believe," "expect," "anticipate," "promise," "plan," and other expressions or words of similar meanings, as well as future or conditional verbs such as "will," "would," "should," "could," or "may" are generally intended to identify forward-looking statements. Actual results and operations for any future period may vary materially from those projected herein, from past results discussed herein, or illustrative examples provided herein.

Factors which could cause actual results to differ materially from historical results or those anticipated include, but are not limited to: changes in our investment objectives or investment or operational strategies, including any new lines of business or new products and services that may subject us to additional risks; volatility in our industry, the debt or equity markets, the general economy or the real estate finance and real estate markets specifically, whether the result of market events or otherwise; events or circumstances which undermine confidence in the financial markets or otherwise have a broad impact on financial markets, such as the sudden instability or collapse of large depository institutions or other significant corporations, terrorist attacks, natural or man-made disasters, or threatened or actual armed conflicts; changes in general business, economic, market, employment and political conditions, or in consumer confidence and spending habits from those expected; declines in real estate or significant changes in U.S. housing prices or activity in the U.S. housing market; the availability of, and level of competition for, attractive risk-adjusted investment opportunities in mortgage loans and mortgage-related assets that satisfy our investment objectives; the inherent difficulty in winning bids to acquire mortgage loans, and our success in doing so; the concentration of credit risks to which we are exposed; the degree and nature of our competition; our dependence on our manager and servicer, potential conflicts of interest with such entities and their affiliates, and the performance of such entities; changes in personnel and lack of availability of qualified personnel at our manager, servicer or their affiliates; the availability, terms and deployment of short-term and long-term capital; the adequacy of our cash reserves and working capital; our ability to maintain the desired relationship between our financing and the interest rates and maturities of our assets; the timing and amount of cash flows, if any, from our investments; unanticipated increases or volatility in financing and other costs, including a rise in interest rates; the performance, financial condition and liquidity of borrowers; the ability of our servicer, which also provides us with fulfillment services, to approve and monitor correspondent sellers and underwrite loans to investor standards; incomplete or inaccurate information or documentation provided by customers or counterparties, or adverse changes in the financial condition of our customers and counterparties; our indemnification and repurchase obligations in connection with mortgage loans we purchase and later sell or securitize; the quality and enforceability of the collateral documentation evidencing our ownership and rights in the assets in which we invest; increased rates of delinquency, default and/or decreased recovery rates on our investments; our ability to foreclose on our investments in a timely manner or at all; increased prepayments of the mortgages and other loans underlying our mortgage-backed securities or relating to our mortgage servicing rights, excess servicing spread and other investments; the degree to which our hedging strategies may or may not protect us from interest rate volatility; the effect of the accuracy of or changes in the estimates we make about uncertainties, contingencies and asset and liability valuations when measuring and reporting upon our financial condition and results of income; our failure to maintain appropriate internal controls over financial reporting; technologies for loans and our ability to mitigate security risks and cyber intrusions; our ability to obtain and/or maintain licenses and other approvals in those jurisdictions where required to conduct our business; our ability to detect misconduct and fraud; our ability to comply with various federal, state and local laws and regulations that govern our business; developments in the secondary markets for our mortgage loan products; legislative and regulatory changes that impact the mortgage loan industry or housing market; changes in regulations or the occurrence of other events that impact the business, operations or prospects of government agencies or government-sponsored entities, or such changes that increase the cost of doing business with such entities; the Dodd-Frank Wall Street Reform and Consumer Protection Act and its implementing regulations and regulatory agencies, and any other legislative and regulatory changes that impact the business, operations or governance of mortgage lenders and/or publicly-traded companies; the Consumer Financial Protection Bureau and its issued and future rules and the enforcement thereof; changes in government support of homeownership; changes in government or government-sponsored home affordability programs; limitations imposed on our business and our ability to satisfy complex rules for us to qualify as a real estate investment trust (REIT) for U.S. federal income tax purposes and qualify for an exclusion from the Investment Company Act of 1940 and the ability of certain of our subsidiaries to qualify as REITs or as taxable REIT subsidiaries for U.S. federal income tax purposes, as applicable, and our ability and the ability of our subsidiaries to operate effectively within the limitations imposed by these rules; changes in governmental regulations, accounting treatment, tax rates and similar matters (including changes to laws governing the taxation of REITs, or the exclusions from registration as an investment company); the effect of public opinion on our reputation; the occurrence of natural disasters or other events or circumstances that could impact our operations; and our organizational structure and certain requirements in our charter documents.

You should not place undue reliance on any forward-looking statement and should consider all of the uncertainties and risks described above, as well as those more fully discussed in reports and other documents filed by the Company with the Securities and Exchange Commission from time to time. The Company undertakes no obligation to publicly update or revise any forward-looking statements or any other information contained herein, and the statements made in this presentation are current as of the date of this presentation only.

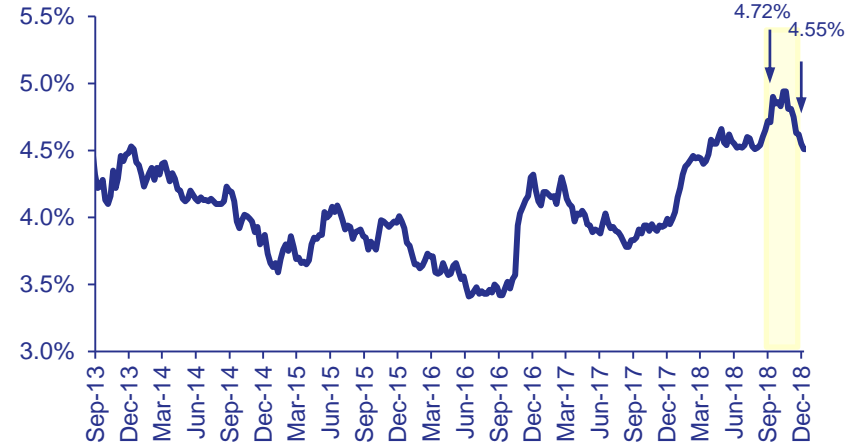
# Fourth Quarter Highlights

- Net income attributable to common shareholders of \$35.4 million; diluted earnings per common share of \$0.55
  - Annualized return on average common equity of 11%
  - Dividend of \$0.47 per common share declared on December 21, 2018 and paid on January 28, 2019
  - Book value per common share increased to \$20.61 from \$20.48 at September 30, 2018
- Results reflect solid contributions from Government-sponsored enterprise (GSE) credit risk transfer (CRT) investments and Interest Rate Sensitive strategies
  - Fair value declines in CRT and mortgage servicing rights (MSR) investments held in PennyMac Mortgage Investment Trust's (PMT's) taxable subsidiary drove \$15.4 million benefit for income tax expense
- Segment pretax results: Credit Sensitive Strategies: \$17.9 million; Interest Rate Sensitive Strategies: \$20.1 million; Correspondent Production: \$(0.6) million; Corporate: \$(11.2) million
- Continued investment in CRT and MSRs resulting from PMT's correspondent production
  - Conventional correspondent loan production from non-affiliates totaled \$9.0 billion in unpaid principal balance (UPB), up 21% from the prior quarter, and conventional loan acquisitions from PennyMac Financial Services (NYSE: PFSI) totaled \$0.9 billion, down 2% from the prior quarter
  - Loans eligible for CRT investments totaled \$8.1 billion in UPB, resulting in a firm commitment to purchase \$310 million of CRT securities
  - New MSR investments totaled \$128 million
- Completed \$267 million in UPB of previously announced distressed loan sales

# Current Market Environment

- Concerns related to the U.S. and global growth prospects in addition to uncertainty regarding the trajectory of the Fed Funds rate drove increased volatility across financial markets in the fourth quarter
  - The average 30-year fixed mortgage rate in the fourth quarter was 22 basis points higher than the prior quarter but fell in December<sup>(1)</sup>
    - The sharp decrease is expected to drive a modest increase in refinancing activity
  - Spreads on GSE credit risk transfer (CRT) securities widened by approximately 40–80 basis points in the fourth quarter but have substantially recovered after quarter end
- Favorable demographic trends and slowing home price appreciation expected to aid home sales increase in 2019
  - Moderating home price appreciation improves affordability
  - Purchase money originations are expected to grow by mid-single digit percentages over the next two years
- Mortgage delinquency rates decreased Q/Q and remain near historical lows
  - The total U.S. loan delinquency rate was 3.88% as of December 31, 2018, down from 3.97% at September 30, 2018 and 4.71% at December 31, 2017<sup>(3)</sup>

**Average 30-year fixed rate mortgage<sup>(1)</sup>**



**Macroeconomic Forecasts<sup>(2)</sup>**

	2015	2016	2017	2018E	2019E	2020E
<b>New home sales ('000s)</b>	503	561	616	613	631	649
<b>Existing home sales ('000s)</b>	5,234	5,440	5,547	5,373	5,462	5,555
<b>Total originations (\$ in billions)</b>	\$1,735	\$2,065	\$1,810	\$1,638	\$1,636	\$1,675
<b>Purchase originations (\$ in billions)</b>	\$924	\$1,037	\$1,144	\$1,169	\$1,218	\$1,269
<b>U.S. Home Price Appreciation (Y/Y % Change)</b>	5.3%	5.8%	6.9%	5.5%	4.3%	2.5%

<sup>(1)</sup> Source: Freddie Mac Primary Mortgage Market Survey; 4.46% as of January 31, 2019  
<sup>(2)</sup> Actual Home Sales: National Association of Realtors (existing) and the Census Bureau (new). Home sales Forecast: Average of Mortgage Bankers Association and Fannie Mae. Actual purchase and total originations: Inside Mortgage Finance. Purchase and total originations forecast: Average of Mortgage Bankers Association, Fannie Mae, Freddie Mac. Actual home price appreciation: FHFA Home Price Index. Forecasted home price appreciation: Average of Mortgage Bankers Association, Fannie Mae, Freddie Mac.  
<sup>(3)</sup> Source: Black Knight Financial Services. Includes loans that are 30 days or more past due but not in foreclosure.

# PMT's Business Model Is Unique Among Mortgage REITs

## Diversified Investment Strategy

- Organically produced investments in credit risk and interest-sensitive assets driven by production activities
- Demonstrated ability to invest in multiple residential mortgage strategies to capitalize on market trends: newly originated loans, CRT, MSRs, ESS<sup>(1)</sup>, RMBS<sup>(2)</sup> and distressed whole loans
- Securitization interests in HELOC<sup>(3)</sup> and prime Non-QM<sup>(4)</sup> loans

## Strong Balance Sheet with Significant Sources of Liquidity

- Strong capital structure with modest leverage and diversified sources of funding
- Securitization structure that allows for issuance of term notes on Fannie Mae MSRs to institutional investors

<sup>(1)</sup> Excess Servicing Spread

<sup>(2)</sup> Residential Mortgage Backed Securities

<sup>(3)</sup> Home Equity Line of Credit

<sup>(4)</sup> Non-qualified mortgage



## Synergistic Partnership with PFSI

- Access to specialized mortgage capabilities, including origination and servicing operations
- PFSI has expertise across all mortgage functions with over 3,000 employees led by a highly experienced management team
- Enables PMT to aggregate quality investments in residential mortgage products with minimal operational risk
- Established appropriate agreements, controls and oversight to identify and manage potential conflicts

## Access to Mortgage Origination and Servicing Assets

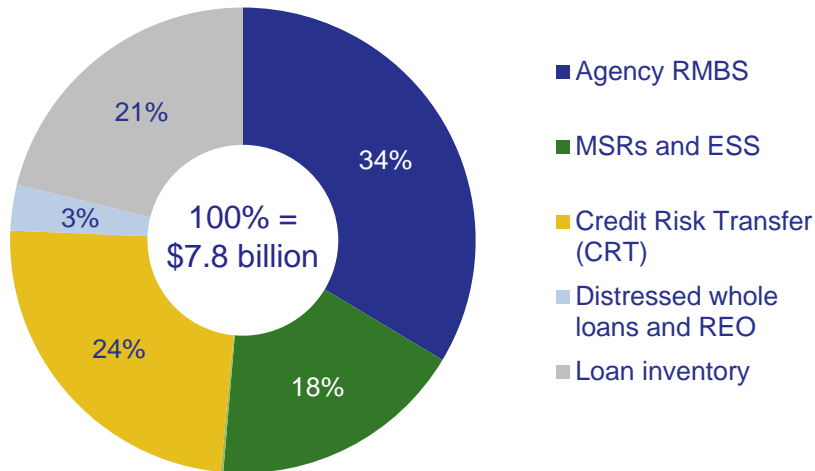
- Exclusive rights to the conventional correspondent production business and resulting assets
- Right of first refusal on other investment opportunities sourced by its manager and service provider, PFSI

## Risk Management and Governance

- Substantial expertise and resources dedicated to risk management
- Sophisticated program to actively manage and hedge interest rate risk
- Governance led by board of trustees which includes seven independent trustees

# Unique Mortgage-Related Investments Delivering Strong Performance

## PMT's Mortgage Assets<sup>(1)</sup>



## Return on Equity Contribution by Strategy

Strategy	2017	2018
Credit Sensitive	13.7%	12.3%
Interest Rate Sensitive	3.8%	13.7%
Correspondent Production	52.2%	17.7%
<b>Net income attributable to common shareholders<sup>(2)</sup> (\$ millions)</b>	<b>\$102.5</b>	<b>\$127.9</b>
<b>Annualized return on common equity<sup>(2)</sup></b>	<b>7.8%</b>	<b>10.1%</b>

- High-quality balance sheet comprised of residential mortgage investments focused on CRT and interest rate sensitive strategies including: MSRs, MBS, ESS and hedge instruments
- PMT's market position as the 5<sup>th</sup> largest conventional conforming mortgage producer in the U.S.<sup>(3)</sup> drives organic investment growth in CRT and MSRs
- Portfolio is delivering strong returns as CRT and MSR positions have grown while the distressed loan portfolio has diminished through liquidation and resolutions
- Opportunity to invest in HELOC and prime Non-QM securitization interests via partnership with PFSI

<sup>(1)</sup> As of December 31, 2018, except for CRT, which is presented on a pro forma basis reflecting the settlement of the commitments to fund deposits securing CRT agreements related to our fourth CRT transaction and firm commitments to purchase CRT securities.

<sup>(2)</sup> Includes results of the Corporate segment and the tax benefit (provision) in addition to the Credit Sensitive Strategies, Interest Rate Sensitive Strategies and Correspondent Production segments.

<sup>(3)</sup> Source: *Inside Mortgage Finance* through September 30, 2018

# Run-Rate Return Potential from PMT's Investment Strategies

	Annualized Return on Equity (ROE)	Equity Allocated (%) <sup>(1)</sup>
<b>Credit sensitive strategies:</b>		
GSE credit risk transfer <sup>(2)</sup>	25.5%	36%
Distressed loan investments	-12.0%	5%
Other credit sensitive strategies	7.0%	1%
<b>Net credit sensitive strategies</b>	<b>20.4%</b>	<b>42%</b>
<b>Interest rate sensitive strategies:</b>		
MSRs (incl. recapture)	11.8%	29%
ESS (incl. recapture)	11.3%	5%
Agency MBS	24.7%	7%
Non-Agency senior MBS (incl. jumbo)	20.4%	0%
Interest rate hedges	-	-
<b>Net interest rate sensitive strategies</b>	<b>11.3%</b>	<b>42%</b>
<b>Correspondent production</b>	<b>9.2%</b>	<b>7%</b>
Cash, short term investments, and other	0.4%	10%
Management fees & corporate expenses <sup>(3)</sup>	-3.1%	0%
<b>Net Corporate<sup>(3)</sup></b>	<b>-3.6%</b>	
Provision for income tax expense <sup>(3)</sup>	-0.6%	0%
<b>Net income</b>	<b>10.2%</b>	<b>100%</b>
<b>Dividends on preferred stock</b>	<b>8.3%</b>	<b>18%</b>
<b>Net income attributable to common shareholders</b>	<b>10.6%</b>	<b>82%</b>
<b>Diluted earnings per common share</b>	<b>\$ 0.51</b>	

**Note:** This slide presents estimates for illustrative purposes only, using PMT's base case assumptions (e.g., for credit performance, prepayment speeds, financing economics) and does not contemplate significant changes or shocks to current market conditions. Actual results may differ materially. Please refer to slide 2 for important disclosures regarding forward-looking statements.

- New investments in CRT and MSRs are accretive to and drive PMT's overall return on equity potential
  - CRT and MSR growth driven by PMT's correspondent production
  - Growth in MBS to hedge the interest rate sensitivity of a growing MSR asset
- Correspondent production return potential reflects the continuation of a highly competitive market environment
- Reduced impact of distressed loan portfolio due to significant sales in 2018

<sup>(1)</sup> Management's internal allocation of equity. Equity allocated to MSR, ESS and distressed loan investments reflects an allocation of exchangeable senior notes and associated expenses

<sup>(2)</sup> Projected CRT income includes fair value recognition upon loan delivery under CRT agreements

<sup>(3)</sup> ROE calculated as a percentage of total equity

# Mortgage Investment Activities

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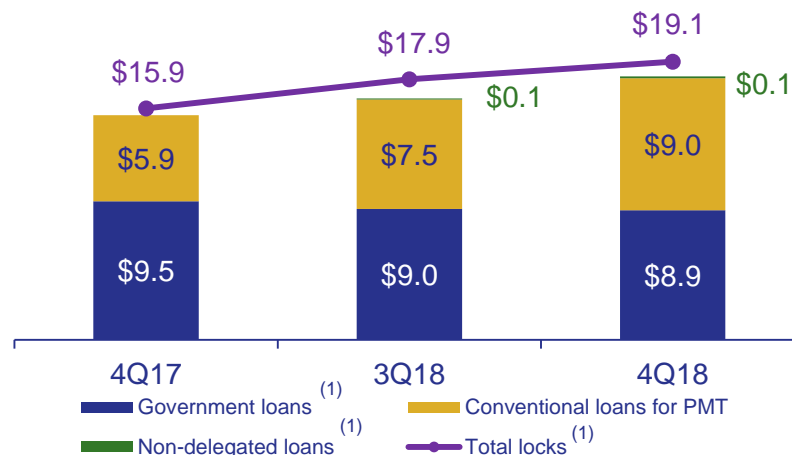


# Correspondent Production Highlights

- Correspondent acquisitions from nonaffiliates by PMT in 4Q18 totaled \$18.1 billion, up 9% Q/Q and 17% Y/Y
  - 21% increase in conventional conforming acquisitions from 3Q18 and 54% Y/Y; 1% decrease in government acquisitions from 3Q18 and 7% Y/Y
  - Purchase-money loans comprised 88% of total 4Q18 acquisition volume, up from 87% in 3Q18
- Seller relationships growth driven by addition of non-delegated and community bank clients
- During 4Q18, PMT also acquired \$879 million in UPB of conventional conforming loans originated by PFSI
- Increased conventional loan production drives additional investments in CRT and MSR
- January correspondent acquisitions totaled \$5.2 billion; locks totaled \$5.2 billion
- Have benefitted from incentives under a master repurchase agreement which are expected to cease starting in 2Q19; impact unclear but we expect partial offset from improvement in pricing margins
- Launched an innovative prime Non-QM loan product in January, offering a technology-based solution to streamline the underwriting process
- Plans to acquire HELOCs originated by PFSI

## Correspondent Production Volume and Mix

(UPB in billions)



Key Financial Metrics		
	3Q18	4Q18
Pretax income as a percentage of interest rate lock commitments <sup>(2)</sup>	0.07%	0.00%
Fulfillment Fee <sup>(3)</sup>	0.35%	0.32%

Selected Operational Metrics		
	3Q18	4Q18
Correspondent Seller Relationships	655	710
Purchase money loans, as a % of total acquisitions	87%	88%

<sup>(1)</sup> For Government and non-delegated loans, PMT earns a sourcing fee and interest income for its holding period and does not pay a fulfillment fee

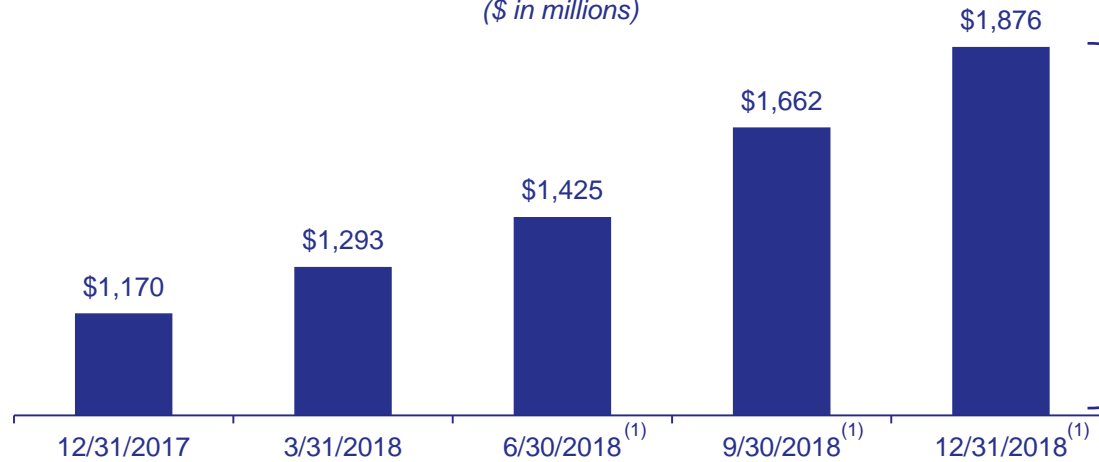
<sup>(2)</sup> Conventional conforming and jumbo interest rate lock commitments

<sup>(3)</sup> Based on funded loans subject to fulfillment fees. The fulfillment fee rate in 4Q18 reflects discretionary reductions made by PFSI to facilitate successful loan acquisitions.

# GSE CRT Investments Growing and Credit Performance Remains Strong

## CRT Investments

(\$ in millions)



- Carrying value of existing CRT agreements: \$1,270
- Firm commitments to purchase REMIC CRT securities: \$605

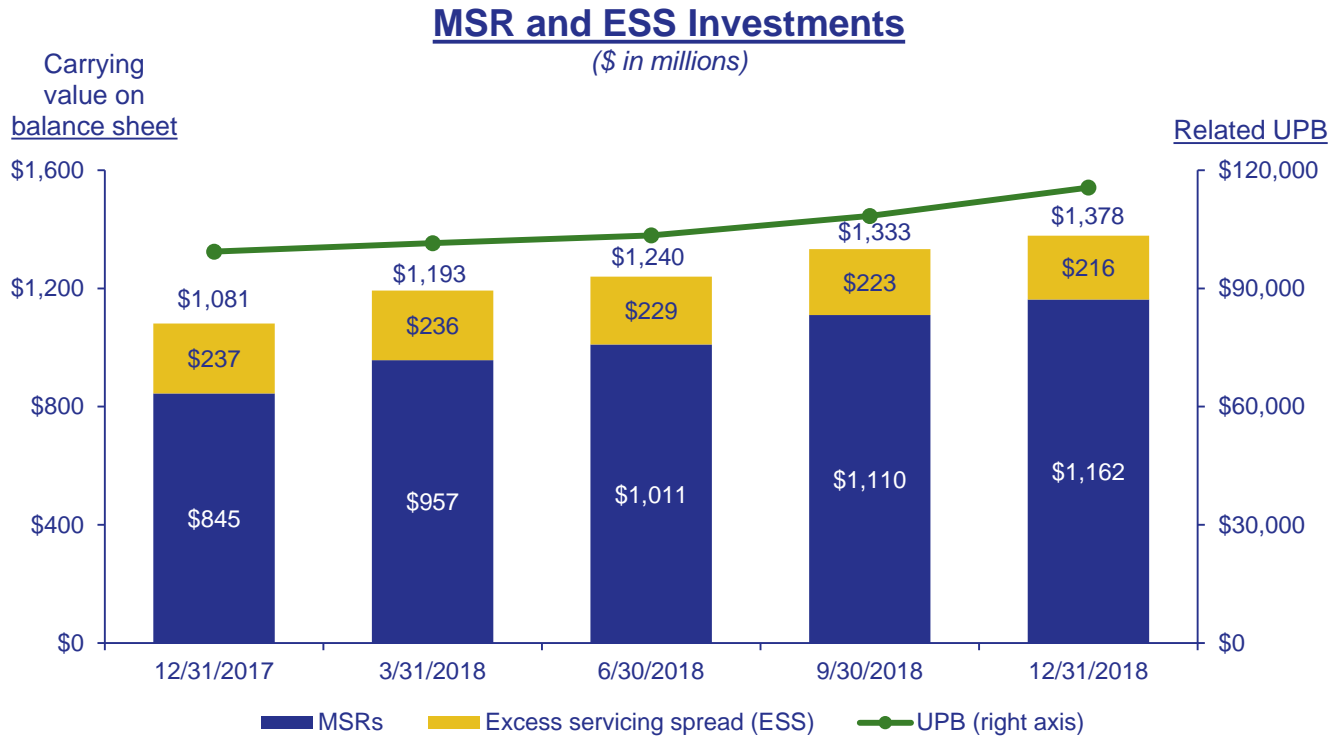
% of conventional production delivered into CRT				
4Q17	1Q18	2Q18	3Q18	4Q18
73%	65%	64%	81%	81%

- Loans eligible for CRT investments totaled \$8.1 billion during 4Q18, resulting in a firm commitment to purchase \$310 million of CRT securities from Fannie Mae under a new REMIC structure
  - Total firm commitments were \$605 million at December 31, 2018
- Outstanding UPB of mortgage loans subject to CRT agreements totaled \$46.3 billion at December 31, 2018
  - Settled our fourth CRT transaction with Fannie Mae during the quarter, which represents \$21.5 billion in UPB
- Delinquency levels decreased in the fourth quarter while incurred losses increased modestly from normal seasoning of loans
  - Losses recognized during the quarter were \$0.7 million, bringing lifetime losses to \$3.6 million; reflects portfolio seasoning and in line with expectations

Note: See slides 14, 15 and 25 - 28 for financial performance and additional details regarding CRT investments

<sup>(1)</sup> Presented on a pro forma basis that reflects the settlement of the commitments to fund deposits securing CRT agreements related to our fourth CRT investment, and for December 31, 2018, firm commitments to purchase CRT securities.

# MSR Investments Continued to Grow

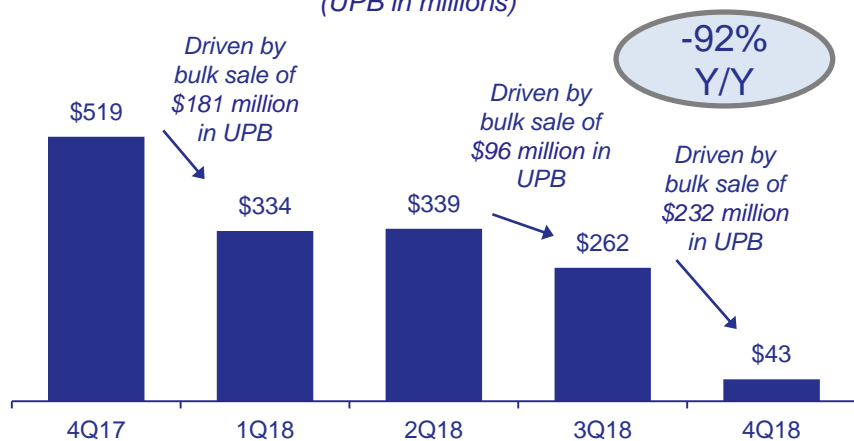


- MSR investments increased to \$1.2 billion driven by strong production activity, partially offset by fair value losses resulting from lower mortgage rates
- ESS investments relating to bulk, mini-bulk and flow MSR acquisitions by PFSI between 2013 and 2015 decreased modestly to \$216 million, driven by repayments and fair value declines
  - UPB associated with legacy ESS investments decreased to \$23.2 billion from \$24.1 billion at September 30, 2018, due to expected runoff
- PMT's MSR portfolio increased to \$92.4 billion in UPB, up from \$84.4 billion at September 30, 2018

# Distressed Loan Portfolio Is Declining Through Liquidation and Sales

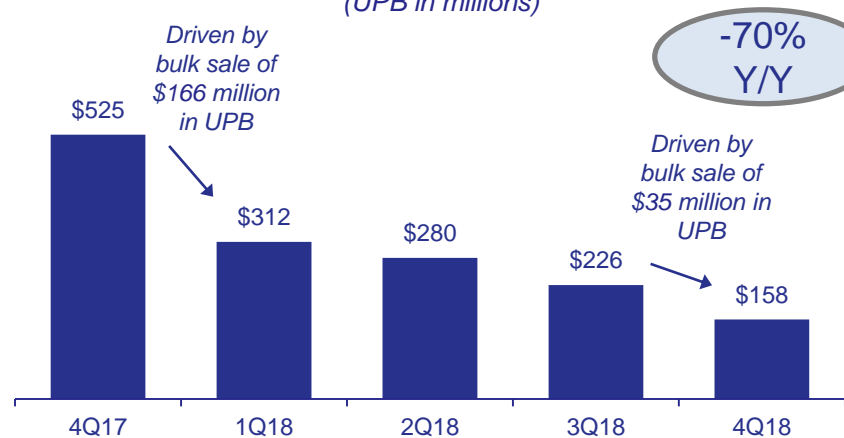
## Performing Loans

(UPB in millions)



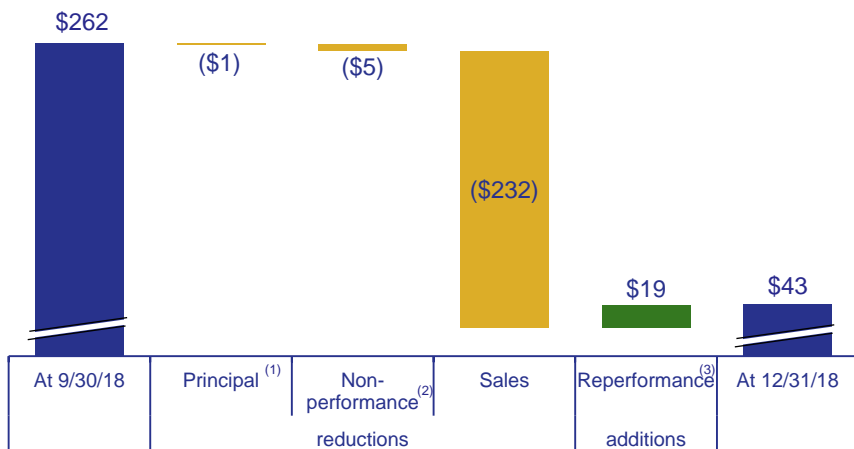
## Nonperforming Loans

(UPB in millions)



## Performing Loan Portfolio Activity

(UPB in millions)



- Completed \$267 million in UPB of previously announced distressed loan sales

<sup>(1)</sup> Includes principal payments, payoffs, and write downs

<sup>(2)</sup> Primarily through recidivism of previously performing loans

<sup>(3)</sup> Primarily through loan modifications

# Financial Results

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# Fourth Quarter Income and Return Contributions by Strategy

(\$ in millions)	Total Income Contribution <sup>(1)</sup>	Market-Driven Value Changes	Income Excluding Market-Driven Value Changes <sup>(1)</sup>	WA Equity Allocated <sup>(2)</sup>	Annualized Return on Equity (ROE) <sup>(1)</sup>
<b>Credit sensitive strategies:</b>					
GSE credit risk transfer <sup>(3)</sup>	\$ 21.8	\$ (5.7)	\$ 27.6	\$ 446	19.6%
Distressed loan investments <sup>(2)</sup>	(4.1)	(1.2)	(2.9)	184	-8.9%
Other credit sensitive strategies	0.2	(0.0)	0.2	11	6.1%
<b>Net credit sensitive strategies</b>	<b>\$ 17.9</b>	<b>\$ (6.9)</b>	<b>\$ 24.9</b>	<b>\$ 641</b>	<b>11.2%</b>
<b>Interest rate sensitive strategies:</b>					
MSRs (incl. recapture) <sup>(2)</sup>	\$ (30.2)	\$ (40.9)	\$ 10.8		
ESS (incl. recapture) <sup>(2)</sup>	1.9	(0.5)	2.4		
Agency MBS	44.4	36.9	7.5		
Non-Agency senior MBS (incl. jumbo)	0.4	0.2	0.2		
Interest rate hedges	3.6	3.6			
<b>Net interest rate sensitive strategies</b>	<b>\$ 20.1</b>	<b>\$ (0.8)</b>	<b>\$ 20.9</b>	<b>\$ 793</b>	<b>10.2%</b>
<b>Correspondent production</b>	<b>\$ (0.6)</b>		<b>\$ (0.6)</b>	<b>\$ 94</b>	<b>-2.7%</b>
Cash, short term investments, and other	\$ 0.4		\$ 0.4	\$ 45	3.7%
Management fees & corporate expenses	(11.7)	n/a	(11.7)		
<b>Corporate</b>	<b>\$ (11.2)</b>	<b>n/a</b>	<b>\$ (11.2)</b>	<b>\$ 45</b>	<b>-100.0%</b>
Benefit (provision) for income tax expense	\$ 15.4	n/a	\$ 15.4		
<b>Net income</b>	<b>\$ 41.6</b>	<b>\$ (6.5)</b>	<b>\$ 48.1</b>	<b>\$ 1,572</b>	<b>10.6%</b>
<b>Dividends on preferred stock</b>	<b>\$ 6.2</b>			<b>\$ 300</b>	<b>8.3%</b>
<b>Net income attributable to common shareholders</b>	<b>\$ 35.4</b>			<b>\$ 1,273</b>	<b>11.1%</b>
<b>Diluted earnings per common share</b>	<b>\$ 0.55</b>				

**Note: Amounts may not sum exactly due to rounding**

(1) Income contribution and the annualized return on equity calculated net of any direct expenses associated with investments (e.g., loan fulfillment fees and loan servicing fees), but before tax expenses. Some of the income associated with the investment strategies may be subject to taxation.

(2) Equity allocated represents management's internal allocation. MSR, ESS and distressed loan investments reflect an allocation of exchangeable senior notes and associated expenses.

(3) Market-driven value changes include fair value recognition upon loan delivery under firm commitment to purchase CRT securities and valuation changes.

# Performance of the GSE Credit Risk Transfer Investments in 4Q18

(\$ in millions)

	Income Contribution	Comments
<b>Market-driven value changes:</b>		
Valuation-related changes included in Net gain (loss) on investment	\$ (19.6)	<ul style="list-style-type: none"> <li>• Reflects effects of credit spread widening on fair value of existing CRT investments and firm commitment</li> <li>• Fair value recognition upon loan delivery under firm commitments to purchase CRT securities</li> </ul>
Net gain on mortgage loans acquired for sale	13.9	
	<b>\$ (5.7)</b>	
<b>Income excluding market-driven value changes:</b>		
Realized gains and carry included in Net gain (loss) on investment	\$ 30.1	
Losses recognized during period	(0.7)	
Interest income	6.7	• Interest earned on cash deposits securing existing CRT investments
Interest expense	(8.5)	• Financing expense related to existing CRT investments
	<b>\$ 27.6</b>	
<b>Total income contribution</b>	<b>\$ 21.8</b>	

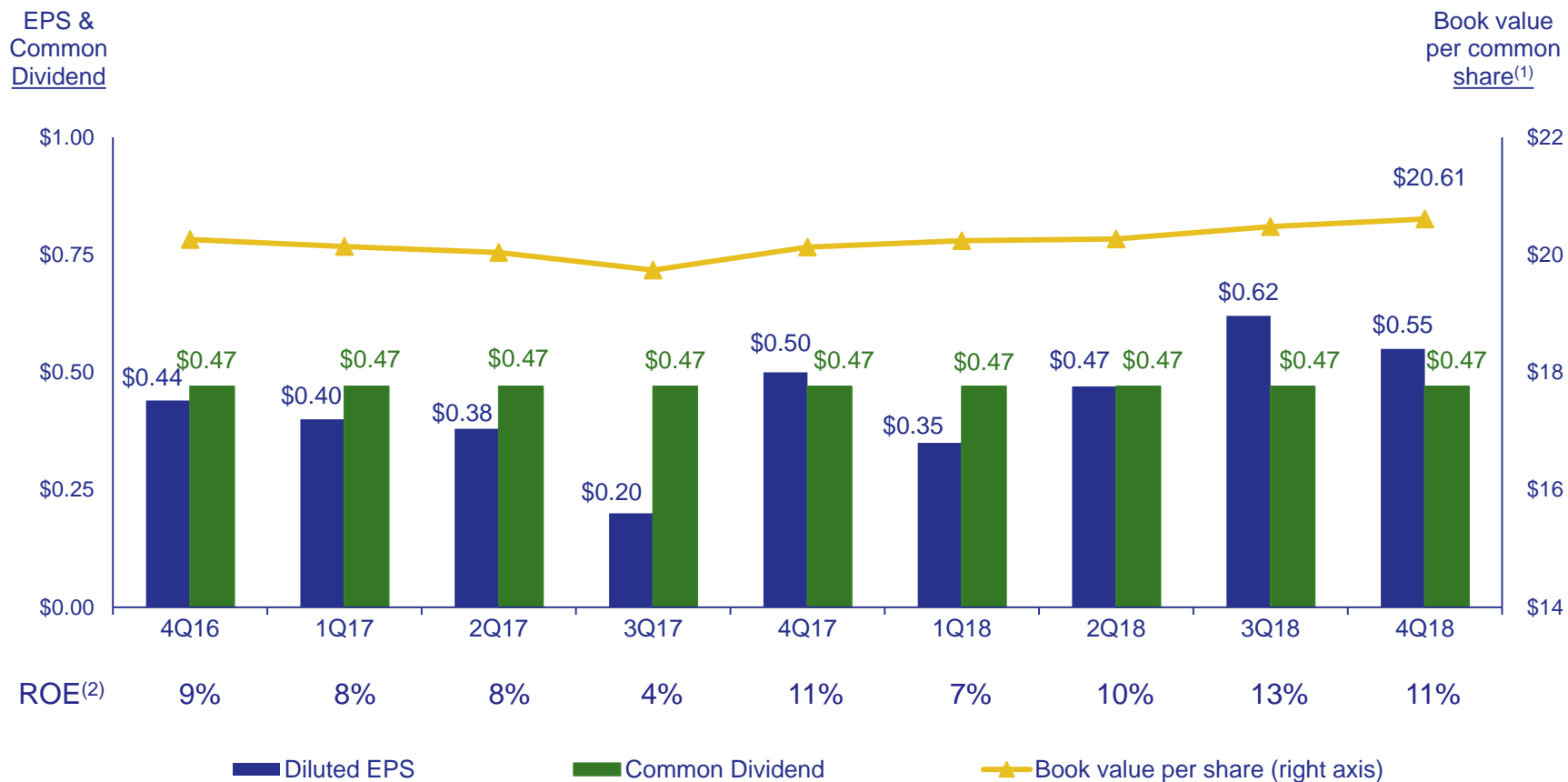
# Appendix

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# Track Record of Stable Dividends and Book Value



- Repurchased 14.7 million common shares at a cost of \$216 million from 3Q15 through 1Q18

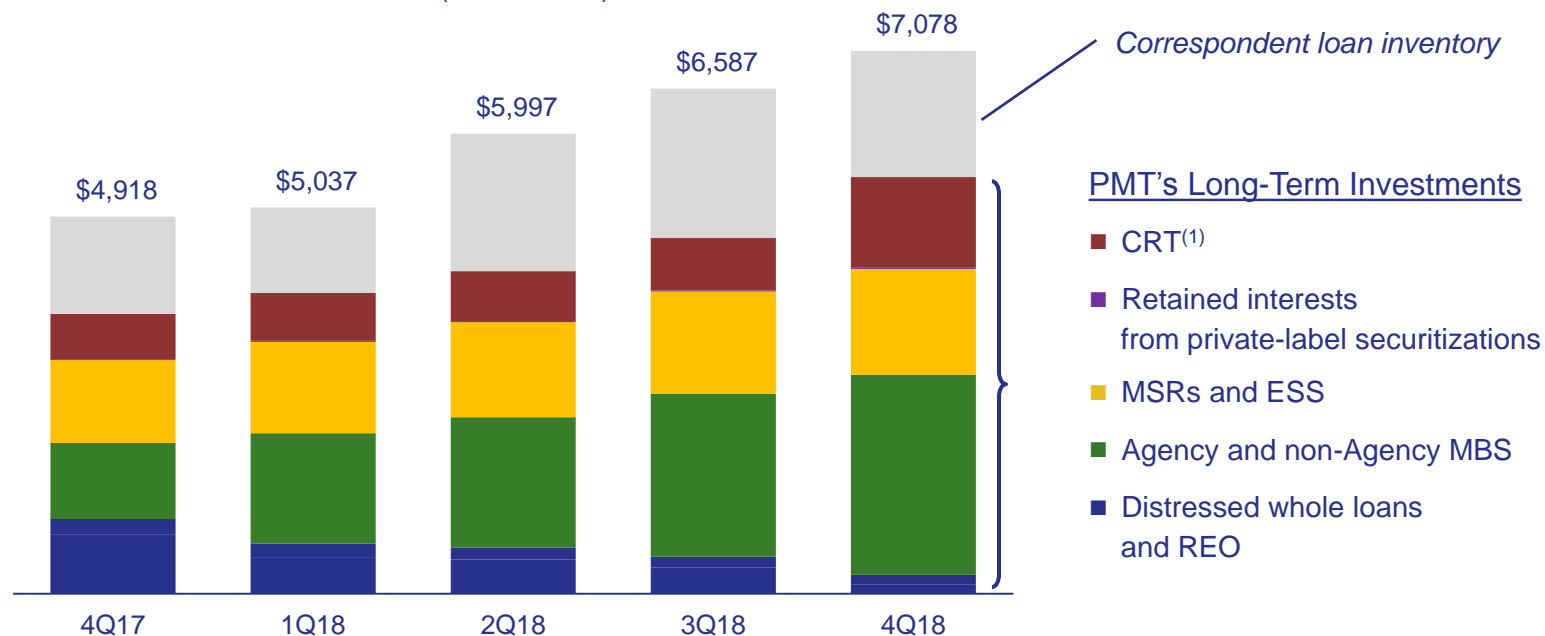
(1) At period end

(2) Return on average common equity is calculated based on annualized quarterly net income attributable to common shareholders as a percentage of monthly average common equity during the period

# PMT's Mortgage Assets and Leverage Ratio Over Time

## Mortgage Assets

(\$ in millions)



### PMT's Long-Term Investments

- CRT<sup>(1)</sup>
- Retained interests from private-label securitizations
- MSR and ESS
- Agency and non-Agency MBS
- Distressed whole loans and REO

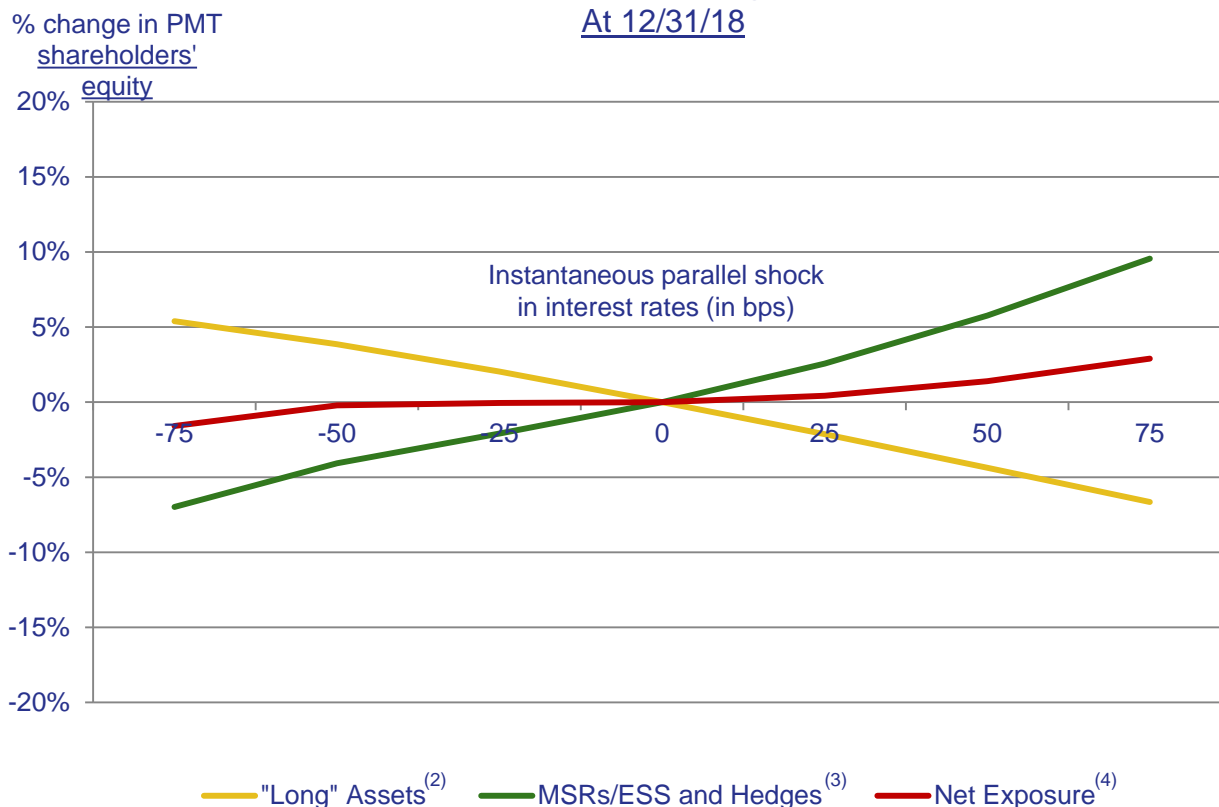
Leverage ratio <sup>(2)</sup>	4Q17	1Q18	2Q18	3Q18	4Q18
	2.5x	2.7x	3.2x	3.5x	3.9x

<sup>(1)</sup> The fair value of CRT investments is reflected on the balance sheet as restricted cash and derivative assets. Presented on a pro forma basis that reflects the settlement of the commitments to fund deposits securing CRT agreements related to our fourth CRT investment and for December 31, 2018, firm commitments to purchase CRT securities

<sup>(2)</sup> All borrowings divided by shareholders' equity at period end

# Management of PMT's Interest Rate Risk<sup>(1)</sup>

## Estimated Sensitivity to Changes in Interest Rates



- PMT's interest rate risk exposure is managed on a "global" basis
  - Disciplined hedging
  - Multiple mortgage-related investment strategies with complementary interest rate sensitivities
  - Utilization of financial hedge instruments
  - Also considers recapture benefit on MSRs and ESS and revenue opportunities from correspondent production

<sup>(1)</sup> Analysis does not include PMT assets for which interest rates are not a key driver of values, i.e., distressed mortgage loans and REO. The sensitivity analyses on the slide and the associated commentary are limited in that they are estimates as of December 31, 2018; only reflect movements in interest rates and do not contemplate other variables; do not incorporate changes in the variables in relation to other variables; are subject to the accuracy of various models and assumptions used; and do not incorporate other factors that would affect the Company's overall financial performance in such scenarios, including operational adjustments made by management to account for changing circumstances. For these reasons, the preceding estimates should not be viewed as earnings forecasts.

<sup>(2)</sup> Includes loans acquired for sale and IRLCs, net of associated hedges, Agency and Non-Agency MBS assets

<sup>(3)</sup> Includes MSRs, ESS, and hedges which include put and call options on MBS, Eurodollar futures, Treasury futures, and Exchange-traded swaps

<sup>(4)</sup> Net exposure represents the net position of the "Long" Assets and the MSRs/ESS and Hedges

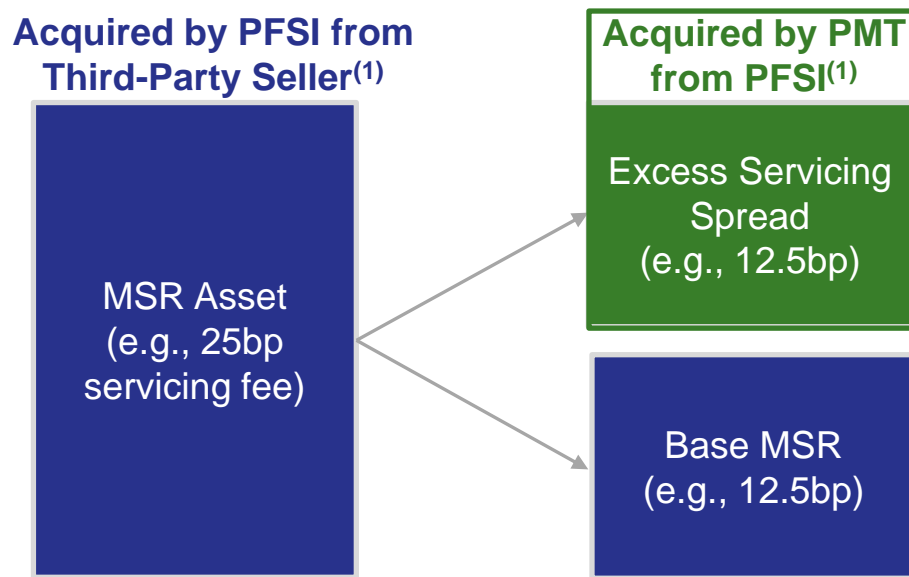
# MSRs and ESS Asset Valuation

(\$ in millions)	Mortgage Servicing Rights	Excess Servicing Spread <sup>(1)</sup>
At 12/31/18		
Pool UPB	\$92,410	\$23,196
Pool weighted average coupon	4.23%	4.18%
Weighted-average pool prepayment speed assumption (CPR)	9.8%	9.7%
Weighted average servicing fee/spread	0.25%	0.19%
Fair value	\$1,162	\$216
As multiple of servicing fee	4.94	4.98

<sup>(1)</sup> Pool UPB, weighted average coupon and expected prepayment speed represent the characteristics of the underlying MSR portfolio owned by PennyMac Financial. Weighted average servicing spread, fair value and valuation multiple relate to the ESS asset owned by PMT. The fair value assessment of ESS gives consideration to expected servicing fee collections on non-MSR collateral that has been bought out of the underlying MSR pools due to ongoing servicer activity. The balance of the non-MSR collateral is reflected in the unpaid principal balance above in the amount of \$382 million.

# PMT's Excess Servicing Spread Investments in Partnership with PFSI

- PMT has co-invested in Agency MSR assets acquired from third-party sellers by PFSI; presently only related to Ginnie Mae MSR assets
- PMT acquires the right to receive the excess servicing spread cash flows over the life of the underlying loans
- PFSI owns the MSR assets and services the loans



*Example transaction: actual transaction details may vary materially*

## Excess Servicing Spread<sup>(2)</sup>

- Interest income from a portion of the contractual servicing fee
  - Realized yield dependent on prepayment speeds and recapture

## Base MSR

- Income from a portion of the contractual servicing fee
- Also entitled to ancillary income
- Bears expenses of performing loan servicing activities
- Required to advance certain payments largely for delinquent loans

<sup>(1)</sup> The contractual servicer and MSR owner is PennyMac Loan Services, LLC, an wholly-owned subsidiary of PFSI

<sup>(2)</sup> Subject and subordinate to Agency rights (under the related servicer guide); does not change the contractual servicing fee paid by the Agency to the servicer.

# Performance of the Distressed Mortgage Loan Investments

## Net Gains/(Losses) on Mortgage Loans

<i>Unaudited</i> (\$ in thousands)	Quarter ended	
	September 30, 2018	December 31, 2018
<b>Valuation Changes:</b>		
Performing loans	\$ 885	\$ 7,774
Nonperforming loans	(2,026)	(4,031)
	<b>(1,141)</b>	<b>3,743</b>
Payoffs	107	(226)
Sales	(2,017)	(1,012)
	<b>\$ (3,051)</b>	<b>\$ 2,505</b>

## Cash Proceeds and Gain on Liquidation

<i>Unaudited</i> (\$ in thousands)	Quarter ended December 31, 2018		
	Proceeds	Accumulated gains (losses) <sup>(1)</sup>	Loss on liquidation <sup>(2)</sup>
Mortgage loans	\$ 4,209	\$ 15	\$ (226)
REO	14,550	(3,441)	(204)
Subtotal	18,759	(3,426)	(430)
Distressed loan sales	214,785	29,404	(1,012)
	<b>\$ 233,544</b>	<b>\$ 25,978</b>	<b>\$ (1,442)</b>

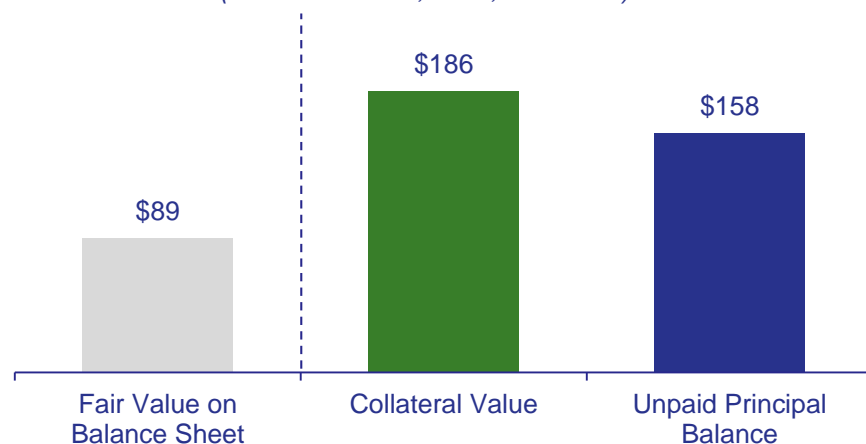
<sup>(1)</sup> Represents accumulated valuation gains and losses recognized during the period the Company held the respective asset; including valuation adjustments made upon entering into a contract of sale but excludes the gain or loss recorded upon sale or repayment of the respective asset

<sup>(2)</sup> Represents the gain or loss recognized as of the date of sale or repayment of the respective asset

# Carrying Values for PMT's Distressed Whole Loans

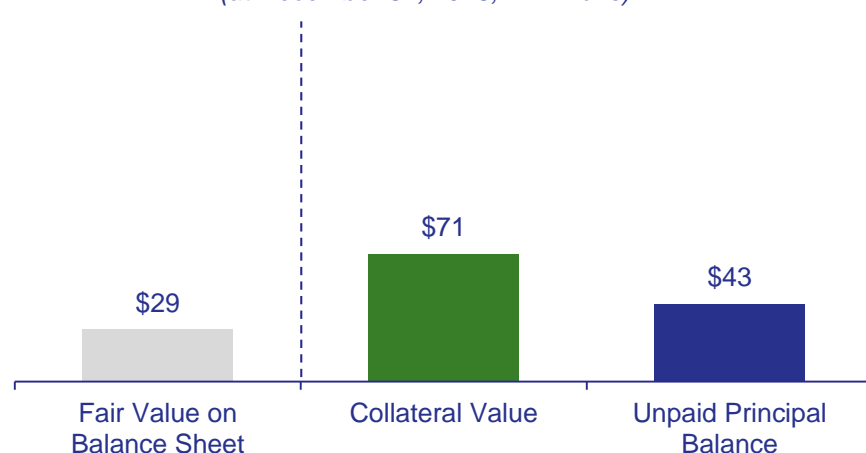
## Nonperforming Loans

(at December 31, 2018, in millions)



## Performing Loans

(at December 31, 2018, in millions)

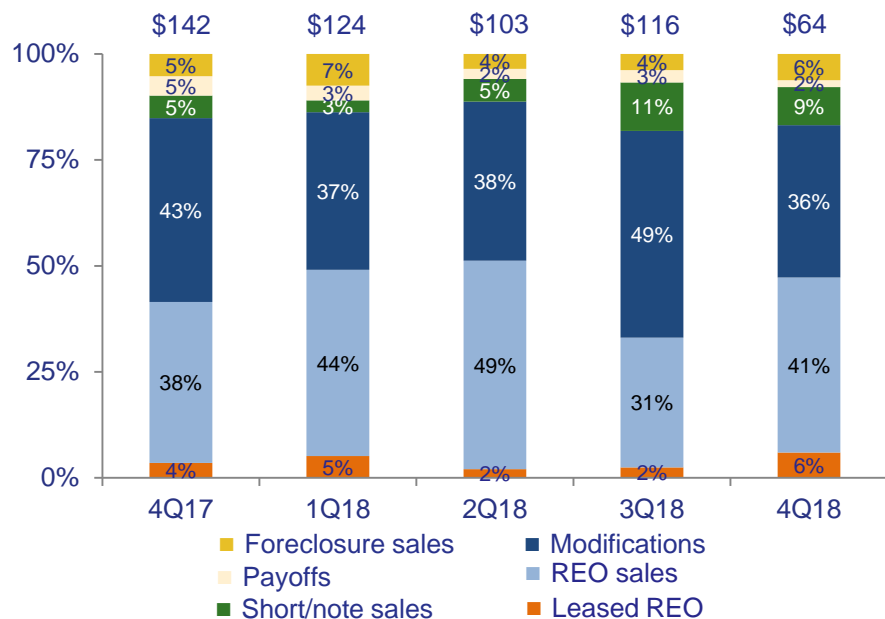


- Nonperforming loans are carried on average at a 52% discount to current property value – fair value considers costs expected over the liquidation timeline, expected property appreciation, reperformance probability and a market return on the investment
- PMT advances funds for items such as property taxes and property preservation to protect its investment in the underlying property; these advances may be recovered from the proceeds when the loan is liquidated before loan balances are repaid or from borrower reperformance either through modification of the loan or reinstatement of the loan to current status
- Performing loans provide ongoing cash interest income and, as they season, the opportunity to realize gains through payoffs, refinances or loan sales

# 4Q18 Distressed Loan Portfolio Resolution Activity<sup>(1)</sup>

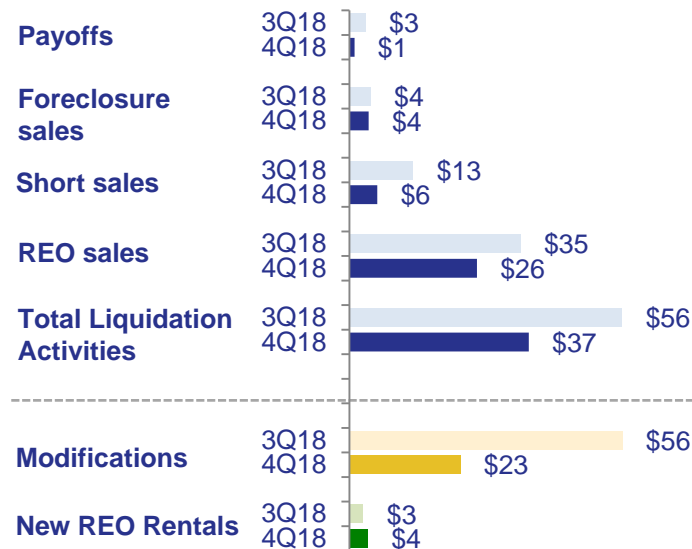
## Resolution Activity Over Time

(\$UPB in millions) (% by Activity Type)



## Resolution Activity in the Quarter

(\$UPB in millions)



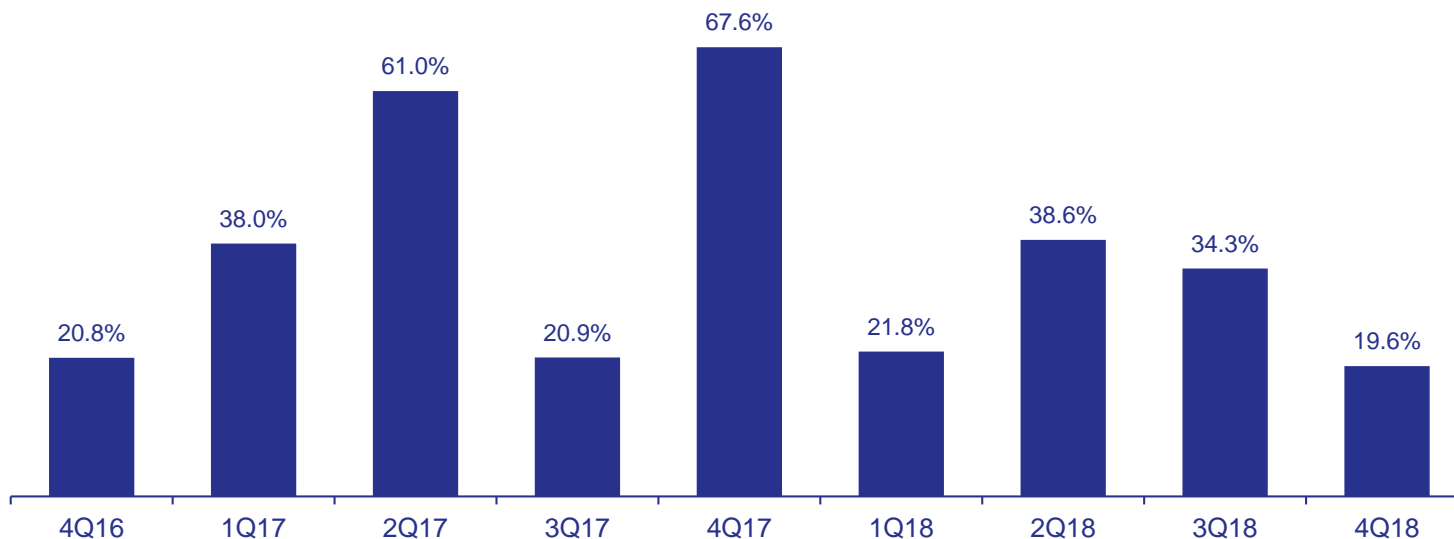
- Quarterly resolution activity as a percentage of nonperforming loans and real estate acquired upon settlement of loans (REO) was 20% in 4Q18, down from 30% in 3Q18 and up from 16% in 4Q17
- Modifications were impacted by loan sales and the declining size of the distressed portfolio
- REO sales were 41% of total resolution activity, up from 31% in the third quarter
  - REO inventory decreased to \$86 million at December 31, 2018 from \$96 million at September 30, 2018
- New REO rentals were \$4 million versus \$3 million in 3Q18

<sup>(1)</sup> Does not include bulk sales



# Return on Equity Contribution of the GSE Credit Risk Transfer Investments

## Annualized Return on Average CRT Equity



Average CRT equity <sup>(1)</sup> (\$ in millions)	4Q16	1Q17	2Q17	3Q17	4Q17	1Q18	2Q18	3Q18	4Q18
	\$166	\$178	\$207	\$271	\$333	\$403	\$452	\$490	\$446

<sup>(1)</sup> Equity allocated represents management's internal allocation across segments and investment strategies

# Credit Risk Transfer – Income Statement and Balance Sheet Treatment

(\$ in thousands)	Since Inception <sup>(1)</sup>	
Total UPB of mortgage loans transferred under CRT agreements.....	\$ 52,262,265	} Total UPB of loans delivered to the CRT Special Purpose Vehicles (SPVs) and sold to Fannie Mae
UPB of mortgage loans transferred under CRT agreements.....	\$ 35,869,965	
UPB of mortgage loans delivered subject to agreements to purchase REMIC CRT securities.....	\$ 16,392,300	
Deposits of cash to secure guarantees.....	\$ 1,203,220	} Cash deposited in the SPV in deposits securing CRT agreements. Represents collateral for the initial credit risk retained
Gains (losses) recognized on assets related to CRT agreements Included in net gain on investments:		
Realized.....	\$ 161,788	} Cash income to PMT from the CRT SPVs
Valuation-related .....	118,341	} Includes fair value recognition upon loan delivery under CRT Agreements and market value changes
	\$ 280,129	
Included in net gain on mortgage loans acquired for sale.....	\$ 30,595	} Recognition upon loan delivery of fair value of firm commitment to purchase REMIC CRT securities
Payments made to settle losses.....	\$ 3,619	} Payments made to Fannie Mae, from pledged cash, for losses on loans underlying the CRT agreements

<sup>(1)</sup> Cumulative for the fourteen quarters ending 12/31/2018

# Credit Risk Transfer – Income Statement and Balance Sheet Treatment (cont'd)

(\$ in thousands)	At December 31, 2018	
UPB of mortgage loans subject to guarantee obligation.....	\$ 46,326,303	} Current outstanding UPB of loans delivered to the CRT SPVs and sold to Fannie Mae or delivered subject to agreements to purchase REMIC CRT securities
Delinquency		
Current to 89 days delinquent.....	\$ 46,250,250	
90 or more days delinquent.....	\$ 46,255	
Foreclosure.....	\$ 5,180	
Bankruptcy.....	\$ 24,618	
Carrying value of CRT agreements		
Deposits securing CRT agreements.....	\$ 1,146,501	} Current cash collateralizing guarantee included in "Deposits securing credit risk transfer agreements"
Derivative assets.....	\$ 123,987	} Derivative represents fair value of expected future cash inflows related to assumption of credit risk net of expected future losses
Firm commitment to purchase CRT security.....	\$ 37,994	} Fair value of firm commitments to purchase REMIC CRT securities based on loans delivered to date
Firm commitments to purchase CRT securities.....	\$ 605,052	} Face amount of firm commitments to purchase REMIC CRT securities related to mortgage loans delivered

# PMT's Investments in GSE Credit Risk Transfer

(UPB in billions)

CRT 2015 -1 (May 2015 - July 2015)		
	At inception	12/31/2018
UPB	\$ 1.3	\$ 0.7
Loan Count	4,108	2,785
% Purchase	67.6%	69.8%
WA FICO <sup>(1)</sup>	742	743
WA LTV <sup>(1)</sup>	80.5%	75.7%
60+ Days Delinquent Loan Count		19
60+ Days Delinquent % o/s UPB		0.727%
180+ Days Delinquent Loan Count		12
Actual Losses (\$k)		\$ 362

CRT 2015 -2 (August 2015 - February 2016)		
	At inception	12/31/2018
UPB	\$ 4.2	\$ 2.7
Loan Count	15,255	10,526
% Purchase	71.4%	73.4%
WA FICO <sup>(1)</sup>	743	744
WA LTV <sup>(1)</sup>	81.2%	77.0%
60+ Days Delinquent Loan Count		79
60+ Days Delinquent % o/s UPB		0.775%
180+ Days Delinquent Loan Count		45
Actual Losses (\$k)		\$ 1,195

CRT 2016 -1 (February 2016 - August 2016)		
	At inception	12/31/2018
UPB	\$ 6.4	\$ 5.1
Loan Count	21,615	17,986
% Purchase	67.4%	70.1%
WA FICO <sup>(1)</sup>	748	749
WA LTV <sup>(1)</sup>	81.2%	77.1%
60+ Days Delinquent Loan Count		86
60+ Days Delinquent % o/s UPB		0.466%
180+ Days Delinquent Loan Count		35
Actual Losses (\$k)		\$ 977

CRT 2016 -2 (August 2016 - May 2018)		
	At inception	12/31/2018
UPB	\$ 24.0	\$ 21.5
Loan Count	86,057	79,976
% Purchase	73.2%	73.9%
WA FICO <sup>(1)</sup>	747	746
WA LTV <sup>(1)</sup>	82.5%	80.2%
60+ Days Delinquent Loan Count		231
60+ Days Delinquent % o/s UPB		0.290%
180+ Days Delinquent Loan Count		38
Actual Losses (\$k)		\$ 1,085

CRT 2018 -1 (June 2018 - Current)		
	At inception	12/31/2018
UPB	\$ 16.4	\$ 16.4
Loan Count	60,260	60,260
% Purchase	81.0%	81.0%
WA FICO <sup>(1)</sup>	746	746
WA LTV <sup>(1)</sup>	82.9%	82.9%
60+ Days Delinquent Loan Count		31
60+ Days Delinquent % o/s UPB		0.050%
180+ Days Delinquent Loan Count		-
Actual Losses (\$k)		\$ -

Total		
	At inception	12/31/2018
UPB	\$ 52.3	\$ 46.3
Loan Count	187,295	171,533
% Purchase	74.9%	73.1%
WA FICO <sup>(1)</sup>	746	746
WA LTV <sup>(1)</sup>	82.7%	80.6%
60+ Days Delinquent Loan Count		446
60+ Days Delinquent % o/s UPB		0.259%
180+ Days Delinquent Loan Count		130
Actual Losses (\$k)		\$ 3,619

<sup>(1)</sup> FICO and LTV metrics at origination

# Correspondent Production Fundings and Locks by Product

(\$ in millions)	4Q17	1Q18	2Q18	3Q18	4Q18
<b>Fundings</b>					
Delegated Conventional	\$ 5,891	\$ 4,226	\$ 5,396	\$ 7,501	\$ 9,050
Delegated Government	9,505	8,830	9,546	8,970	8,885
Delegated Jumbo	-	-	8	9	5
Non-delegated	-	-	-	75	120
<b>Total</b>	<b>\$ 15,396</b>	<b>\$ 13,056</b>	<b>\$ 14,951</b>	<b>\$ 16,554</b>	<b>\$ 18,060</b>
<b>Locks</b>					
Delegated Conventional	\$ 6,293	\$ 4,392	\$ 6,091	\$ 8,535	\$ 9,831
Delegated Government	9,571	9,162	10,082	9,146	8,992
Delegated Jumbo	-	13	59	33	17
Non-delegated	-	-	-	144	227
<b>Total</b>	<b>\$ 15,864</b>	<b>\$ 13,567</b>	<b>\$ 16,232</b>	<b>\$ 17,858</b>	<b>\$ 19,066</b>

Note: Delegated volumes exclude loans purchased from PennyMac Financial. Amounts may not sum exactly due to rounding.