PennyMac Mortgage Investment Trust

Barclays Global Financial Services Conference

September 11, 2017



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 operations; 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.

Investment Highlights

Unique mortgage-related Investment Strategies

- Diversified mortgage-related REIT with $6 billion in assets
- Investments in Credit Risk Transfer (CRT), Mortgage Servicing Right (MSRs), Agency and non-Agency MBS, Excess Servicing Spread (ESS), and Distressed Residential Loans
- Market leader in correspondent production

Access to operational capabilities to organically create investments

- Access to operational expertise of manager and services provider PennyMac Financial Services, Inc. (NYSE:PFSI)
- Capital deployment focused on investments resulting from PMT's correspondent production activities

Focus on delivering appropriate risk-adjusted returns

- Core strategies have attractive earnings potential
- Growing CRT and MSR investments and liquidating distressed loan investments

Highly experienced management team

- Seasoned executive team with considerable mortgage industry experience

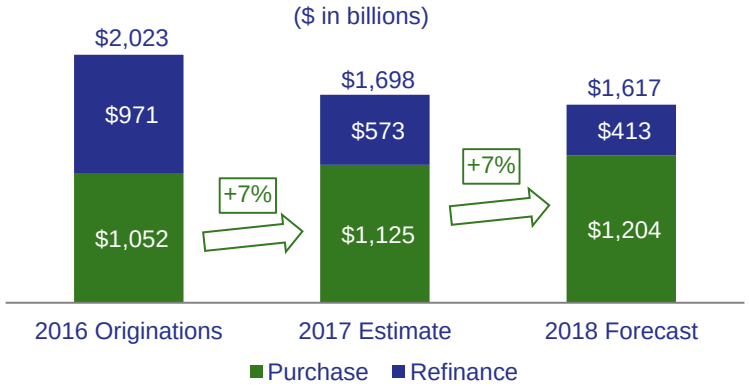
Mortgage Market Environment

- Mortgage rates, while volatile, have declined 54 bps thus far in 2017 as compared to year-end 2016 levels[(1)]
- Applications for refinance-purposed mortgages have decreased 39% from the same period a year ago[(2)]
  - Industry-wide refinance loan application volumes remain well below the average over the last five years, but have improved with the recent decline in rates
- Macroeconomic backdrop remains favorable for the mortgage and housing markets
  - While home sales have increased in recent years, they have only recovered to levels of the early 2000's[(3)]
    - New home sales have lagged behind the pace of recovery in existing home sales
  - Demographic trends support sustained demand with millennials reaching peak home buying age
  - Strong home purchase demand is forecast to result in growth for purchase-mortgage origination volume
- Mortgage performance remains very strong
  - Delinquencies declined to 4.24% at June 30, 2017, down from 4.66% a year ago[(5)]

Average 30-year fixed rate mortgage[(1)]



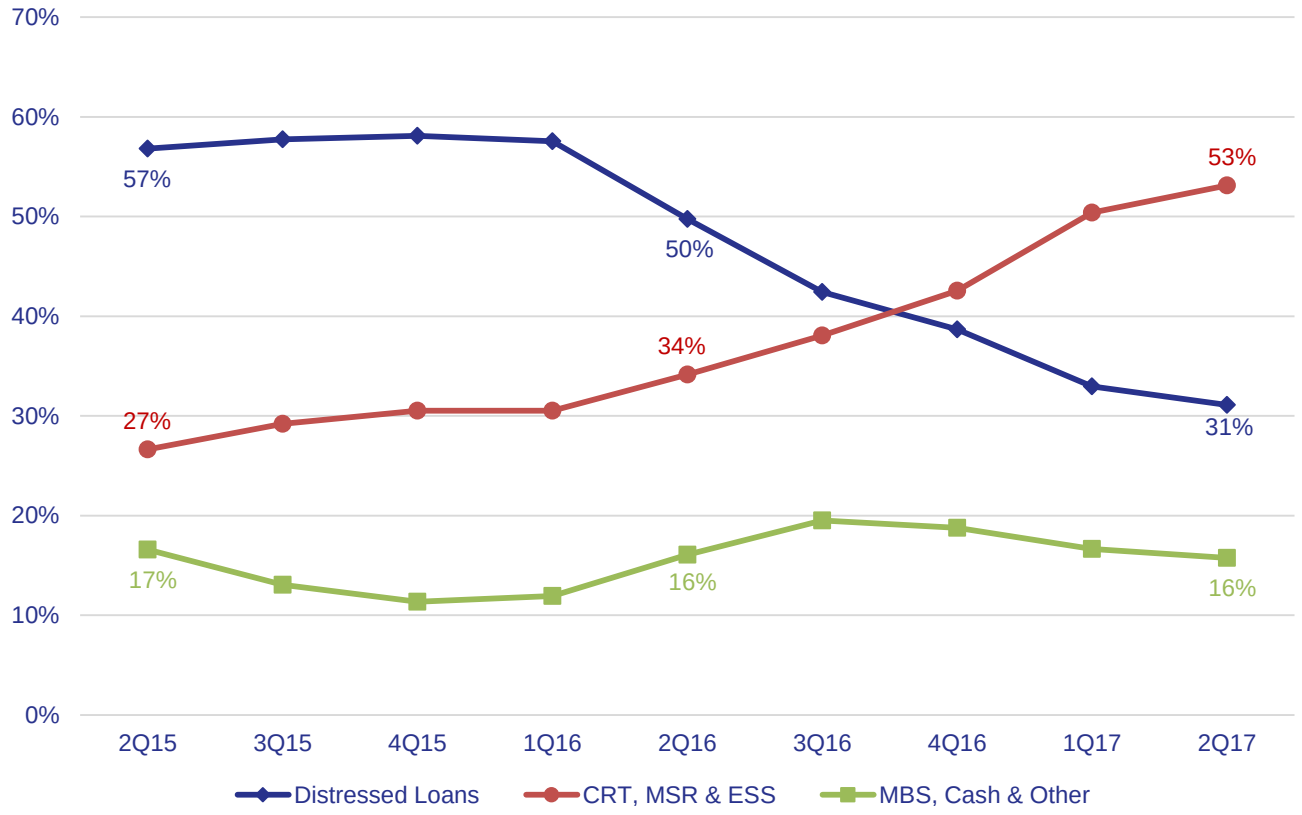
Estimates for Total U.S. Single Family Mortgage Originations[(4)]



(1) Freddie Mac Primary Mortgage Market Survey. 3.78% as of 9/7/2017
(2) Mortgage Bankers Association Refinance Index
(3) National Association of Real Estate Agents, Census Bureau
(4) Origination estimates represent the average of forecasts from Fannie Mae (as of 8/10/2017), Freddie Mac (as of 8/9/2017) and the Mortgage Bankers Association (as of 8/22/2017)
(5) Mortgage Bankers Association Mortgage Delinquency Survey

Transitioning to Correspondent-Generated Investments in CRT and MSRs

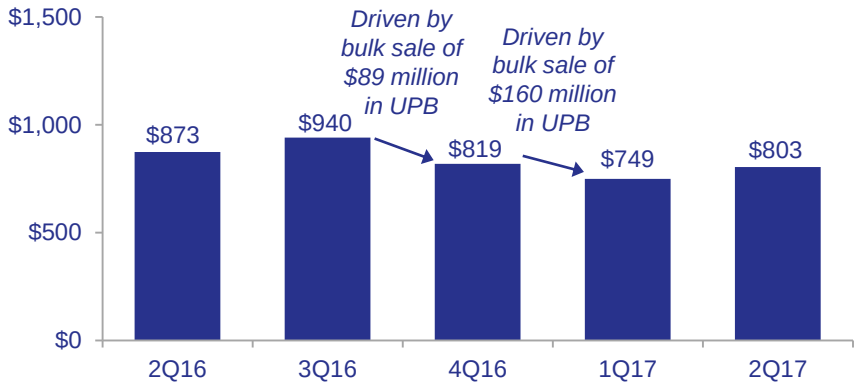
PMT's Equity Allocation[(1)]



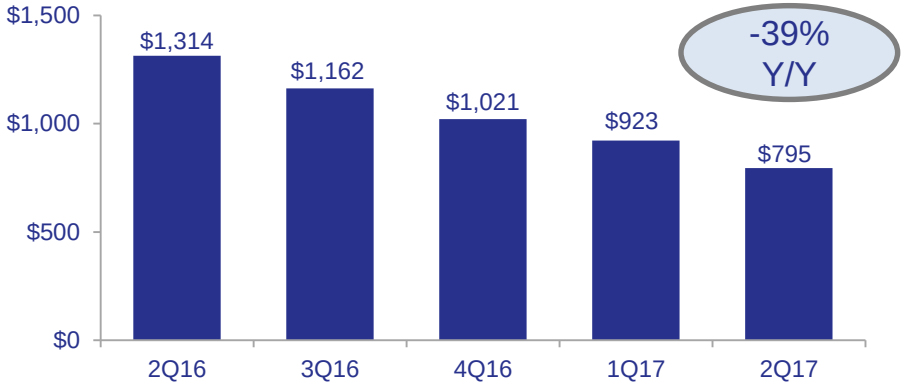
[(1)] Management's internal allocation of equity. Amounts as of quarter end. Percentages may not sum exactly due to rounding.

Distressed Loan Portfolio Is Declining Through Liquidation and Sales

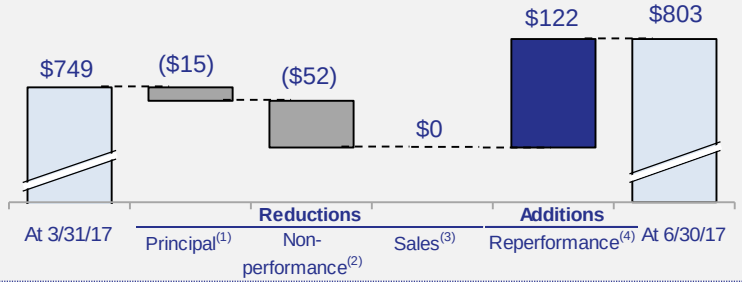
Performing Loans
(UPB in millions)



Nonperforming Loans
(UPB in millions)



Performing Loan Portfolio Waterfall
(UPB in millions)



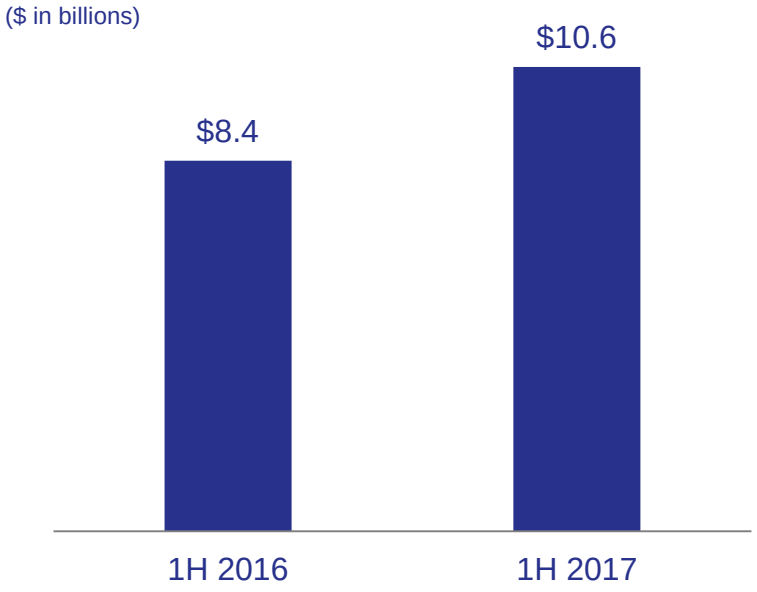
- $803 million ending balance of performing loans includes $149 million in UPB of loans sold in August 2017
- Assessing opportunities to access the market for additional bulk sales of performing and nonperforming loans

(1) Includes principal payments, payoffs, and write downs
(2) Primarily through recidivism of previously performing loans
(3) Bulk sales of performing loans
(4) Primarily through loan modifications

Attractive Investments Created Through Correspondent Production Activities

PMT's ability to generate attractive investments through conventional correspondent production differentiates it from many other mREITs

PMT Production Eligible for Delivery to the GSEs



- PMT was the #4 producer of GSE deliverable loans in 1H 2017, up from #10 in the same period last year(1)

Correspondent Production Earnings

- Attractive returns from the acquisition, aggregation and sale or securitization of newly originated loans

Ongoing MSR Investment

- Created from the securitization of correspondent production through Fannie Mae and Freddie Mac
- Attractive yield on investment results from interest rate / prepayment risk

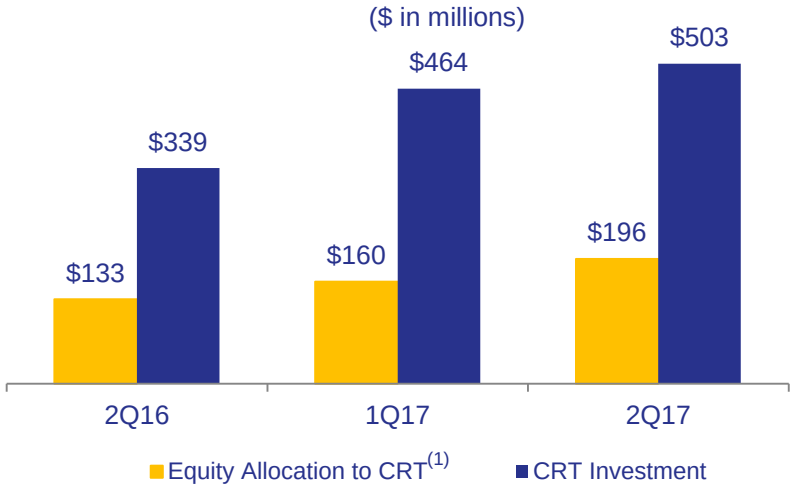
GSE Risk Transfer Investments

- Investment in a portion of the credit risk on loans delivered by PMT to Fannie Mae
- Takes advantage of PMT's high-quality correspondent production
- Leverages the leadership position of our correspondent production channel and the operational capabilities of PFSI

(1) Inside Mortgage Finance

PMT's Unique Investments in GSE Credit Risk Transfer

CRT Investments Outstanding



2Q17 Returns on CRT Investments

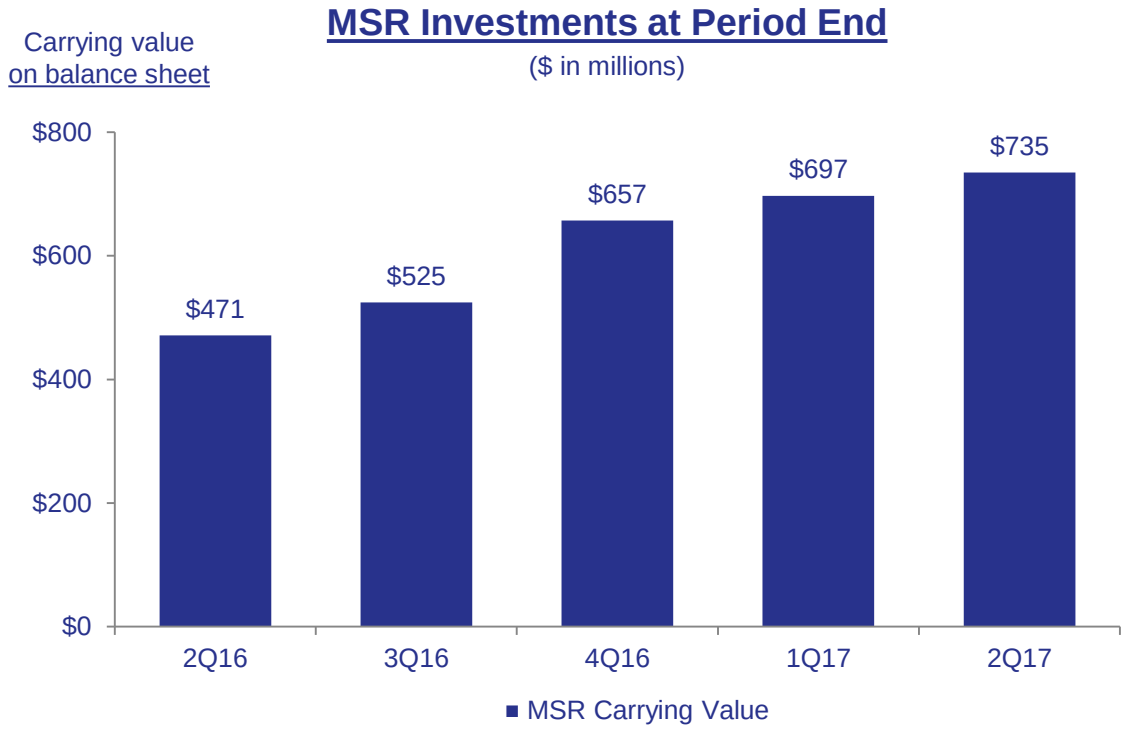
($ in millions)	Total Income Contribution	Income Excluding Market-Driven Fair Value Changes[3][4]
Investment income	$31.5	$10.2
Return on average CRT assets	26.2%	9.5%
Return on average CRT equity	61.0%	19.4%

Unique CRT Investment Opportunity

- PMT's existing credit risk transfer structure allows it to invest in first loss credit risk on its own newly originated, high-quality production
- PMT invests in the "first loss" credit risk of these loans
- CRT investment receives a return derived from a portion of the interest-only strip that Fannie Mae otherwise would have retained[2]
- CRT investment can be financed, resulting in an expected return on equity in the mid to high teens
- Returns reflect strong underlying investment income and market-driven valuation-related changes[3]

(1) Represents equity allocation net of financing
(2) Net of credit losses on these loans
(3) Valuation-related changes include fair value recognition upon loan delivery under CRT Agreements and fair value changes
(4) Included in total income contribution

MSR Investments Continue to Grow



- Organic MSR investments resulting from correspondent production activity increased to $735 million at June 30, 2017, up over 50% in the past year
- Owning MSRs from PMT's production provides a strong alignment with its CRT investments
  - Effective servicing and loss mitigation capabilities can drive better outcomes for borrowers and help improve the performance of the underlying loans

Run-Rate Quarterly Income Potential from PMT's Strategies

($ in millions, except EPS)	Income Potential	WA Equity Allocated[1]	Annualized Return on Equity (ROE)
Credit sensitive strategies:			
Distressed loan investments[2]	$ 5.2	$ 458	4.6%
Other credit sensitive strategies			
GSE credit risk transfer[3]	$ 22.3	$ 276	32.3%
Non-Agency subordinate bonds	$ 0.1	$ 3	16.9%
Commercial real estate finance	$ 0.1	$ 17	3.1%
Subtotal net other credit sensitive strategies	$ 22.5	$ 296	30.5%
Net credit sensitive strategies	**$ 27.8**	**$ 754**	**14.7%**
Interest rate sensitive strategies:			
MSRs (incl. recapture)[2]	$ 13.3	$ 530	10.0%
ESS (incl. recapture)[2]	$ 3.2	$ 102	12.6%
Agency MBS	$ 4.7	$ 48	38.9%
Non-Agency senior MBS (incl. jumbo)	$ 0.2	$ 1	70.3%
Interest rate hedges	$ (1.8)		
Net interest rate sensitive strategies	**$ 19.6**	**$ 681**	**11.5%**
Correspondent production	**$ 10.8**	**$ 110**	**39.3%**
Cash, short term investments, and other	$ 0.2	$ 59	1.3%
Management fees & corporate expenses	$ (12.3)		
Corporate	**$ (12.1)**	**$ 59**	**n/a**
Provision for income tax expense	$ (5.7)		
Net income	**$ 40.3**	**$ 1,605**	**10.0%**
Annualized ROE attributable to W.A. Preferred Equity	**$ 6.2**	**$ 310**	**8.0%**
Annualized ROE attributable to W.A. Common Equity	**$ 34.1**	**$ 1,295**	**10.5%**
Diluted EPS	**$ 0.48**		

- Returns on net credit sensitive strategies expected to remain significant earnings driver
- Returns on net interest rate sensitive strategies expected to improve from recent levels with improved hedge performance
- Correspondent production returns are expected to be generally consistent with the second quarter
- PMT's objective is to distribute a common share dividend consistent with earnings per share; REIT taxable income for the year is a floor for dividend payments
- Income potential does not reflect any share repurchases or gain/loss related to fair value changes or from bulk asset sales (e.g., distressed loans)

Note: This slide presents estimates for illustrative purposes only, using PMT's base case assumptions (e.g., for credit performance, prepayment speeds, financing economics). Actual results may differ materially. Please refer to slide 2 for important disclosures regarding forward-looking statements.

(1) Management's internal allocation of equity
(2) Equity allocated to MSR, ESS and distressed loan investments reflects an allocation of exchangeable senior notes and associated expenses
(3) Valuation-related changes include fair value recognition upon loan delivery under CRT agreements and market value changes