PennyMac Mortgage Investment Trust



Third Quarter 2019 Earnings Report **October 31, 2019**

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.

Third Quarter Highlights

- Net income attributable to common shareholders of $63.8 million; diluted earnings per common share of $0.71
  - Annualized return on average common equity of 14%[(1)]
  - Dividend of $0.47 per common share declared on September 24, 2019 and paid on October 30, 2019
  - Book value per common share increased to $21.14 from $20.79 at June 30, 2019
- Segment pretax results: Credit Sensitive Strategies: $51.9 million; Interest Rate Sensitive Strategies: $(10.1) million; Correspondent Production: $21.8 million; Corporate: $(15.4) million
  - Income tax benefit driven by fair value declines in mortgage servicing rights (MSR) investments held in PMT's taxable subsidiary
- Results reflect:
  - Strong correspondent production results, which offset fair value losses in Interest Rate Sensitive Strategies driven by declining interest rates and market volatility
  - Continued strong performance from government-sponsored enterprise (GSE) credit risk transfer (CRT) investments
- Record correspondent production volumes drove strong growth in CRT and MSR investments
  - Conventional correspondent loan production totaled $18.5 billion in unpaid principal balance (UPB), up 52% from the prior quarter and 118% from 3Q18[(2)]
  - CRT deliveries totaled $14.2 billion in UPB, resulting in a firm commitment to purchase $523 million of CRT securities
  - New MSR investments totaled $250 million

[(1)] Annualized 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.
[(2)] Consists of delegated and non-delegated conventional conforming and non-Agency loans and includes conventional loans acquired from PennyMac Financial Services, Inc. (NYSE: PFSI).

Third Quarter Highlights (continued)

- Completed the sale of distressed mortgage loans totaling $94 million in UPB
  - Remaining distressed loans after the sale totaled $33 million in UPB
- Strong share price performance and increased investment opportunities drove successful capital raises totaling $253 million in net proceeds
  - Raised $198 million from an issuance of 9.2 million common shares in an underwritten equity offering
  - Raised $55 million through the “At-The-Market” (ATM) equity offering program, issuing 2.5 million shares

Notable activity after quarter end:

- Issued $375 million of 3-year term notes related to PMT’s fifth CRT transaction

Current Market Environment

- The Federal Reserve again cut the Fed Funds rate by 25 basis points, reflecting uncertainty due to international trade tensions and concerns about the growth rate of the global economy
- The average 30-year fixed rate mortgage in the third quarter was 3.66% and remains at comparable levels in October
- Continued decline has led to increased origination volumes and increases to 2019 and 2020 origination forecasts
  - Average monthly MBA Refinance Index in 3Q19 was 42% higher than in 2Q19
- Home price appreciation has moderated to levels more consistent with wage growth
  - Tight supply continues to support home prices
- Credit markets remain strong, as evidenced by spreads on GSE CRT securities, which tightened relative to 2Q19
- Mortgage delinquency rates remain near all-time lows
  - The total U.S. loan delinquency rate was 3.53% as of September 30, 2019, down from 3.73% at June 30, 2019 and 3.97% at September 30, 2018[3]

Average 30-year fixed rate mortgage[1]



Macroeconomic Forecasts[2]

	2016	2017	2018	2019E	2020E	2021E
New home sales ('000s)	561	616	620	675	687	743
Existing home sales ('000s)	5,440	5,547	5,339	5,376	5,474	5,699
Total originations ($ in billions)	$2,065	$1,810	$1,630	$2,064	$1,856	$1,740
Purchase originations ($ in billions)	$1,037	$1,144	$1,141	$1,239	$1,266	$1,325
U.S. Home Price Appreciation (Y/Y % Change)	5.8%	6.9%	6.3%	4.3%	3.3%	2.2%

Green: denotes improvement since previous earnings report
Red: denotes drop since previous earnings report

(1) Freddie Mac Primary Mortgage Market Survey. 3.75% as of 10/24/19
(2) 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.
(3) Black Knight Financial Services. Includes loans that are 30 days or more past due but not in foreclosure

Potential Changes in Housing Finance and Implication for PMT

- Treasury recently released its proposed plan for housing finance reform
  - Seeks to end conservatorship of the GSEs and minimize taxpayer risk
  - Seeks to facilitate competition in the housing finance market
  - Outlines legislative and administrative actions required to enact reforms
- CFPB earlier announced a proposed rule to eliminate the "QM patch" that classifies all GSE loans as Qualified Mortgages (QM)



- Any significant reduction in the roles of Fannie Mae and Freddie Mac in the U.S. mortgage market would take time
- Even with changes in the structure of the GSEs, PMT expects to continue to provide meaningful private capital to invest in Agency residential mortgage credit
- As markets evolve, PMT is well-positioned to expand its investments to prime non-Agency loan and securitization interests
  - Prime jumbo loans, building on previous securitization activities
  - Prime non-QM and HELOC(1) products

(1) Home Equity Line of Credit

PMT's Investment Activity by Strategy During the Quarter

(in millions)	Long-term mortgage asset	Asset carrying value at 6/30/19	Net new investments[5]	Fair value changes[6]	Asset carrying value at 9/30/19
Credit Sensitive Strategies	**Credit Risk Transfer[1]**	$ 2,561	**$ 507**	$ 43	$ 3,111
	Distressed Loans & REO[2]	$ 172	**$ (76)**	$ (2)	$ 95
Interest Rate Sensitive Strategies	**MSR & ESS[3]**	$ 1,321	**$ 187**	$ (162)	$ 1,346
	Agency MBS[4]	$ 2,600	**$ (287)**	$ 11	$ 2,325
	Total	$ 6,654	**$ 331**	$ (109)	$ 6,876

[1] The fair value of CRT investments is reflected on the balance sheet as deposits securing CRT arrangements, firm commitment to purchase CRT securities, and derivative and credit risk transfer strip assets, net of the interest-only security payable. Presented on a pro forma basis that reflects the face amount of firm commitment to purchase CRT securities.
[2] REO = Real estate acquired in settlement of loans. Net new investments reflect sales in performing and non-performing loans as a part of PMT's strategy to exit the investments.
[3] ESS = Excess servicing spread
[4] MBS = Mortgage-backed securities. Net new investments represents rebalancing of the MBS portfolio and runoff.
[5] Net new investments represents new investments net of sales, liquidations, and runoff
[6] Changes in fair value of CRT investments included the accrual of carry on firm commitments reflected in income as well as changes in fair value upon settlement of a CRT transaction

Run-Rate Return Potential from PMT's Investment Strategies

($ in millions, except EPS)	Annualized Return on Equity (ROE)	WA Equity Allocated (%)[1]
Credit sensitive strategies:		
GSE credit risk transfer[2]	19.9%	42%
Distressed loan investments	-1.1%	2%
Other credit sensitive strategies	15.5%	0%
Net credit sensitive strategies	**18.9%**	**44%**
Interest rate sensitive strategies:		
MSRs (incl. recapture)	13.7%	17%
ESS (incl. recapture)	8.5%	3%
Agency MBS	19.5%	6%
Non-Agency senior MBS (incl. jumbo)	11.9%	0%
Interest rate hedges[3]	-4.5%	0%
Net interest rate sensitive strategies	**9.9%**	**26%**
Correspondent production	**14.4%**	**15%**
Cash, short term investments, and other	0.4%	15%
Management fees & corporate expenses[4]	-2.8%	
Net Corporate[4]	**-2.8%**	
Provision for income tax expense	-0.2%	
Net income	**10.1%**	**100%**
Dividends on preferred stock	**8.3%**	**12%**
Net income attributable to common shareholders	**10.4%**	**88%**
Diluted EPS	**$ 0.53**	

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 potential
  - Driven by PMT's strong correspondent production volumes
- CRT return potential reflects credit spreads that have tightened
- Interest rate sensitive strategies return potential incorporates elevated hedge costs driven by market volatility
- Correspondent production return potential reflects normalization over time from recent elevated results
- Impact of distressed loans and real estate owned substantially diminished given recent sales

(1) 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
(2) Projected CRT income includes fair value recognition upon loan delivery under CRT agreements
(3) ROE calculated as a percentage of segment equity
(4) ROE calculated as a percentage of total equity

Mortgage Investment Activities



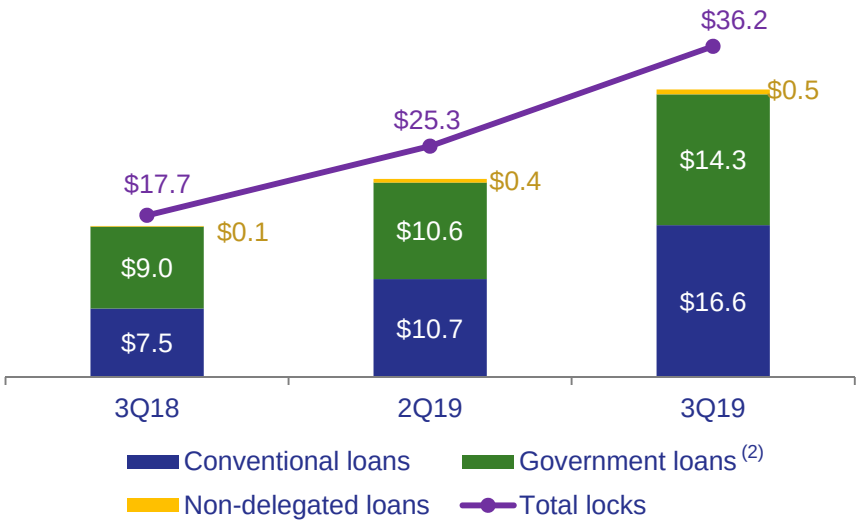
Correspondent Production Highlights

- Correspondent acquisitions of nonaffiliated originations in 3Q19 totaled $31.5 billion in UPB, up 45% Q/Q and 90% Y/Y[1]
  - 54% conventional loans; 46% government loans
  - Conventional conforming acquisitions of $16.6 billion in UPB, up 55% Q/Q and 122% Y/Y
  - Government acquisitions of $14.3 billion in UPB, up 36% Q/Q and 60% Y/Y
- Acquired $1.4 billion in UPB of conventional loans originated by PFSI, up 28% Q/Q and 60% Y/Y
- Conventional lock volume of $19.5 billion in UPB, up 54% Q/Q and 132% Y/Y[3]
- Largest correspondent aggregator in the U.S. in 3Q19[4]
- Increase in market share driven by our ability to maintain high service levels despite substantially elevated industry volumes
- E-note pilot launched with first correspondent seller; first notes funded and financed with a bank warehouse line of credit and delivered to Fannie Mae
- October correspondent acquisitions estimated to be $14.2 billion in UPB; locks estimated to be $14.2 billion in UPB

[1] Includes delegated and non-delegated acquisitions
[2] For delegated government loans, PMT earns a sourcing fee and interest income for its holding period and does not pay a fulfillment fee
[3] Conventional conforming and non-Agency interest rate lock commitments
[4] Inside Mortgage Finance for 3Q19
[5] Based on funded loans subject to fulfillment fees

Correspondent Production Volume and Mix

(UPB in billions)



Key Financial Metrics	2Q19	3Q19
Pretax income as a percentage of interest rate lock commitments[3]	0.06%	0.06%
Fulfillment fee[5]	0.28%	0.27%

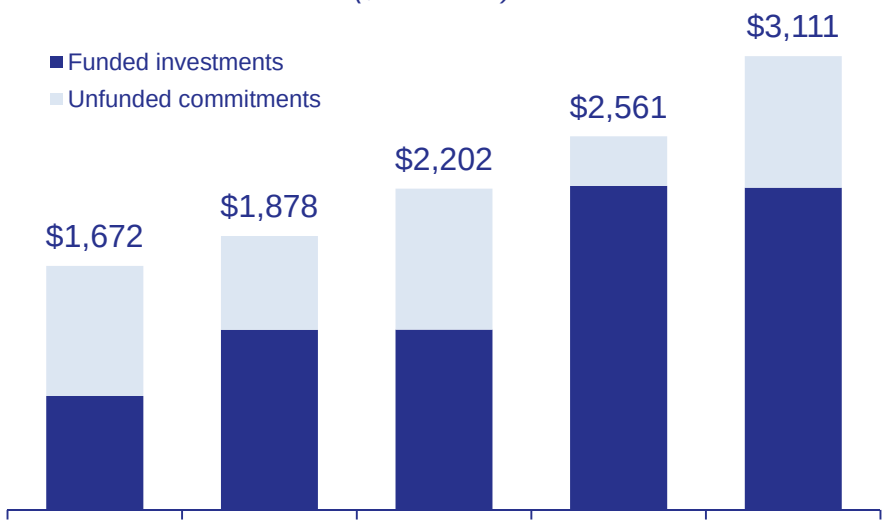
Selected Operational Metrics	2Q19	3Q19
Correspondent seller relationships	752	770
Purchase money loans, as a % of total acquisitions	79%	66%

GSE CRT Investments Continue Growth Trajectory and Strong Performance

- Delivering loans to Fannie Mae under a commitment for our sixth CRT transaction
- Delivered $14.2 billion in UPB of loans during the quarter resulting in a firm commitment to purchase $523 million of CRT securities
- Modest increase in delinquencies reflects expected seasoning of the loans underlying our CRT investments; credit performance remains strong and in line with expectations

CRT Investments[1]

($ in millions)



Selected metrics for quarter ended[2]:	9/30/2018	12/31/2018	3/31/2019	6/30/2019	9/30/2019
Underlying UPB of loans ($ in billions)	$38.7	$46.3	$52.9	$59.6	$69.1
WA FICO	746	746	746	747	748
WA LTV	80.2%	80.6%	82.9%	83.2%	83.4%
60+ Days Delinquent % o/s UPB	0.238%	0.259%	0.267%	0.267%	0.305%
Actual losses ($ in millions)	$0.4	$0.7	$0.9	$0.9	$1.7
Cumulative lifetime losses ($ in millions)	$2.9	$3.6	$4.5	$5.4	$7.1

Note: See slides 15, 17, and 26 - 28 for financial performance and additional details regarding CRT investments

(1) The fair value of CRT investments is reflected on the balance sheet as deposits securing CRT arrangements, firm commitments to purchase CRT securities and derivative and credit risk transfer strip assets, net of the interest-only security payable. Presented on a pro forma basis that reflects the face amount of firm commitment to purchase CRT securities, and the commitment to fund deposits securing CRT agreements, as applicable, for each period shown.

(2) FICO and LTV metrics at origination for the population of loans remaining as of the date presented

Term Financing in Place for Substantial Majority of CRT Investments

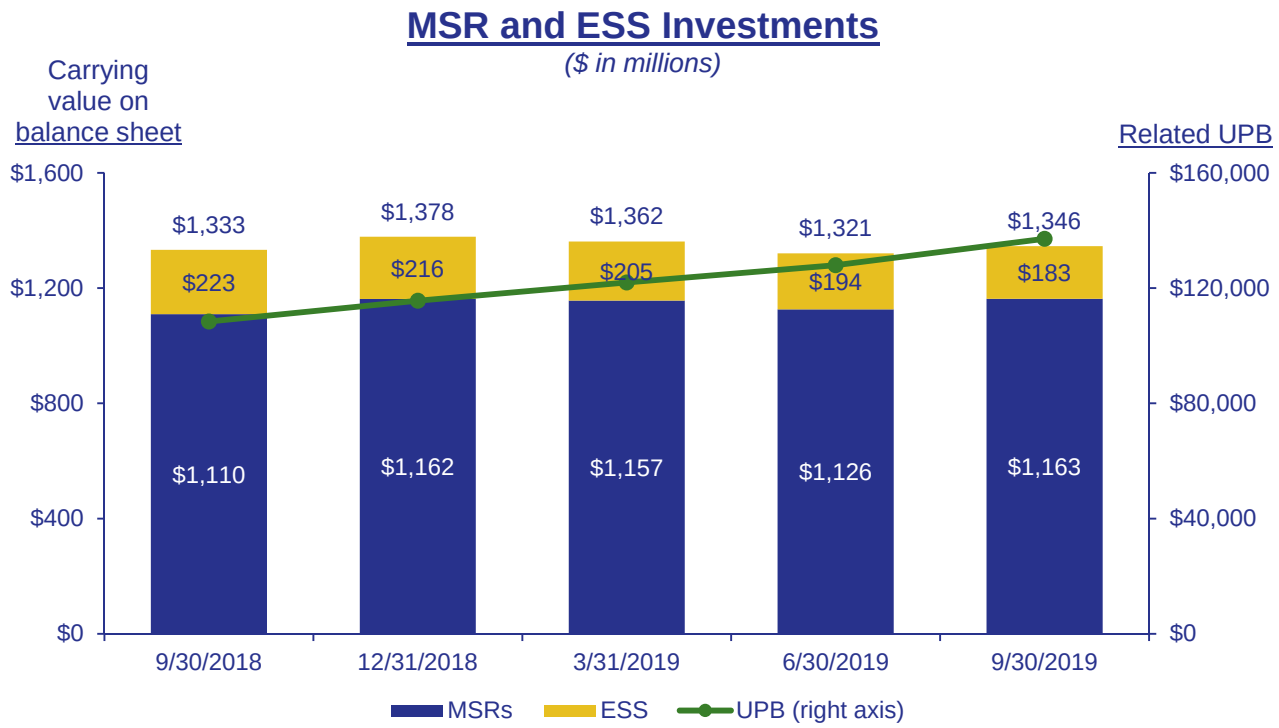
Transaction	CRTs 1-3	CRT 4	CRT 5	CRT 6[1]
Status	Funded	Funded	Funded	In aggregation
UPB[2] ($ in billions)	$7.6	$19.0	$19.9	$22.6
Face Amount[2] ($ in millions)	$354.0	$761.7	$928.6	$847.3
Financing	• $296 million of 3-year term notes	• $638 million of 4-year term notes	• $375 million of 3-year term notes • $384 million of securities repurchase agreements	• Commitment to acquire CRT securities

- Outstanding term financing for PMT's CRT investments grew to over $1.3 billion as of October 31, 2019
  - Term notes reduce margin call risk and associated internal cash reserves

[1] PMT is currently in the aggregation period delivering loans to Fannie Mae under a commitment for a sixth CRT transaction. UPB represents the volume delivered through September 30, 2019.

[2] As of September 30, 2019

Trends in MSR and ESS Investments



- MSR assets increased modestly to $1.2 billion driven by investment growth from record conventional production volumes, partially offset by fair value losses resulting from the decline in mortgage rates during the quarter and expectations for higher prepayments in the future
  - $250 million in new MSR investments from third quarter production volume
  - UPB associated with MSR investments increased to $116.3 billion from $106.2 billion at June 30, 2019
- ESS investments relating to bulk, mini-bulk and flow MSR acquisitions by PFSI between 2013 and 2015 decreased to $183.1 million, driven by repayments of the underlying loans and interest rate-driven fair value losses
  - UPB associated with ESS investments decreased to $20.7 billion from $21.8 billion at June 30, 2019

Financial Results



Third Quarter Income and Return Contributions by Strategy

($ in millions)	Total Income Contribution[1]	Market-Driven Value Changes[2]	Income Excluding Market-Driven Value Changes[1][2]	WA Equity Allocated[3]	Annualized Return on Equity (ROE)[1]
Credit sensitive strategies:					
GSE credit risk transfer	$ 55.2	$ 19.2	$ 36.0	$ 574	38%
Distressed loan investments	(3.6)	-	(3.6)	80	-18%
Other credit sensitive strategies	0.3	0.1	0.3	8	17%
Net credit sensitive strategies	**$ 51.9**	**$ 19.3**	**$ 32.6**	**$ 662**	**31%**
Interest rate sensitive strategies:					
MSRs (incl. recapture)	$ (143.5)	$ (157.9)	$ 14.4	$ 549	-105%
ESS (incl. recapture)	(2.7)	(3.9)	1.2	73	-15%
Agency MBS	17.6	11.3	6.3	129	55%
Non-Agency senior MBS (incl. jumbo)	0.1	0.1	0.0	2	20%
Interest rate hedges	118.4	118.4			63%
Net interest rate sensitive strategies	**$ (10.1)**	**$ (32.1)**	**$ 22.0**	**$ 753**	**-5%**
Correspondent production	**$ 21.8**		**$ 21.8**	**$ 587**	**15%**
Cash, short term investments, and other	$ 0.6		$ 0.6	$ 87	3%
Management fees & corporate expenses	(16.1)		(16.1)		
Corporate	**$ (15.4)**	**n/a**	**$ (15.4)**	**$ 87**	**-3%**
Benefit / (Provision) for income tax expense	$ 21.9	$ 24.8	$ (3.0)		
Net income	**$ 70.0**	**$ 12.0**	**$ 58.0**	**$ 2,089**	**13%**
Dividends on preferred stock	**$ 6.2**			**$ 300**	**8%**
Net income attributable to common shareholders	**$ 63.8**			**$ 1,789**	**14%**
Diluted EPS	**$ 0.71**				

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] Market-driven value changes include fair value recognition upon loan delivery under firm commitment to purchase CRT securities attributable to the credit sensitive strategies segment; see slide 17 for details. Categorization of income as market-driven value changes based on management assessment. Income excluding market-driven value changes does not represent REIT taxable income.

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

Segment Pretax Results

($ in millions)	Total Income Contribution[1]	Market-Driven Value Changes[2]	Income Excluding Market-Driven Value Changes[1][2]
Net credit sensitive strategies	**$ 51.9**	**$ 19.3**	**$ 32.6**
Interest rate sensitive strategies:			
MSRs (incl. recapture)	$ (143.5)	$ (157.9)	$ 14.4
ESS (incl. recapture)	(2.7)	(3.9)	1.2
Agency MBS	17.6	11.3	6.3
Non-Agency senior MBS (incl. jumbo)	0.1	0.1	0.0
Interest rate hedges	118.4	118.4	
Net interest rate sensitive strategies	**$ (10.1)**	**$ (32.1)**	**$ 22.0**
Correspondent production	**$ 21.8**		**$ 21.8**

- PMT seeks to manage interest rate risk exposure on a “global” basis, recognizing interest rate sensitivities across its investment strategies
- In a period of decreasing interest rates, PMT’s MSR and ESS investments typically decrease in fair value, while the Agency MBS investments increase in fair value
- In 3Q19, MSR and ESS fair values decreased by $161.8 million due to the decrease in interest rates, resulting in higher expected prepayment activity in the future
- PMT’s MSR portfolio is concentrated in recent vintage loans (2016 - 2018 originations), highly sensitive to prepayments at the current level of interest rates and, as a result, costly to hedge
- Along with Agency MBS, gains in interest rate hedges substantially offset the MSR and ESS fair value declines
  - $118.4 million in hedge gains, which are net of hedge costs; market volatility has driven higher hedge costs
- Loss in interest rate sensitive strategies segment also offset by significantly higher correspondent production income in 3Q19

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] Market-driven value changes include fair value recognition upon loan delivery under firm commitment to purchase CRT securities attributable to the credit sensitive strategies segment; see slide 17 for details. Categorization of income as market-driven value changes based on management assessment. Income excluding market-driven value changes does not represent REIT taxable income.

Performance of the GSE Credit Risk Transfer Investments in 3Q19

($ in millions)	Income Contribution	Comments
Market-driven value changes:		
Valuation-related changes included in Net gain (loss) on investment	$ 8.7	• Reflects the result of credit spread tightening on CRT investments
Net gain on mortgage loans acquired for sale	10.5	• Fair value recognition upon loan delivery under firm commitment to purchase CRT securities totaled $25.9 million; $15.4 million was attributed to the Correspondent Production segment
	$ 19.2	
Income excluding market-driven value changes:		
Realized gains and carry included in Net gain (loss) on investment	$ 45.6	• Spread income earned on CRT investments
Losses recognized during period	(1.7)	
Interest income	11.2	• Interest income on cash deposits securing CRT investments
Interest expense	(19.2)	• Financing expense related to CRT investments
	$ 36.0	
Total income contribution	**$ 55.2**	

Appendix

PennyMac®
Mortgage Investment Trust

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, RMBS[(1)] and distressed whole loans
- Securitization interests in HELOC and prime non-QM loans

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

PennyMac® Mortgage Investment Trust

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

Synergistic Partnership with PFSI

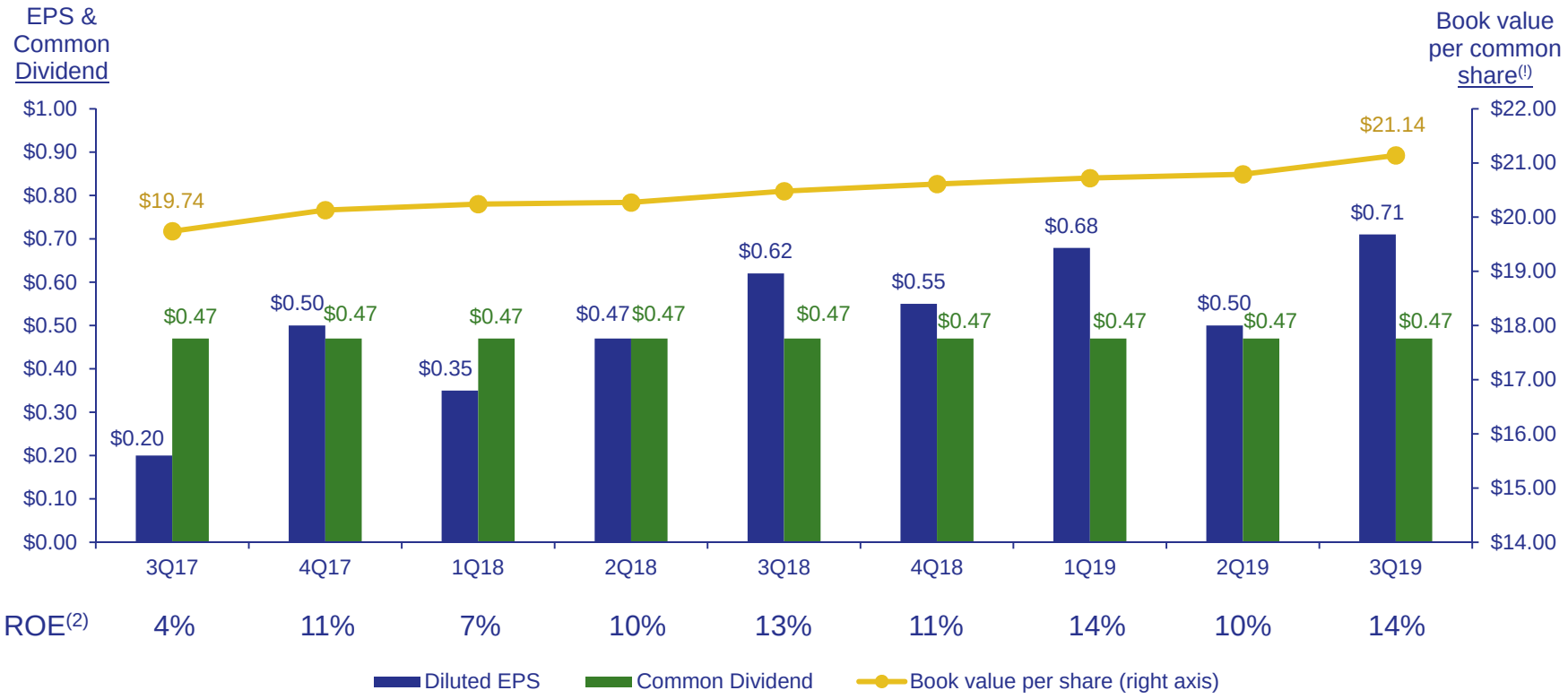
- Access to specialized mortgage capabilities, including origination and servicing operations
- PFSI has expertise across all mortgage functions with over 3,900 employees led by a highly experienced management team
- Enables PMT to aggregate quality investments in residential mortgage products with minimal operational risk
- Established appropriate agreements, controls and oversight to identify and manage potential conflicts

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

(1) Residential Mortgage Backed Securities

Track Record of Stable Dividends and Book Value



- Repurchased 14.7 million common shares at a cost of $216 million from 3Q15 through 1Q18
- Issued 29.2 million common shares through underwritten common equity offerings and our ATM program in 2019

(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

Interest Rate Sensitive Strategies Designed to Mitigate Interest Rate Volatility

Gain in value with increasing rates

MSRs

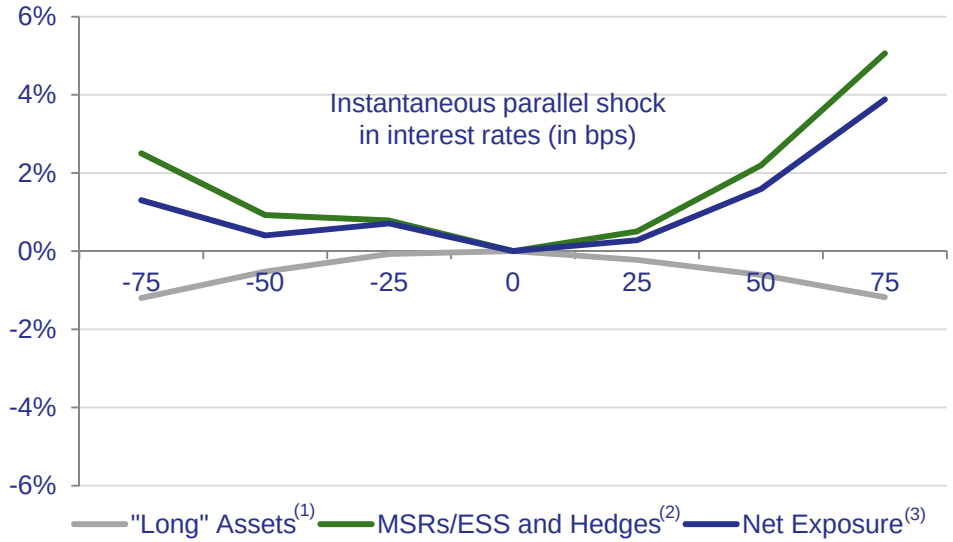
ESS

Gain in value with decreasing rates

Agency MBS

Interest Rate Hedges

Estimated Sensitivity to Changes in Interest Rates
At 9/30/19



- PMT's interest rate risk exposure is managed on a "global" basis
  - Multiple mortgage-related investment strategies with complementary interest rate sensitivities
  - Utilization of financial hedge instruments
  - Contributes to stability of book value

(1) Includes loans acquired for sale and IRLCs, net of associated hedges, Agency and Non-Agency MBS assets
(2) Includes MSRs, ESS, and hedges which include put and call options on MBS, Eurodollar futures, Treasury futures, and Exchange-traded swaps
(3) Net exposure represents the net position of the "Long" Assets and the MSRs/ESS and Hedges

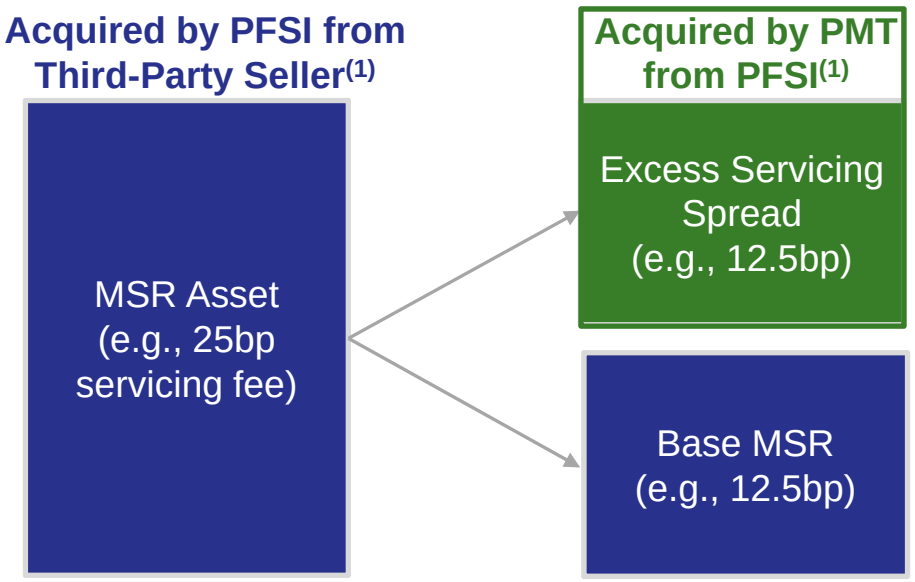
MSRs and ESS Asset Valuation

($ in millions)	Mortgage Servicing Rights	Excess Servicing Spread[(1)]
At 9/30/19		
Pool UPB	$116,372	$20,795
Pool weighted average coupon	4.28%	4.20%
Weighted-average pool prepayment speed assumption (CPR)	16.0%	11.7%
Weighted average servicing fee/spread	0.27%	0.19%
Fair value	$1,163	$183
As a multiple of servicing fee	3.63	4.72

(1) 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 pool UPB above in the amount of $375 million.

PMT's Excess Servicing Spread Investments in Partnership with PFSI

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



Example transaction: actual transaction details may vary materially

Excess Servicing Spread(2)

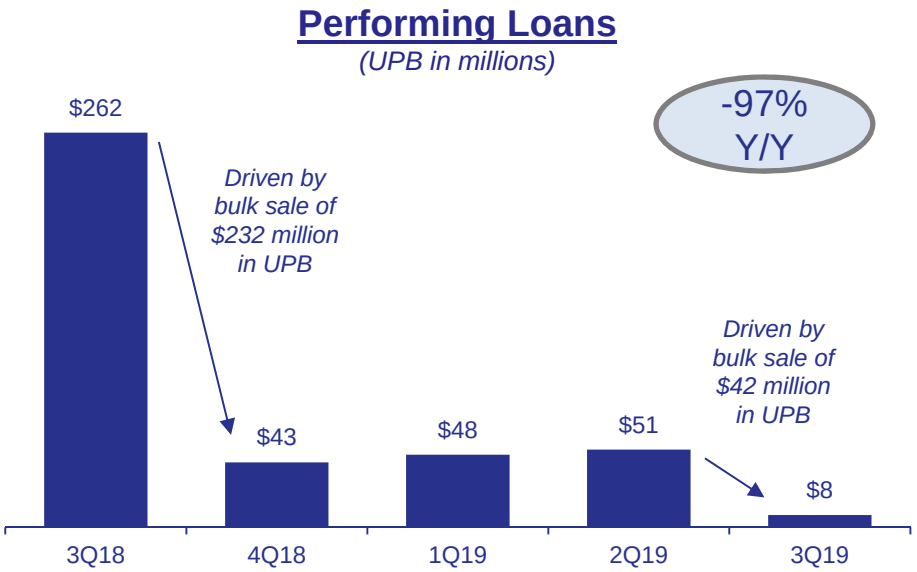
- Interest income from a portion of the contractual servicing fee
  - Realized yield dependent on prepayment speeds and recapture

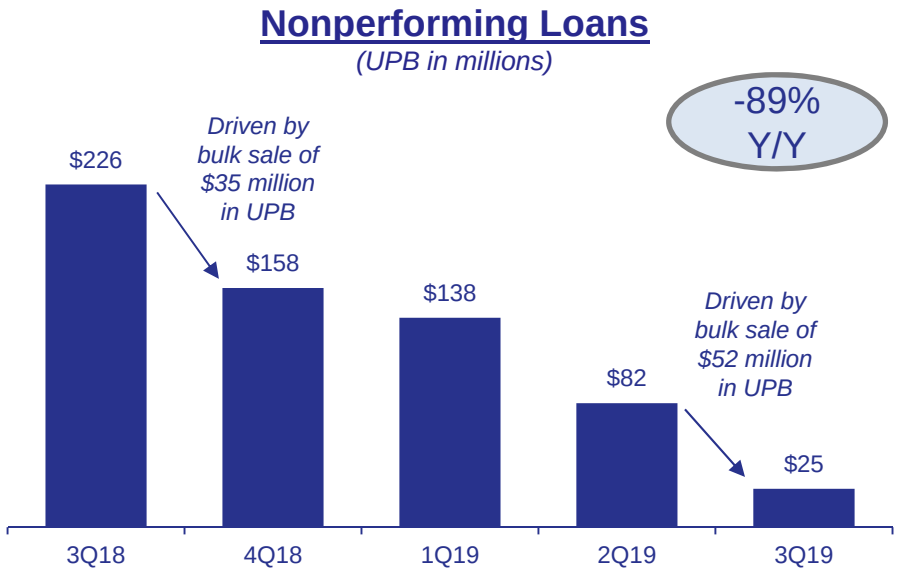
Base MSR

- 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

(1) The contractual servicer and MSR owner is PennyMac Loan Services, LLC, a wholly-owned subsidiary of PFSI
(2) 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.

Distressed Loan Portfolio Is Declining Through Liquidation and Sales





- Completed the sale of distressed mortgage loans totaling $94 million in UPB
  - Remaining distressed loans after the sale totaled $33 million in UPB

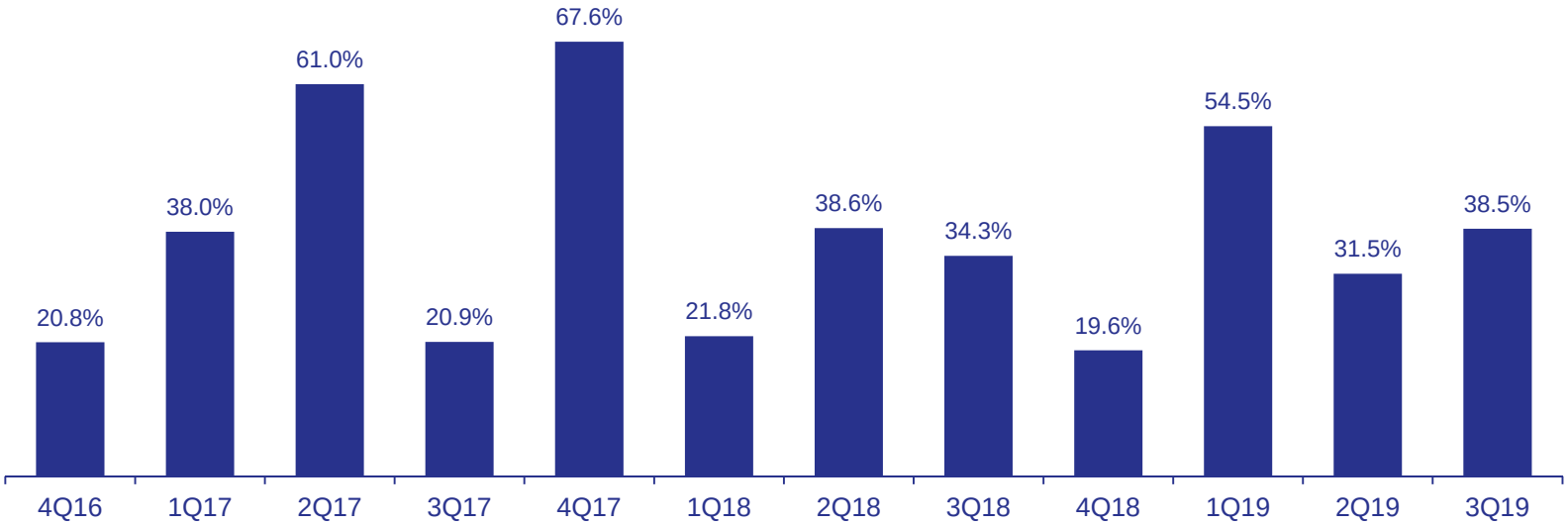
Performance of the Distressed Mortgage Loan Investments

Net Gains (Losses) on Loans

Unaudited ($ in thousands)	Quarter ended June 30, 2019	Quarter ended September 30, 2019
Valuation Changes:		
Performing loans	$ (1,772)	$ (1,263)
Nonperforming loans	(4,330)	(517)
	(6,102)	**(1,780)**
Payoffs	507	480
Sales	144	122
	$ (5,451)	**$ (1,178)**

Return on Equity Contribution of the GSE Credit Risk Transfer Investments

Annualized Return on Average CRT Equity



	4Q16	1Q17	2Q17	3Q17	4Q17	1Q18	2Q18	3Q18	4Q18	1Q19	2Q19	3Q19
Average CRT equity[1] ($ in millions)	$166	$178	$207	$271	$333	$403	$452	$490	$446	$452	$476	$574

[1] Equity allocated represents management's internal allocation across segments and investment strategies

Credit Risk Transfer – Balance Sheet Treatment

($ in thousands)	At September 30, 2019	
UPB of loans subject to guarantee obligation	$ 69,109,106	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
Carrying value of CRT agreements		
Deposits securing CRT arrangements	$ 2,044,250	Current cash collateralizing guarantee included in "Deposits securing credit risk transfer arrangements"
Derivative and credit risk transfer strip assets	$ 188,951	Represents the fair value of expected future cash inflows related to assumption of credit risk net of expected future losses
Interest-only stripped security payable at fair value	$ (24,729)	Fair value of non-recourse liability issued by CRT trusts; represents value of interest-only payment after the maturity of PMT's investments
Firm commitment to purchase CRT security	$ 54,734	Fair value of firm commitment to purchase REMIC CRT securities based on loans delivered to date
Face amount of firm commitment to purchase CRT securities[1]	$ 847,333	Face amount of firm commitment to purchase REMIC CRT securities related to loans delivered

[1] Does not appear on the balance sheet

PMT's Investments in GSE Credit Risk Transfer

(UPB in billions)

CRT 2015 -1 (May 2015 - July 2015)	At inception	9/30/2019
UPB	$ 1.3	$ 0.6
Loan Count	4,108	2,500
% Purchase	67.6%	69.9%
WA FICO[1]	742	744
WA LTV[1]	80.5%	80.9%
60+ Days Delinquent Loan Count		18
60+ Days Delinquent % o/s UPB		0.635%
180+ Days Delinquent Loan Count		16
Actual Losses ($k)		$ 463

CRT 2015 -2 (August 2015 - Feburary 2016)	At inception	9/30/2019
UPB	$ 4.2	$ 2.3
Loan Count	15,255	9,498
% Purchase	71.4%	73.6%
WA FICO(1)	743	744
WA LTV(1)	81.2%	81.6%
60+ Days Delinquent Loan Count		68
60+ Days Delinquent % o/s UPB		0.757%
180+ Days Delinquent Loan Count		72
Actual Losses ($k)		$ 1,848

CRT 2016 -1 (Feburary 2016 - August 2016)	At inception	9/30/2019
UPB	$ 6.4	$ 4.6
Loan Count	21,615	16,446
% Purchase	67.4%	70.4%
WA FICO[1]	748	750
WA LTV[1]	81.2%	81.1%
60+ Days Delinquent Loan Count		95
60+ Days Delinquent % o/s UPB		0.575%
180+ Days Delinquent Loan Count		56
Actual Losses ($k)		$ 1,548

CRT 2016 -2 (August 2016 - May 2018)	At inception	9/30/2019
UPB	$ 24.0	$ 19.0
Loan Count	86,057	72,471
% Purchase	73.2%	74.3%
WA FICO[1]	747	747
WA LTV[1]	82.5%	82.7%
60+ Days Delinquent Loan Count		336
60+ Days Delinquent % o/s UPB		0.454%
180+ Days Delinquent Loan Count		120
Actual Losses ($k)		$ 3,208

CRT 2018 -1 (June 2018 - March 2019)	At inception	9/30/2019
UPB	$ 24.8	$ 19.9
Loan Count	85,434	75,419
% Purchase	81.5%	81.7%
WA FICO[1]	746	745
WA LTV[1]	83.8%	84.0%
60+ Days Delinquent Loan Count		235
60+ Days Delinquent % o/s UPB		0.330%
180+ Days Delinquent Loan Count		38
Actual Losses ($k)		$ -

CRT 2019 -1 (April 2019 - Current)	At inception	9/30/2019
UPB	$ 22.6	$ 22.6
Loan Count	73,050	73,050
% Purchase	73.0%	73.0%
WA FICO[1]	754	754
WA LTV[1]	84.2%	84.2%
60+ Days Delinquent Loan Count		24
60+ Days Delinquent % o/s UPB		0.030%
180+ Days Delinquent Loan Count		-
Actual Losses ($k)		$ -

Total	At inception	9/30/2019
UPB	$ 83.4	$ 69.1
Loan Count	285,519	249,384
% Purchase	75.2%	75.8%
WA FICO[1]	748	748
WA LTV[1]	83.1%	83.4%
60+ Days Delinquent Loan Count		752
60+ Days Delinquent % o/s UPB		0.305%
180+ Days Delinquent Loan Count		302
Actual Losses ($k)		$ 7,066

[1] FICO and LTV metrics at origination

Correspondent Production Acquisitions and Locks by Product

(UPB in millions)	3Q18	4Q18	1Q19	2Q19	3Q19
Acquisitions					
Delegated Conventional Conforming	$ 7,503	$ 9,052	$ 8,130	$ 10,737	$ 16,644
Delegated Government	8,970	8,885	6,752	10,574	14,346
Delegated Non-Agency[(1)]	9	5	5	4	3
Non-Delegated	75	120	174	402	531
Total Correspondent Acquisitions	**$ 16,556**	**$ 18,061**	**$ 15,061**	**$ 21,718**	**$ 31,524**
PFSI's Direct Lending Loans Acquired by PMT	902	879	730	1,127	1,439
Total Acquisitions	**$ 17,458**	**$ 18,940**	**$ 15,791**	**$ 22,845**	**$ 32,963**
Locks					
Delegated Conventional Conforming	$ 8,392	$ 9,639	$ 8,974	$ 12,628	$ 19,461
Delegated Government	9,146	8,962	7,385	12,028	15,933
Delegated Non-Agency[(1)]	20	11	13	14	1
Non-Delegated	157	227	360	636	853
Total Locks	**$ 17,714**	**$ 18,839**	**$ 16,732**	**$ 25,307**	**$ 36,248**

Note: Delegated volumes exclude PennyMac Financial's direct lending loans acquired by PMT. Amounts may not sum exactly due to rounding.

[(1)] Consists of prime jumbo and non-QM loans