PennyMac Mortgage Investment Tru	st
Form 10-Q	
August 08, 2017	

**UNITED STATES** 

SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

Form 10-Q

(Mark One)

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended June 30, 2017

Or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from to

Commission file number: 001-34416

PennyMac Mortgage Investment Trust

(Exact name of registrant as specified in its charter)

Maryland 27-0186273 (State or other jurisdiction of (IRS Employer

incorporation or organization) Identification No.)

3043 Townsgate Road, Westlake Village, California 91361 (Address of principal executive offices) (Zip Code)

(818) 224-7442

(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer

(Do not check if a smaller reporting company) Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act): Yes No

Indicate the number of shares outstanding of each of the registrant's classes of common stock, as of the latest practicable date.

Class Outstanding at August 3, 2017

Common Shares of Beneficial Interest, \$0.01 par value 66,842,495

# PENNYMAC MORTGAGE INVESTMENT TRUST

# FORM 10-Q

June 30, 2017

## TABLE OF CONTENTS

		Page
Special N	Note Regarding Forward-Looking Statements	1
PART I.	FINANCIAL INFORMATION	4
Item 1.	Financial Statements (Unaudited):	4
	Consolidated Balance Sheets	4
	Consolidated Statements of Operations	6
	Consolidated Statements of Changes in Shareholders' Equity	7
	Consolidated Statements of Cash Flows	8
	Notes to Consolidated Financial Statements	10
Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	65
	<u>Our Company</u>	65
	Results of Operations	67
	Net Investment Income	68
	<u>Expenses</u>	85
	Balance Sheet Analysis	88
	Asset Acquisitions	89
	Investment Portfolio Composition	90
	<u>Cash Flows</u>	96
	Liquidity and Capital Resources	96
	Off-Balance Sheet Arrangements and Aggregate Contractual Obligations	99
	Quantitative and Qualitative Disclosures About Market Risk	100
Item 3.	Quantitative and Qualitative Disclosures About Market Risk	103
Item 4.	Controls and Procedures	103
PART II.	OTHER INFORMATION	104
Item 1.	<u>Legal Proceedings</u>	104
Item 1A.	Risk Factors	104
Item 2.	<u>Unregistered Sales of Equity Securities and Use of Proceeds</u>	104
Item 3.	<u>Defaults Upon Senior Securities</u>	104
Item 4.	Mine Safety Disclosures	104
Item 5.	Other Information	104
Item 6.	<u>Exhibits</u>	105

#### SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q ("Report") contains certain forward-looking statements that are subject to various risks and uncertainties. Forward-looking statements are generally identifiable by use of forward-looking terminology such as "may," "will," "should," "potential," "intend," "expect," "seek," "anticipate," "estimate," "approximately," "believe," "predict," "continue," "plan" or other similar words or expressions.

Forward-looking statements are based on certain assumptions, discuss future expectations, describe future plans and strategies, contain financial and operating projections or state other forward-looking information. Examples of forward-looking statements include the following:

- projections of our revenues, income, earnings per share, capital structure or other financial items;
- descriptions of our plans or objectives for future operations, products or services;
- forecasts of our future economic performance, interest rates, profit margins and our share of future markets; and descriptions of assumptions underlying or relating to any of the foregoing expectations regarding the timing of generating any revenues.

Our ability to predict results or the actual effect of future events, actions, plans or strategies is inherently uncertain. Although we believe that the expectations reflected in such forward-looking statements are based on reasonable assumptions, our actual results and performance could differ materially from those set forth in the forward-looking statements. There are a number of factors, many of which are beyond our control that could cause actual results to differ significantly from management's expectations. Some of these factors are discussed below.

You should not place undue reliance on any forward-looking statement and should consider the following uncertainties and risks, as well as the risks and uncertainties discussed elsewhere in this Report and the section entitled "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2016, filed with the Securities and Exchange Commission ("SEC") on February 28, 2017.

Factors that 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;

•ncomplete 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;

the performance of mortgage loans underlying mortgage-backed securities ("MBS") in which we retain credit risk; our ability to foreclose on our investments in a timely manner or at all;

•ncreased prepayments of the mortgages and other loans underlying our MBS or relating to our mortgage servicing rights ("MSRs"), excess servicing spread ("ESS") 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 such as the Government National Mortgage Association ("Ginnie Mae"), the Federal Housing Administration (the "FHA") or the Veterans Administration (the "VA"), the U.S. Department of Agriculture ("USDA"), or government-sponsored entities such as the Federal National Mortgage Association ("Fannie Mae") or the Federal Home Loan Mortgage Corporation ("Freddie Mac") (Fannie Mae, Freddie Mac and Ginnie Mae are each referred to as an "Agency" and, collectively, as the "Agencies"), or such changes that increase the cost of doing business with such entities:

the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank 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 ("CFPB") and its issued and future rules and the enforcement thereof; thanges in government support of homeownership;

changes in government or government-sponsored home affordability programs;

dimitations 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 (the "Investment Company Act") and the ability of certain of our subsidiaries to qualify as REITs or as taxable REIT subsidiaries ("TRSs") 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);
- our ability to make distributions to our shareholders in the future;
- 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.

Other factors that could also cause results to differ from our expectations may not be described in this Report or any other document. Each of these factors could by itself, or together with one or more other factors, adversely affect our business, results of operations and/or financial condition.

Forward-looking statements speak only as of the date they are made, and we undertake no obligation to update any forward-looking statement to reflect the impact of circumstances or events that arise after the date the forward-looking statement was made.

## PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

## PENNYMAC MORTGAGE INVESTMENT TRUST AND SUBSIDIARIES

## CONSOLIDATED BALANCE SHEETS (UNAUDITED)

	June 30, 2017 (in thousand information)	December 31, 2016 s, except share
ASSETS		
Cash	\$69,893	\$ 34,476
Short-term investments	77,366	122,088
Mortgage-backed securities at fair value (includes \$1,065,540 and \$863,802 pledged		
to creditors, respectively)	1,065,540	865,061
Mortgage loans acquired for sale at fair value (includes \$1,300,596 and \$1,653,748		
pledged to creditors, respectively)	1,318,603	1,673,112
Mortgage loans at fair value (includes \$1,521,211 and \$1,712,190 pledged to creditors,		
respectively)	1,527,812	1,721,741
Excess servicing spread purchased from PennyMac Financial Services, Inc. at fair value		
pledged to secure assets sold under agreements to repurchase to		
PennyMac Financial Services, Inc.	261,796	288,669
Derivative assets (includes \$19,291 and \$9,078 pledged to creditors, respectively)	73,875	33,709
Real estate acquired in settlement of loans (includes \$108,353 and \$215,713		
pledged to creditors, respectively)	207,034	274,069
Real estate held for investment (includes \$13,602 pledged to creditors at June 30, 2017)	40,316	29,324
Mortgage servicing rights (includes \$77,624 and \$64,136 at fair value;		
\$723,896 and \$656,567 pledged to creditors)	734,800	656,567
Servicing advances	67,172	76,950
Deposits securing credit risk transfer agreements (includes \$410,512 and \$414,610		
pledged to creditors, respectively)	503,108	450,059
Due from PennyMac Financial Services, Inc.	5,013	7,091
Other	57,916	124,586
Total assets	\$6,010,244	\$ 6,357,502
LIABILITIES		
Assets sold under agreements to repurchase	\$3,497,999	\$ 3,784,001
Mortgage loan participation and sale agreements	38,345	25,917

Notes payable	159,980	275,106
Asset-backed financing of a variable interest entity at fair value	329,459	353,898
Exchangeable senior notes	246,629	246,089
Assets sold to PennyMac Financial Services, Inc. under agreement to repurchase	150,000	150,000
Interest-only security payable at fair value	6,577	4,114
Derivative liabilities	8,856	9,573
Accounts payable and accrued liabilities	74,253	107,758
Due to PennyMac Financial Services, Inc.	17,725	16,416
Income taxes payable	14,892	18,166
Liability for losses under representations and warranties	10,697	15,350
Total liabilities	4,555,412	5,006,388

Commitments and contingencies — See Note 19

### SHAREHOLDERS' EQUITY

8.125% Series A fixed-to floating rate redeemable cumulative preferred shares of

beneficial interest, \$0.01 par value per share, 4,600,000 shares issued and outstanding,

\$115,000,000 aggregate liquidation preference

46

Common shares of beneficial interest—authorized, 500,000,000 common shares of \$0.01

par value; issued and outstanding, 66,842,495 and 66,697,286 common shares,

respectively	668	667
Additional paid-in capital	1,489,116	1,377,171
Accumulated deficit	(34,998)	(26,724)
Total shareholders' equity	1,454,832	1,351,114
Total liabilities and shareholders' equity	\$6,010,244	\$ 6,357,502

The accompanying notes are an integral part of these consolidated financial statements.

## PENNYMAC MORTGAGE INVESTMENT TRUST AND SUBSIDIARIES

## CONSOLIDATED BALANCE SHEETS (UNAUDITED)

Assets and liabilities of consolidated variable interest entities ("VIEs") included in total assets and liabilities (the assets of each VIE can only be used to settle liabilities of that VIE):

	June 30, 2017 (in thousan	December 31, 2016 ands)
ASSETS	`	Ź
Mortgage loans at fair value	\$343,192	\$ 367,169
Derivative assets	52,716	15,610
Deposits securing credit risk transfer agreements	503,108	450,059
Other—interest receivable	972	1,058
	\$899,988	\$ 833,896
LIABILITIES		
Asset-backed financing at fair value	\$329,459	\$ 353,898
Interest-only security payable at fair value	6,577	4,114
Accounts payable and accrued liabilities—interest payab	le 972	1,058
	\$337,008	\$ 359,070

The accompanying notes are an integral part of these consolidated financial statements.

## PENNYMAC MORTGAGE INVESTMENT TRUST AND SUBSIDIARIES

# CONSOLIDATED STATEMENTS OF OPERATIONS (UNAUDITED)

	Quarter ended June 30,		Six months June 30,	ended	
	2017	2016	2017	2016	
	(in thousa	nds, except	t per share a	mounts)	
Net investment income:					
Net gain on mortgage loans acquired for sale:					
From nonaffiliates	\$14,088	\$22,095	\$30,252	\$35,582	
From PennyMac Financial Services, Inc.	3,204	2,131	6,065	3,693	
	17,292	24,226	36,317	39,275	
Mortgage loan origination fees	10,467	8,519	18,757	15,420	
Net gain (loss) on investments:					
From nonaffiliates	33,477	337	51,568	14,066	
From PennyMac Financial Services, Inc.	(5,885)	(15,824)	(7,255)	(33,451)	
	27,592	(15,487)	44,313	(19,385)	
Net mortgage loan servicing fees:					
From nonaffiliates	15,463	15,380	26,923	30,804	
From PennyMac Financial Services, Inc.	234	311	526	441	
	15,697	15,691	27,449	31,245	
Interest income:					
From nonaffiliates	48,020	46,053	91,473	93,404	
From PennyMac Financial Services, Inc.	4,366	5,713	9,013	12,728	
	52,386	51,766	100,486	106,132	
Interest expense:					
To nonaffiliates	36,401	34,371	71,775	64,773	
To PennyMac Financial Services, Inc.	2,025	2,222	3,830	3,824	
	38,426	36,593	75,605	68,597	
Net interest income	13,960	15,173	24,881	37,535	
Results of real estate acquired in settlement of loans	(3,465)	(2,565)	(7,711)	(8,601)	
Other	2,416	2,061	4,427	4,345	
Net investment income	83,959	47,618	148,433	99,834	
Expenses					
Earned by PennyMac Financial Services, Inc.:					
Mortgage loan fulfillment fees	21,107	19,111	37,677	32,046	
Mortgage loan servicing fees	10,099	16,427	20,585	27,880	
Management fees	5,638	5,199	10,646	10,551	
Professional services	2,747	2,011	4,200	4,304	
Compensation	1,959	2,224	3,851	3,513	
Mortgage loan collection and liquidation	3,338	4,290	3,692	6,504	
Mortgage loan origination	1,993	1,557	3,505	2,678	
Other	5,252	4,958	9,844	9,473	
Total expenses	52,133	55,777	94,000	96,949	
Income (loss) before benefit from income taxes	31,826	(8,159)	54,433	2,885	
Provision for (benefit from) income taxes	3,046	(2,892)	(3,083)	(6,344)	

Edgar Filing: PennyMac Mortgage Investment Trust - Form 10-Q

Net income (loss)	28,780	(5,267	57,516	9,229
Dividends on preferred stock	2,336	_	2,907	_
Net income attributable to common shareholders	\$26,444	\$(5,267)	\$54,609	\$9,229
Earnings (loss) per common share				
Basic	\$0.39	\$(0.08	\$0.81	\$0.12
Diluted	\$0.38	\$(0.08	\$0.78	\$0.12
Weighted-average common shares outstanding				
Basic	66,761	68,446	66,740	70,165
Diluted	75,228	68,446	75,207	70,165
Dividends declared per common share	\$0.47	\$0.47	\$0.94	\$0.94

The accompanying notes are an integral part of these consolidated financial statements.

## PENNYMAC MORTGAGE INVESTMENT TRUST AND SUBSIDIARIES

# CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY (UNAUDITED)

	Series A		Common	1			
	shares		shares			Retained	
	Numbe	r	Number		Additional	earnings	
	of	Par	of	Par	paid-in	(Accumulated	l
	shares	value	shares	value	capital	deficit)	Total
	(in thou	ısands,	except per	r share a	amounts)		
Balance at December 31, 2015		\$ —	73,767	\$738	\$1,469,722	\$ 25,653	\$1,496,113
Net income					_	9,229	9,229
Share-based compensation	—	—	298	3	3,010	_	3,013
Common share dividends, \$0.94 per share						(64,694	) (64,694 )
Repurchase of common shares	_	_	(6,342)	(64)	(82,770)	_	(82,834)
Balance at June 30, 2016	_	\$ —	67,723	\$677	\$1,389,962	\$ (29,812	) \$1,360,827
Balance at December 31, 2016	_	\$ —	66,697	\$667	\$1,377,171	\$ (26,724	) \$1,351,114
Net income	_	_	_	_	<del>_</del>	57,516	57,516
Share-based compensation	_	_	284	2	3,125	_	3,127
Issuance of Series A preferred shares	4,600	46	_	_	114,954	_	115,000
Issuance costs relating to Series A							
preferred							
shares	—	—	—	—	(3,828)	—	(3,828)
Common share dividends, \$0.94 per share	—		_		_	(63,298	) (63,298 )
Series A preferred share dividends, \$0.54							
per share		_	_	_	_	(2,492	) (2,492 )
Repurchase of common shares	_		(139)	(1)	(2,306)		(2,307)
Balance at June 30, 2017	4,600	\$ 46	66,842	\$668	\$1,489,116	\$ (34,998	) \$1,454,832

The accompanying notes are an integral part of these consolidated financial statements.

# PENNYMAC MORTGAGE INVESTMENT TRUST AND SUBSIDIARIES

# CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)

	Six months ended June 30, 2017	
	2017	2016
	(in thousands)	
Cash flows from operating activities	Φ.5.7. 5.1.C	Φ0.220
Net income	\$57,516	\$9,229
Adjustments to reconcile net income to net cash provided by (used in) operating		
activities:	(26.217	(20.275
Net gain on mortgage loans acquired for sale	, ,	) (39,275 )
Net (gain) loss on investments	(44,313	19,385
Change in fair value, amortization and impairment of mortgage servicing rights	52,666	29,656
Accrual of unearned discounts and amortization of premiums on mortgage-backed securities, mortgage loans at fair value, and asset-backed financing of a variable		
interest entity	3,007	(1,086)
Capitalization of interest on mortgage loans at fair value	(20,717	) (39,715 )
Capitalization of interest on excess servicing spread	(9,013	) (12,728 )
Amortization of debt issuance costs	7,004	6,472
Results of real estate acquired in settlement of loans	7,711	8,601
Share-based compensation expense	3,127	3,013
Purchase of mortgage loans acquired for sale at fair value from nonaffiliates	(31,573,356	) (25,461,808)
Purchase of mortgage loans acquired for sale at fair value from PennyMac Financial		
Services, Inc.	(40,222	(8,139)
Repurchase of mortgage loans subject to representation and warranties	(6,079	) (6,654 )
Sale and repayment of mortgage loans acquired for sale at fair value to nonaffiliates	10,647,450	8,465,753
Sale of mortgage loans acquired for sale to PennyMac Financial Services, Inc.	21,244,194	16,790,189
Decrease in servicing advances	4,218	12,277
Decrease (increase) in due from PennyMac Financial Services, Inc.	1,800	(2,688)
Decrease in other assets	23,970	39,774
(Decrease) increase in accounts payable and accrued liabilities	(33,496	) 14,084
Increase in due to PennyMac Financial Services, Inc.	1,309	2,032
Decrease in income taxes payable	(3,274	) (6,731 )
Net cash provided by (used in) operating activities	287,185	(178,359)
Cash flows from investing activities		
Net decrease in short-term investments	44,722	24,988
Purchase of mortgage-backed securities at fair value	(251,872	) (249,925 )
Sale and repayment of mortgage-backed securities at fair value	52,753	49,141
Sale and repayment of mortgage loans at fair value	175,016	458,466
Repayment of excess servicing spread by PennyMac Financial Services, Inc.	28,910	38,281
Sale of excess servicing spread to PennyMac Financial Services, Inc.	_	59,045
Net settlement of derivative financial instruments	288	(2,793)

Edgar Filing: PennyMac Mortgage Investment Trust - Form 10-Q

Sale of real estate acquired in settlement of loans	101,609		135,573	
Purchase of mortgage servicing rights	(69	)	(2,602	)
Sale of mortgage servicing rights	_		106	
Deposit of cash securing credit risk transfer agreements	(57,148	)	(192,737	)
Distribution from credit risk transfer agreements	29,923		7,320	
Decrease (increase) in margin deposits and restricted cash	5,132		(16,769	)
Purchase of Federal Home Loan Bank capital stock	_		(225	)
Redemption of Federal Home Loan Bank capital stock			7,320	
Net cash provided by investing activities	129,264		315,189	

The accompanying notes are an integral part of these consolidated financial statements.

## PENNYMAC MORTGAGE INVESTMENT TRUST AND SUBSIDIARIES

# CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)

	Six months end	
	2017	2016
Cook flows from financing activities	(in thousands)	
Cash flows from financing activities	27 995 067	27,426,511
Sale of assets under agreements to repurchase  Repurchase of assets sold under agreements to repurchase	37,885,967 (38,171,465)	
1		
Issuance of mortgage loan participation certificates	3,660,014	
Repayment of mortgage loan participation certificates	(3,647,460)	(3,070,038)
Federal Home Loan Bank advances	<del></del>	28,000
Repayment of Federal Home Loan Bank advances	_	(211,000)
Advance under notes payable	20,000	69,282
Repayment of notes payable	(135,000)	(141,386)
Issuance of asset-backed financing of a variable interest entity at fair value		99,499
Repayment of asset-backed financing of a variable interest entity at fair value	(28,934)	(30,479)
Payment of debt issuance costs	(7,220)	(5,512)
Issuance of preferred shares	115,000	
Payment of issuance costs related to preferred shares	(3,828)	
Payment of dividends to preferred shareholders	(2,492)	
Repurchase of common shares	(2,307)	(82,834)
Payment of dividends to common shareholders	(63,307)	(67,664)
Net cash used in financing activities	(381,032)	(99,233)
Net increase in cash	35,417	37,597
Cash at beginning of period	34,476	58,108
Cash at end of period	\$69,893	\$95,705
1	. ,	. ,

The accompanying notes are an integral part of these consolidated financial statements.

#### PENNYMAC MORTGAGE INVESTMENT TRUST AND SUBSIDIARIES

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

Note 1—Organization and Basis of Presentation

PennyMac Mortgage Investment Trust ("PMT" or the "Company") was organized in Maryland on May 18, 2009, and commenced operations on August 4, 2009, when it completed its initial offerings of common shares of beneficial interest ("common shares"). The Company is a specialty finance company, which, through its subsidiaries (all of which are wholly-owned), invests primarily in residential mortgage-related assets.

The Company operates in four segments: correspondent production, credit sensitive strategies, interest rate sensitive strategies and corporate:

The correspondent production segment represents the Company's operations aimed at serving as an intermediary between mortgage lenders and the capital markets by purchasing, pooling and reselling newly originated prime credit quality mortgage loans either directly or in the form of mortgage-backed securities ("MBS"), using the services of PNMAC Capital Management, LLC ("PCM" or the "Manager") and PennyMac Loan Services, LLC ("PLS"), both indirect controlled subsidiaries of PennyMac Financial Services, Inc. ("PFSI").

Most of the mortgage loans the Company has acquired in its correspondent production activities have been eligible for sale to government-sponsored entities such as the Federal National Mortgage Association ("Fannie Mae") and the Federal Home Loan Mortgage Corporation ("Freddie Mac") or through government agencies such as the Government National Mortgage Association ("Ginnie Mae"). Fannie Mae, Freddie Mac and Ginnie Mae are each referred to as an "Agency" and, collectively, as the "Agencies."

The credit sensitive strategies segment represents the Company's investments in distressed mortgage loans, real estate acquired in settlement of mortgage loans ("REO"), credit risk transfer agreements ("CRT Agreements"), non-Agency subordinated bonds and small balance commercial real estate mortgage loans.

The interest rate sensitive strategies segment represents the Company's investments in mortgage servicing rights ("MSRs"), excess servicing spread ("ESS"), Agency and senior non-Agency MBS and the related interest rate hedging activities.

The corporate segment includes certain interest income, management fee and corporate expense amounts. The Company believes that it qualifies, and has elected to be taxed, as a real estate investment trust ("REIT") under the Internal Revenue Code of 1986, as amended, beginning with its taxable period ended on December 31, 2009. To maintain its tax status as a REIT, the Company has to distribute at least 90% of its taxable income in the form of qualifying distributions to shareholders.

The Company conducts substantially all of its operations and makes substantially all of its investments through its subsidiary, PennyMac Operating Partnership, L.P. (the "Operating Partnership"), and the Operating Partnership's subsidiaries. A wholly-owned subsidiary of the Company is the sole general partner, and the Company is the sole limited partner, of the Operating Partnership.

The accompanying consolidated financial statements have been prepared in compliance with accounting principles generally accepted in the United States ("GAAP") as codified in the Financial Accounting Standards Board's ("FASB") Accounting Standards Codification ("ASC") for interim financial information and with the Securities and Exchange Commission's instructions to Form 10-Q and Rule 10-01 of Regulation S-X. Accordingly, these financial statements and notes do not include all of the information required by GAAP for complete financial statements. The interim

consolidated information should be read together with the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2016.

The accompanying unaudited consolidated financial statements reflect all normal recurring adjustments necessary to present fairly the financial position, results of operations, and cash flows for the interim periods, but are not necessarily indicative of the results of operations that may be anticipated for the full year. Intercompany accounts and transactions have been eliminated.

Preparation of financial statements in compliance with GAAP requires the Manager to make estimates and judgments that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, and revenues and expenses during the reporting period. Actual results will likely differ from those estimates.

#### Note 2—Concentration of Risks

As discussed in Note 1— Organization and Basis of Presentation above, PMT's operations and investing activities are centered in residential mortgage-related assets, a substantial portion of which were distressed at acquisition. The mortgage loans at fair value not acquired for sale or held in a variable interest entity ("VIE") are generally purchased at discounts reflecting their distressed state or perceived higher risk of default, as well as a greater likelihood of collateral documentation deficiencies.

Due to the nature of a substantial portion of the Company's investments, PMT is exposed, to a greater extent than traditional mortgage investors, to the risks associated with loan resolution, including that borrowers may be in economic distress and/or may have become unemployed, bankrupt or otherwise unable or unwilling to make payments when due, and that fluctuations in the residential real estate market may affect the performance of its investments. Factors influencing these risks include, but are not limited to:

- changes in the overall economy, unemployment rates and residential real estate values in the markets where the properties securing the Company's mortgage loans are located;
- PCM's ability to identify and PLS' ability to execute optimal resolutions of certain mortgage loans;
- the accuracy of valuation information obtained during the Company's due diligence activities;
- PCM's ability to effectively model, and to develop appropriate model inputs that properly anticipate, future outcomes; the level of government support for resolution of certain mortgage loans and the effect of current and future proposed and enacted legislative and regulatory changes on the Company's ability to effect cures or resolutions to distressed mortgage loans; and
- regulatory, judicial and legislative support of the foreclosure process, and the resulting effect on the Company's ability to acquire and liquidate the real estate securing its portfolio of distressed mortgage loans in a timely manner or at all.

Due to these uncertainties, there can be no assurance that risk management activities identified and executed on PMT's behalf will prevent significant losses arising from the Company's investments in real estate-related assets.

A substantial portion of the distressed mortgage loans and REO has been acquired by the Company in prior years from or through one or more subsidiaries of JPMorgan Chase & Co. and Citigroup Inc., as presented in the following summary:

	June 30, 2017	December 31, 2016
	(in thousand	ls)
JPMorgan Chase & Co.		
Mortgage loans at fair value	\$437,101	\$ 505,167
REO	97,988	118,737
	535,089	623,904
Citigroup Inc.		
Mortgage loans at fair value	476,517	519,698
REO	34,127	49,048
	510,644	568,746
	\$1,045,733	\$ 1,192,650
Total carrying value of distressed mortgage loans at fair value and REO	\$1,391,654	\$ 1,628,641

Note 3—Transactions with Related Parties

**Operating Activities** 

Correspondent Production Activities

The Company is provided fulfillment and other services by PLS under a mortgage banking services agreement. The Company's mortgage banking services agreement provides for a fulfillment fee paid to PLS based on the type of mortgage loan that the Company acquires. The fulfillment fee is equal to a percentage of the unpaid principal balance of mortgage loans purchased by the Company. PLS has also agreed to provide such services exclusively for the Company's benefit, and PLS and its affiliates are prohibited from providing such services for any other party.

Before September 12, 2016, the applicable fulfillment fee percentages were (i) 0.50% for conventional mortgage loans, (ii) 0.88% for loans sold in accordance with the Ginnie Mae Mortgage-Backed Securities Guide, and (iii) 0.50% for all other mortgage loans not contemplated above; provided, however, that PLS was permitted, in its sole discretion, to reduce the amount of the applicable fulfillment fee and credit the amount of such reduction to any reimbursement that would have otherwise been due based on volumes tied to the aggregate unpaid principal balance of the mortgage loans purchased by the Company in the related month. This reduction was only credited to the reimbursement applicable to the month in which the related mortgage was funded.

Effective as of September 12, 2016, pursuant to the terms of an amended and restated mortgage banking services agreement the applicable fulfillment fee percentages are (i) 0.35% for mortgage loans sold or delivered to Fannie Mae or Freddie Mac, and (ii) 0.85% for all other mortgage loans; provided however, that no fulfillment fee shall be due or payable to PLS with respect to any mortgage loans underwritten to Ginnie Mae guidelines. The Company does not hold the Ginnie Mae approval required to issue securities guaranteed by Ginnie Mae MBS and act as a servicer. Accordingly, under the agreement, PLS currently purchases loans salable in accordance with the Ginnie Mae Mortgage-Backed Securities Guide "as is" and without recourse of any kind from the Company at cost less any administrative fees paid by the Correspondent to PMT plus accrued interest and a sourcing fee ranging from two to three and one-half basis points, generally based on the average number of calendar days loans are held by the Company prior to purchase by PLS. The discretionary reductions and volume reimbursements described above are no longer in effect.

In consideration for the mortgage banking services provided by PLS with respect to the Company's acquisition of mortgage loans under PLS's early purchase program, PLS is entitled to fees accruing (i) at a rate equal to \$1,500 per annum per early purchase facility, and (ii) in the amount of \$35 for each mortgage loan that the Company acquires.

The mortgage banking services agreement expires on September 12, 2020, subject to automatic renewal for additional 18-month periods, unless terminated earlier in accordance with the terms of the agreement.

Following is a summary of correspondent production activity between the Company and PLS:

	Quarter ended 2017 (in thousands	2016	Six months er 2017	nded June 30, 2016
Mortgage loans fulfillment fees earned by PLS	\$21,107	\$19,111	\$37,677	\$32,046
Unpaid principal balance ("UPB") of mortgage loans				
fulfilled by PLS	\$5,918,027	\$5,174,020	\$10,549,933	\$8,433,383
Sourcing fees received from PLS included in				
Net gain on mortgage loans acquired for sale	\$3,204	\$2,824	\$6,065	\$4,773
UPB of mortgage loans sold to PLS	\$10,641,243	\$9,409,399	\$20,215,960	\$15,905,121
Purchases of mortgage loans acquired for sale at				
fair value from PLS	\$18,692	\$3,424	\$40,222	\$8,139
Tax service fee paid to PLS included in Other expense	\$1,891	\$1,464	\$3,269	\$2,471
Early purchase program fees paid to PLS included				
in Mortgage loan servicing fees	\$1	\$1	\$6	\$2

June 30,

2017 December 31, 2016

(in thousands)

Mortgage loans included in Mortgage loans acquired

for sale at fair value pending sale to PLS \$246,259 \$ 804,616

#### Mortgage Loan Servicing Activities

The Company, through its Operating Partnership, has a mortgage loan servicing agreement with PLS. The servicing agreement provides for servicing fees earned by PLS that are based on a percentage of the mortgage loan's unpaid principal balance or fixed per loan monthly amounts based on the delinquency, bankruptcy and/or foreclosure status of the serviced mortgage loan or the REO. PLS is also entitled to market-based fees and charges including boarding and deboarding fees, liquidation and disposition, assumption, modification and origination fees and late charges relating to mortgage loans it services for the Company. The servicing agreement was amended and restated as of September 12, 2016; however, the fee structure was not amended in any material respect.

- The base servicing fees for distressed mortgage loans are calculated based on a monthly per-loan dollar amount, with the actual dollar amount for each mortgage loan based on the delinquency, bankruptcy and/or foreclosure status of such mortgage loan or the related underlying real estate. Presently, the base servicing fees for distressed mortgage loans range from \$30 per month for current mortgage loans up to \$100 per month for mortgage loans where the borrower has declared bankruptcy. PLS is also entitled to certain activity-based fees for distressed mortgage loans that are charged based on the achievement of certain events. These fees range from 0.50% for a streamline modification to 1.50% for a liquidation and \$500 for a deed-in-lieu of foreclosure. PLS is not entitled to earn more than one liquidation fee, reperformance fee or modification fee in any 18-month period.
- The base servicing fee rate for REO is \$75 per month. To the extent that the Company rents its REO under an REO rental program, the Company pays PLS an REO rental fee of \$30 per month per REO, an REO property lease renewal fee of \$100 per lease renewal, and a property management fee in an amount equal to PLS' cost if property management services and/or any related software costs are outsourced to a third-party property management firm or 9% of gross rental income if PLS provides property management services directly. PLS is also entitled to retain any tenant paid application fees and late rent fees and seek reimbursement for certain third party vendor fees.
- The base servicing fees for non-distressed mortgage loans subserviced by PLS on the Company's behalf are also calculated through a monthly per-loan dollar amount, with the actual dollar amount for each loan based on whether the mortgage loan is a fixed-rate or adjustable-rate loan. The base servicing fees for loans subserviced on the Company's behalf are \$7.50 per month for fixed-rate loans and \$8.50 per month for adjustable-rate mortgage loans. To the extent that these non-distressed mortgage loans become delinquent, PLS is entitled to an additional servicing fee per mortgage loan ranging from \$10 to \$55 per month and based on the delinquency, bankruptcy and foreclosure status of the mortgage loan or \$75 per month if the underlying mortgaged property becomes REO. PLS is also entitled to customary ancillary income and certain market-based fees and charges, including boarding and deboarding fees, liquidation and disposition fees, assumption, modification and origination fees.
- PLS is required to provide a range of services and activities significantly greater in scope than the services provided in connection with a customary servicing arrangement because the Company does not have any employees or infrastructure. For these services, PLS received a supplemental fee of \$25 per month for each distressed whole loan. PLS is entitled to reimbursement for all customary, good faith reasonable and necessary out-of-pocket expenses incurred in performance of its servicing obligations.
- PLS, on behalf of the Company, is entitled to retain any incentive payments made to it and to which it is entitled under the U.S. Department of Treasury's Home Affordable Modification Plan ("HAMP"); provided, however, that with respect to any such incentive payments paid to PLS under HAMP in connection with a mortgage loan modification for which the Company previously paid PLS a modification fee, PLS shall reimburse the Company an amount equal to the incentive payments.

The term of the servicing agreement, as amended, expires on September 12, 2020, subject to automatic renewal for additional 18-month periods, unless terminated earlier in accordance with the terms of the servicing agreement.

Pursuant to the terms of an MSR recapture agreement, if PLS refinances mortgage loans for which the Company previously held the MSRs, PLS is generally required to transfer and convey to one of the Company's wholly-owned subsidiaries without cost to the Company, the MSRs with respect to new mortgage loans originated in those refinancings (or, under certain circumstances, other mortgage loans) that have an aggregate unpaid principal balance that is not less than 30% of the aggregate unpaid principal balance of all the loans so originated. Where the fair value of the aggregate MSRs to be transferred for the applicable month is less than \$200,000, PLS may, at its option, pay cash to the Company in an amount equal to such fair value instead of transferring such MSRs.

The MSR recapture agreement was amended and restated as of September 12, 2016; however, the fee structure was not amended in any material respect. The MSR recapture agreement expires, unless terminated earlier in accordance with the agreement, on September 12, 2020, subject to automatic renewal for additional 18-month periods.

Following is a summary of mortgage loan servicing fees earned by PLS and MSR recapture income earned from PLS:

	Quarter ended 2017	2016	Six months en 2017	nded June 30, 2016
	(in thousands	)		
Mortgage loans servicing fees:				
Mortgage loans acquired for sale at fair value:				
Base	\$82	\$79	\$147	\$135
Activity-based	176	172	319	287
	258	251	466	422
Mortgage loans at fair value:				
Distressed mortgage loans				
Base	1,755	2,908	3,713	6,267
Activity-based	1,767	8,518	4,157	11,967
	3,522	11,426	7,870	18,234
Mortgage loans held in VIE:				
Base	11	51	42	92
Activity-based		_	_	_
·	11	51	42	92
MSRs:				
Base	6,176	4,583	11,982	8,927
Activity-based	132	116	225	205
,	6,308	4,699	12,207	9,132
	\$10,099	\$16,427	\$20,585	\$27,880
MSR recapture income recognized included in Net	, ,,,,,,		, 2,2 2 2	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
mortgage loan servicing fees	\$234	\$311	\$526	\$440
Average investment in:				
Mortgage loans acquired for sale at fair value	\$1,274,817	\$1,422,945	\$1,174,417	\$1,170,720
Mortgage loans at fair value:	, , , , , , , , , , , , , , , , , , , ,	. , , ,	. , . , . ,	, , , , , , , ,
Distressed mortgage loans	\$1,199,786	\$1,791,429	\$1,264,752	\$1,925,605
U U	4 - 9 - 7 - 7 - 7 - 7 - 7	~ -, · / -, · <del>-</del> /	\$ 1,20 1,702	
Mortgage loans held in a VIE	\$352,589	\$437,542	\$356,271	\$446,013

### Management Fees

Under a management agreement, the Company pays PCM management fees as follows:

- A base management fee that is calculated quarterly and is equal to the sum of (i) 1.5% per year of average shareholders' equity up to \$2 billion, (ii) 1.375% per year of average shareholders' equity in excess of \$2 billion and up to \$5 billion, and (iii) 1.25% per year of average shareholders' equity in excess of \$5 billion.
- A performance incentive fee that is calculated at a defined annualized percentage of the amount by which "net income," on a rolling four-quarter basis and before deducting the incentive fee, exceeds certain levels of return on "equity."

The performance incentive fee is calculated quarterly and is equal to: (a) 10% of the amount by which net income for the quarter exceeds (i) an 8% return on equity plus the high watermark, up to (ii) a 12% return on equity; plus (b) 15%

of the amount by which net income for the quarter exceeds (i) a 12% return on equity plus the high watermark, up to (ii) a 16% return on equity; plus (c) 20% of the amount by which net income for the quarter exceeds a 16% return on equity plus the high watermark.

For the purpose of determining the amount of the performance incentive fee:

"Net income" is defined as net income or loss computed in accordance with GAAP and certain other non-cash charges determined after discussions between PCM and PMT's independent trustees and after approval by a majority of PMT's independent trustees.

"Equity" is the weighted average of the issue price per common share of all of PMT's public offerings, multiplied by the weighted average number of common shares outstanding (including restricted share units) in the rolling four-quarter period.

The "high watermark" is the quarterly adjustment that reflects the amount by which the net income (stated as a percentage of return on equity) in that quarter exceeds or falls short of the lesser of 8% and the Fannie Mae MBS yield (the target yield) for such quarter. The "high watermark" starts at zero and is adjusted quarterly. If the net income is lower than the target yield, the high watermark is increased by the difference. If the net income is higher than the target yield, the high watermark is reduced by the difference. Each time a performance incentive fee is earned, the high watermark returns to zero. As a result, the threshold amounts required for PCM to earn a performance incentive fee are adjusted cumulatively based on the performance of PMT's net income over (or under) the target yield, until the net income in excess of the target yield exceeds the then-current cumulative high watermark amount, and a performance incentive fee is earned.

The base management fee and the performance incentive fee are both payable quarterly in arrears. The performance incentive fee may be paid in cash or a combination of cash and PMT's common shares (subject to a limit of no more than 50% paid in common shares), at the Company's option.

The management agreement was amended and restated as of September 12, 2016; however, the fee structure was not amended in any material respect. Following is a summary of the base management and performance incentive fees payable to PCM recorded by the Company:

	Quarter June 30.	ended	Six mont June 30,	hs ended
	2017	2016	2017	2016
	(in thou	sands)		
Base management	\$5,334	\$5,199	\$10,342	\$10,551
Performance incentive	304		304	
	\$5,638	\$5,199	\$10,646	\$10,551

In the event of termination of the management agreement between the Company and PFSI, PFSI may be entitled to a termination fee in certain circumstances. The termination fee is equal to three times the sum of (a) the average annual base management fee, and (b) the average annual performance incentive fee earned by PFSI, in each case during the 24-month period before termination.

Expense Reimbursement and Amounts Payable to and Receivable from PFSI

Under the management agreement, PCM is entitled to reimbursement of its organizational and operating expenses, including third-party expenses, incurred on the Company's behalf, it being understood that PCM and its affiliates shall allocate a portion of their personnel's time to provide certain legal, tax and investor relations services for the direct benefit of the Company. With respect to the allocation of PCM's and its affiliates personnel, from and after September 12, 2016, PCM shall be reimbursed \$120,000 per fiscal quarter, such amount to be reviewed annually and to not preclude reimbursement for any other services performed by PCM or its affiliates.

The Company is required to pay PCM and its affiliates a pro rata portion of rent, telephone, utilities, office furniture, equipment, machinery and other office, internal and overhead expenses of PCM and its affiliates required for the Company's and its subsidiaries' operations. These expenses will be allocated based on the ratio of the Company's and its subsidiaries' proportion of gross assets compared to all remaining gross assets managed by PCM as calculated at each fiscal quarter end:

The Company reimbursed PCM and its affiliates for expenses:

	Quarter ended June 30, 2017 2016 (in thousands)		Six mont June 30, 2017	hs ended 2016
Reimbursement of:				
Common overhead incurred by PCM and its affiliates	\$1,593	\$2,435	\$3,027	\$4,996
Expenses incurred on the Company's behalf, net	398	(169)	653	(114)
	\$1,991	\$2,266	\$3,680	\$4,882
Payments and settlements during the year (1)	\$16,070	\$28,952	\$40,463	\$56,613

<sup>(1)</sup> Payments and settlements include payments and netting settlements made pursuant to master netting agreements between the Company and PFSI for operating, investment and financing activities itemized in this Note.

#### Amounts Receivable from and Payable to PFSI

Amounts receivable from and payable to PFSI are summarized below:

	June 30, 2017 (in thous	December 31, 2016 ands)
Receivable from PFSI:		
MSR recapture receivable	\$428	\$ 707
Other	4,585	6,384
	\$5,013	\$ 7,091
Payable to PFSI:		
Management fees	\$5,638	\$ 5,081
Mortgage loan servicing fees	4,231	5,465
Correspondent production fees	2,495	2,371
Allocated expenses and expenses paid by PFSI		
on PMT's behalf	2,324	1,046
Fulfillment fees	2,022	1,300
Conditional Reimbursement	900	900
Interest on Assets sold to PFSI under agreement		
to repurchase and Note payable to PFSI	115	253
	\$17,725	\$ 16,416

### **Investing Activities**

On February 29, 2016, the Company and PLS terminated that certain master spread acquisition and MSR servicing agreement that the parties entered into effective February 1, 2013 (the "2/1/13 Spread Acquisition Agreement") and all amendments thereto. In connection with the termination of the 2/1/13 Spread Acquisition Agreement, PLS reacquired from the Company all of its right, title and interest in and to all of the Fannie Mae ESS previously sold by PLS to the Company under the 2/1/13 Spread Acquisition Agreement and then subject to such 2/1/13 Spread Acquisition Agreement. On February 29, 2016, PLS also reacquired from the Company all of its right, title and interest in and to all of the Freddie Mac ESS previously sold to the Company by PLS. The amount of ESS sold by the Company to PLS under these reacquisitions was \$59.0 million.

Following is a summary of investing activities between the Company and PFSI:

	Quarter ended June 30,		led June Six mont June 30,	
	2017	2016	2017	2016
	(in thous	ands)		
ESS:				
Received pursuant to a recapture agreement	\$1,380	\$1,690	\$2,953	\$3,601
Repayments and sales	\$14,278	\$17,400	\$28,910	\$97,326
Interest income	\$4,366	\$5,713	\$9,013	\$12,728

Edgar Filing: PennyMac Mortgage Investment Trust - Form 10-Q

Net (loss) gain included in Net (loss) gain on				
investments:				
Valuation changes	\$(7,156)	\$(17,428)	\$(9,929)	\$(36,877)
Recapture income	1,271	1,604	2,674	3,426
	\$(5.885)	\$(15,824)	\$(7,255)	\$(33,451)

# Financing Activities

PFSI held 75,000 of the Company's common shares at both June 30, 2017 and December 31, 2016.

#### Repurchase Agreement with PLS

On December 19, 2016, the Company, through a wholly-owned subsidiary, PennyMac Holdings, LLC ("PMH"), entered into a master repurchase agreement with PLS (the "PMH Repurchase Agreement"), pursuant to which PMH may borrow from PLS for the purpose of financing PMH's participation certificates representing beneficial ownership in ESS. PLS then re-pledges such participation certificates to PNMAC GMSR ISSUER TRUST (the "Issuer Trust") under a master repurchase agreement by and among PLS, the Issuer Trust and Private National Mortgage Acceptance Company, LLC, as guarantor (the "PC Repurchase Agreement"). The Issuer Trust was formed for the purpose of allowing PLS to finance MSRs and ESS relating to such MSRs (the "GNMA MSR Facility").

In connection with the GNMA MSR Facility, PLS pledges and/or sells to the Issuer Trust participation certificates representing beneficial interests in MSRs and ESS pursuant to the terms of the PC Repurchase Agreement. In return, the Issuer Trust (a) has issued to PLS, pursuant to the terms of an indenture, the Series 2016-MSRVF1 Variable Funding Note, dated December 19, 2016, known as the "PNMAC GMSR ISSUER TRUST MSR Collateralized Notes, Series 2016-MSRVF1" (the "VFN"), and (b) may, from time to time pursuant to the terms of any supplemental indenture, issue to institutional investors additional term notes ("Term Notes"), in each case secured on a pari passu basis by the participation certificates relating to the MSRs and ESS. The maximum principal balance of the VFN is \$1,000,000,000.

The principal amount paid by PLS for the participation certificates under the PMH Repurchase Agreement is based upon a percentage of the market value of the underlying ESS. Upon PMH's repurchase of the participation certificates, PMH is required to repay PLS the principal amount relating thereto plus accrued interest (at a rate reflective of the current market and consistent with the weighted average note rate of the VFN and any outstanding Term Notes) to the date of such repurchase. PLS is then required to repay the Issuer Trust the corresponding amount under the PC Repurchase Agreement.

### Note Payable to PLS

Before entering into the PMH Repurchase Agreement, PLS was a party to a repurchase agreement between it and Credit Suisse First Boston Mortgage Capital LLC ("CSFB") (the "MSR Repo"), pursuant to which PLS financed Ginnie Mae MSRs and servicing advance receivables and pledged all of its rights and interests in any Ginnie Mae MSRs it owned to CSFB, and a separate acknowledgement agreement with respect thereto, by and among Ginnie Mae, CSFB and PLS. In connection with the MSR Repo, the Company was party to an underlying loan and security agreement with PLS, pursuant to which the Company was able to borrow up to \$150 million from PLS for the purpose of financing its investment in ESS (the "Underlying LSA"). The principal amount of the borrowings under the Underlying LSA was based upon a percentage of the market value of the ESS pledged to PLS, subject to the \$150 million sublimit described above. Pursuant to the Underlying LSA, the Company granted to PLS a security interest in all of its right, title and interest in, to and under the ESS pledged to secure the borrowings, and PLS, in turn, re-pledged such ESS to CSFB under the MSR Repo. Interest accrued on the Company's note relating to the Underlying LSA at a rate based on CSFB's cost of funds under the MSR Repo. The underlying LSA was terminated in connection with the execution of the PMH Agreement.

Conditional Reimbursement of Initial Public Offering ("IPO") Underwriting Fees

In connection with its IPO, the Company conditionally agreed to reimburse PCM up to \$2.9 million for underwriting fees paid to the IPO underwriters by PCM on the Company's behalf (the "Conditional Reimbursement"). Also in connection with its IPO, the Company agreed to pay the IPO underwriters up to \$5.9 million in contingent underwriting fees.

Following is a summary of financing activities between the Company and PFSI:

	Quarter	ended	Six mor	nths
	June 30,		ended J	une 30,
	2017	2016	2017	2016
	(in thou	sands)		
Interest expense	\$2,025	\$2,222	\$3,830	\$3,824
Conditional Reimbursements paid to PCM	<b>\$</b> —	<b>\$</b> —	<b>\$</b> —	<b>\$</b> —

June 30, December 31, 2017 2016 (in thousands)

Assets sold to PFSI under agreement to repurchase \$150,000 \$150,000

Conditional Reimbursement payable to PFSI included in

Accounts payable and accrued liabilities \$900 \$900

#### Note 4—Earnings Per Share

The Company grants restricted share units which entitle the recipients to receive dividend equivalents during the vesting period on a basis equivalent to the dividends paid to holders of common shares. Unvested share-based compensation awards containing non-forfeitable rights to receive dividends or dividend equivalents (collectively, "dividends") are classified as "participating securities" and are included in the basic earnings per share calculation using the two-class method.

Under the two-class method, all earnings (distributed and undistributed) are allocated to common shares and participating securities, based on their respective rights to receive dividends. Basic earnings per share is determined by dividing net income, reduced by income attributable to the participating securities, by the weighted-average common shares outstanding during the period.

Diluted earnings per share is determined by dividing net income attributable to diluted shareholders, which adds back to net income the interest expense, net of applicable income taxes, on the Company's exchangeable senior notes (the "Exchangeable Notes"), by the weighted-average common shares outstanding, assuming all dilutive securities were issued. In periods in which the Company records a loss, potentially dilutive securities are excluded from the diluted loss per share calculation, as their effect on loss per share is anti-dilutive.

The following table summarizes the basic and diluted earnings per share calculations:

			Six month June 30,	ns ended
	2017	2016	2017	2016
	(in thousa	inds except	t per share	
	amounts)			
Net income	\$28,780	\$(5,267)	\$57,516	\$9,229
Preferred share dividends	(2,336)	_	(2,907)	_
Effect of participating securities—share-based				
compensation awards	(230)	(307)	(529)	(718)
Net income available to common shareholders	\$26,214	\$(5,574)	\$54,080	\$8,511
Net income available to common shareholders	\$26,214	\$(5,574)	\$54,080	\$8,511
Interest on Exchangeable Notes, net of income taxes	2,188		4,374	
Diluted net income attributable to common				
shareholders	\$28,402	\$(5,574)	\$58,454	\$8,511
Weighted-average basic shares outstanding	66,761	68,446	66,740	70,165
Dilutive securities:				
Shares issuable pursuant to exchange of the				
Exchangeable Notes	8,467	_	8,467	_
Diluted weighted-average number of shares				
outstanding				
	75,228	68,446	75,207	70,165

Diluted earnings (loss) per share

\$0.38

\$(0.08) \$0.78

\$0.12

Calculation of diluted earnings per share requires certain potentially dilutive shares to be excluded based on whether the inclusion of such shares in the diluted earnings per share calculation would be antidilutive. The following table summarizes the potentially dilutive shares excluded from the diluted earnings per share calculation for the periods as inclusion of such shares would have been antidilutive:

				June
Shares issuable under share-based compensation awards	776	766	793	766
Shares issuable pursuant to exchange of the				
Exchangeable Notes		8,467	_	8,467

#### Note 5—Loan Sales and Variable Interest Entities

The Company is a variable interest holder in various special purpose entities that relate to its mortgage loan transfer and financing activities. These entities are classified as VIEs for accounting purposes. The Company has distinguished its involvement with VIEs between those VIEs which the Company does not consolidate and those VIEs which the Company consolidates.

### Unconsolidated VIEs with Continuing Involvement

The following table summarizes cash flows between the Company and transferees in transfers of mortgage loans that are accounted for as sales where the Company maintains continuing involvement with the mortgage loans, as well as UPB information at end of period:

	Quarter ende	ed June 30.	Six months en 30,	nded June
	2017 (in thousand	2016	2017	2016
Cash flows:		,		
Proceeds from sales	\$5,788,605	\$5,231,974	\$10,647,450	\$8,465,753
Mortgage loan servicing fees received (1)	\$39,705	\$29,179	\$76,986	\$56,755

### (1) Net of guarantee fees

	June 30,	December 31,
	2017	2016
	(in thousands)	
UPB of mortgage loans outstanding	\$62,751,484	\$56,303,664
Delinquent mortgage loans:		
30-89 days delinquent	\$281,790	\$262,467
90 or more days delinquent:		
Not in foreclosure	\$83,821	\$53,200
In foreclosure	\$20,194	\$25,180
Bankruptcy	\$42,173	\$36,357
Custodial funds managed by the Company (1)	\$972,911	\$736,398

<sup>(1)</sup> Custodial funds include borrower and investor custodial cash accounts relating to mortgage loans serviced under the servicing agreements and are not recorded on the Company's consolidated balance sheets. The Company earns placement fees on certain of the custodial funds it manages on behalf of the mortgage loans' investors, which are included in Interest income in the Company's consolidated statements of operations.

### Consolidated VIEs

Credit Risk Transfer Agreements

The Company, through its wholly-owned subsidiary, PennyMac Corp. ("PMC"), entered into CRT Agreements with Fannie Mae, pursuant to which PMC, through subsidiary trust entities, sells pools of mortgage loans into Fannie Mae-guaranteed securitizations while retaining a portion of the credit risk underlying such mortgage loans ("Recourse Obligations") as part of the retention of an interest-only ownership interest in such mortgage loans. The mortgage loans subject to the CRT Agreements are transferred by PMC to subsidiary trust entities which sell the mortgage loans into Fannie Mae mortgage loan securitizations. Transfers of mortgage loans subject to CRT Agreements receive sale accounting treatment upon fulfillment of the criteria for sale recognition contained in the Transfers and Servicing topic of the ASC. The pledged cash represents the Company's maximum contractual exposure to claims under its Recourse Obligations and is the sole source of settlement of losses under the CRT Agreements. Gains and losses on derivatives related to CRT Agreements are included in Net gain on investments in the consolidated statements of operations.

# Following is a summary of the CRT Agreements:

	Quarter ende	ed June 30.	Six months of 30,	ended June	
	2017 (in thousand	2016	2017	2016	
UPB of mortgage loans sold under CRT Agreements	\$3,760,825	\$3,162,746	\$5,595,121	\$5,084,744	
Deposits of cash securing CRT Agreements	\$41,355	\$126,031	\$57,148	\$192,737	
Increase in commitments to fund Deposits securing					
CRT Agreements resulting from sale of mortgage					
loans under CRT Agreements	\$98,722	<b>\$</b> —	\$146,872	<b>\$</b> —	
Interest earned on Deposits securing CRT Agreements	\$855	\$235	\$1,264	\$375	
Gains recognized on CRT Agreements					
included in Net gain (loss) on investments					
Realized	\$11,361	\$3,859	\$21,650	\$6,395	
Resulting from valuation changes	27,087	3,905	37,106	(2,774	)
	38,448	7,764	58,756	3,621	
Change in fair value of interest-only security payable					
at fair value	(5,595)	<del>-</del>	(7,316)	<del></del>	
	\$32,853	\$7,764	\$51,440	\$3,621	
Payments made to settle losses	\$262	<b>\$</b> —	\$411	<b>\$</b> —	
•					

	June 30, 2017	December 31, 2016
	(in thousands	s)
UPB of mortgage loans subject to credit guarantee obligations	\$19,301,982	\$14,379,850
Delinquency status (in UPB):		
Current—89 days delinquent	\$19,285,561	\$14,372,247
90 or more days delinquent	\$13,922	\$5,711
Foreclosure	\$2,499	\$1,892
Carrying value of CRT Agreements:		
Derivative assets	\$52,716	\$15,610
Deposits securing CRT Agreements	\$503,108	\$450,059
Interest-only security payable at fair value	\$6,577	\$4,114
CRT Agreement assets pledged to secure assets sold		
under agreements to repurchase:		
Deposits securing credit risk CRT Agreements	\$410,512	\$414,610
Derivative assets	\$19,291	\$9,078
Commitments to fund Deposits securing credit risk		
transfer agreements	\$247,942	\$92,109

### Jumbo Mortgage Loan Financing

On September 30, 2013, the Company completed a securitization transaction in which PMT Loan Trust 2013-J1, a VIE, issued \$537.0 million in UPB of certificates backed by fixed-rate prime jumbo mortgage loans, at a 3.9% weighted yield. The Company initially retained \$366.8 million in fair value of such certificates. During the quarter ended June 30, 2016 the Company sold \$100.6 million in UPB of those certificates, which reduced the fair value of the certificates retained by the Company to \$9.4 million as of June 30, 2017. The Company included the proceeds from the sales in Asset backed financing of a variable interest entity at fair value. The Company issued no certificates during the quarter ended June 30, 2017.

#### Note 6—Derivative Activities

The Company's activities involving derivative financial instruments are summarized below:

The Company recognizes IRLCs when it commits to purchase mortgage loans acquired for sale.

The Company enters into CRT Agreements whereby it retains a Recourse Obligation relating to certain mortgage loans it sells into Fannie Mae guaranteed securitizations and an interest-only ownership interest in such mortgage loans. The fair values of the Recourse Obligations and the Company's retention of the interest-only ownership interest are accounted for as derivative financial instruments.

The Company engages in interest rate risk management activities in an effort to reduce the variability of earnings caused by the effects of changes in interest rates on the fair value of certain of its assets and liabilities. To manage the price risk resulting from interest rate risk, the Company uses derivative financial instruments acquired with the intention of moderating the risk that changes in market interest rates will result in unfavorable changes in the fair value of the Company's MBS, inventory of mortgage loans acquired for sale, mortgage loans held in a VIE, ESS, IRLCs and MSRs.

The Company records all derivative financial instruments at fair value and records changes in fair value in current period results of operations.

The Company is exposed to price risk relative to the IRLCs it issues to correspondent sellers and to the mortgage loans it purchases as a result of issuing the IRLCs. The Company bears price risk from the time an IRLC is issued to a correspondent seller until the time the purchased mortgage loan is sold. The Company is exposed to loss if market mortgage interest rates increase, because market interest rate increases generally cause the fair value of the IRLC or mortgage loan acquired for sale to decrease. The Company is exposed to losses related to its investment in MSRs if market mortgage interest rates decrease, because market interest rate decreases generally cause the fair value of MSRs to decrease.

### Derivative Notional Amounts and Fair Value of Derivatives

The Company had the following derivative assets and liabilities recorded within Derivative assets and Derivative liabilities and related margin deposits recorded in Other assets on the consolidated balance sheets:

	June 30, 2017 Fair value		December 31, 2016 Fair value			
	Notional Derivative Derivative				Derivative	
Instrument	amount	assets	liabilities	amount	assets	liabilities
	(in thousands		11401111110		433013	11401111110
Derivatives not designated as hedging	(=== ==================================	,				
instruments:						
Not subject to master netting arrangements:						
Interest rate lock commitments	1,931,374	\$3,542	\$ 3,147	1,420,468	\$7,069	\$3,292
CRT Agreements	19,301,982	52,716	_	14,379,850	15,610	_
Subject to master netting agreements-used						
for hedging purposes:						
Forward purchase contracts	1,933,390	458	7,631	4,840,707	30,879	7,619
Forward sale contracts	3,644,636	13,358	655	6,148,242	13,164	17,974
MBS put options	1,475,000	_	_	925,000	1,697	_
MBS call options	200,000	2,695	_	750,000	142	—
Call options on interest rate futures	200,000	2,531		200,000	63	_
Put options on interest rate futures	925,000	_	_	550,000	2,469	_
Swap futures	175,000	_	_	150,000	_	_
Eurodollar future contracts	1,139,000	_	_	1,351,000	_	_
Total derivative instruments before netting		75,300	11,433		71,093	28,885
Netting		(1,425)	(2,577)		(37,384)	(19,312)
		\$73,875	\$ 8,856		\$33,709	\$9,573
Margin deposits placed with (received						
from)						
derivatives counterparties included in						
Other						
assets (Accounts payable and accrued						
liabilities)		\$1,154			\$(18,071)	
Derivative assets pledged to secure assets		+ -,			+ (-0,01-)	
sold						
under agreements to repurchase		\$19,291			\$9,078	
ander agreements to reparemase		Ψ1/,4/1			Ψ2,070	

The following tables summarize the notional amount activity for derivative contracts used to hedge the Company's MBS, inventory of mortgage loans acquired for sale, mortgage loans at fair value held in a VIE, IRLCs and MSRs and for CRT Agreements.

	Quarter ended June 30, 2017				
	Balance,			Balance,	
	beginning		Dispositions/	end	
Instrument	of period	Additions	expirations	of period	
	(in thousands)	)			
CRT Agreements	15,978,755	3,760,825	(437,598	19,301,982	
Forward purchase contracts	4,115,159	15,486,147	(17,667,916)	1,933,390	
Forward sales contracts	5,673,414	21,590,830	(23,619,608)	3,644,636	
MBS put options	950,000	525,000	_	1,475,000	
MBS call options	_	200,000	_	200,000	
Call options on interest rate futures	262,500	62,500	(125,000	200,000	
Put options on interest rate futures	500,000	1,625,000	(1,200,000)	925,000	
Swap futures	150,000	550,000	(525,000	175,000	
Eurodollar future contracts	1,240,000	_	(101,000	1,139,000	
Treasury future buy contracts		6,400	(6,400	<b>—</b>	
Treasury future sale contracts	_	6,400	(6,400		

	Quarter ended June 30, 2016						
	Balance,			Balance,			
	beginning		Dispositions/	end			
Instrument	of period	Additions	expirations	of period			
	(in thousand	ls)					
CRT Agreements	5,931,409	3,162,746	(117,194)	8,976,961			
Forward purchase contracts	2,981,134	15,361,702	(14,152,487)	4,190,349			
Forward sales contracts	3,466,697	21,138,542	(20,257,713)	4,347,526			
MBS call option	425,000	1,975,000	(875,000)	1,525,000			
Swap futures	12,500	12,500	(12,500)	12,500			
Eurodollar future contracts	1,734,000		(191,000)	1,543,000			
Call options on interest rate futures	1,250,000	275,000	(1,000,000)	525,000			
Put options on interest rate futures	1,525,000	550,000	(1,650,000)	425,000			

	Six months ended June 30, 2017					
	Balance,			Balance,		
	beginning		Dispositions/	end		
Instrument	of period	Additions	expirations	of period		
	(in thousands)	)				
CRT Agreements	14,379,850	5,595,121	(672,989)	19,301,982		
Forward purchase contracts	4,840,707	34,392,176	(37,299,493)	1,933,390		
Forward sales contracts	6,148,242	45,815,933	(48,319,539)	3,644,636		
MBS put options	925,000	1,925,000	(1,375,000)	1,475,000		
MBS call options	750,000	200,000	(750,000)	200,000		
Call options on interest rate futures	200,000	125,000	(125,000)	200,000		
Put options on interest rate futures	550,000	3,375,000	(3,000,000)	925,000		
Swap futures	150,000	850,000	(825,000)	175,000		
Eurodollar future sale contracts	1,351,000	101,000	(313,000)	1,139,000		
Treasury future buy contracts		55,700	(55,700)			
Treasury future sale contracts	_	55,700	(55,700)	_		

	Six months ended June 30, 2016					
	Balance,			Balance,		
	beginning		Dispositions/	end		
Instrument	of period	Additions	expirations	of period		
	(in thousand	ds)				
CRT Agreements	4,546,265	5,084,744	(654,048)	8,976,961		
Forward purchase contracts	2,469,550	25,430,142	(23,709,343)	4,190,349		
Forward sales contracts	2,450,642	35,292,415	(33,395,531)	4,347,526		
MBS call option	375,000	2,725,000	(1,575,000)	1,525,000		
Swap futures	_	25,000	(12,500)	12,500		
Eurodollar future sale contracts	1,755,000	80,000	(292,000)	1,543,000		
Call options on interest rate futures	50,000	1,575,000	(1,100,000)	525,000		
Put options on interest rate futures	1,600,000	2,600,000	(3,775,000)	425,000		

Netting of Financial Instruments

The Company has elected to net derivative asset and liability positions, and cash collateral obtained from (or posted to) its counterparties when subject to a legally enforceable master netting arrangement. The derivative financial instruments that are not subject to master netting arrangements are IRLCs and the derivatives related to CRT Agreements. As of June 30, 2017 and December 31, 2016, the Company did not enter into reverse repurchase agreements or securities lending transactions that are required to be disclosed in the following tables.

# Offsetting of Derivative Assets

Following is a summary of net derivative assets.

	June 30, 2017		Net	December Net		Net
		Gross	amounts		Gross	amounts
		amounts	of assets		amounts	of assets
	Gross	offset	presented	Gross	offset	presented
	amounts	in the	in the	amounts	in the	in the
	of	consolidated	consolidated	of	consolidated	consolidated
	recognize	echalance	balance	recognize	echalance	balance
	assets (in thousa	sheet	sheet	assets	sheet	sheet
Derivative assets		,				
Not subject to master netting						
arrangements:						
Interest rate lock commitments	\$3,542	\$ —	\$ 3,542	\$7,069	\$ —	\$ 7,069
CRT Agreements	52,716	_	52,716	15,610		15,610
	56,258	_	56,258	22,679	_	22,679
Subject to master netting arrangements:						
Forward purchase contracts	458	_	458	30,879	_	30,879
Forward sale contracts	13,358	_	13,358	13,164		13,164
MBS put options	_	_	_	1,697	_	1,697
MBS call options	2,695	_	2,695	142		142
Call options on interest rate futures	2,531	_	2,531	63	_	63
Put options on interest rate futures	_	_	<u>—</u>	2,469		2,469
Netting	_	(1,425)	(1,425)	_	(37,384	(37,384)
	19,042	(1,425)	17,617	48,414	(37,384	) 11,030
	\$75,300	\$ (1,425)	\$ 73,875	\$71,093	\$ (37,384	\$ 33,709

# Derivative Assets, Financial Instruments and Collateral Held by Counterparty

The following table summarizes by significant counterparty the amount of derivative asset positions after considering master netting arrangements and financial instruments or cash pledged that do not meet the accounting guidance qualifying for setoff accounting.

	June 30, 2 Net	2017				Decembe Net	er 31, 20	16		
	amount	Gross a	mounts			amount	Gross	amounts		
	of assets	not offs	et in the			of assets	not off	set in the		
	presented	consoli	dated			presented	l consol	idated		
	in the consolida	balance ited	sheet Cash			in the consolida		e sheet Cash		
	balance	Financi	abollatera	al I	Net	balance	Financ	ia <b>c</b> ollater	al	Net
	sheet	instrum	e <b>nts</b> eived	l a	amount	sheet	instrur	ne <b>nts</b> eive	d	amount
	(in thousa	ands)								
CRT Agreements	\$52,716	\$ —	\$	—5	52,716	\$15,610	\$ —	\$	—	\$15,610
Interest rate lock commitments	3,542			_	3,542	7,069			—	7,069
Goldman Sachs	3,311	_		—	3,311	1,164	_		—	1,164
Morgan Stanley Bank, N.A.	2,604			—	2,604		_		—	_
RBS Securities Inc.	2,531	_		—	2,531	_	_		—	
Bank of America, N.A.	2,162			_	2,162	1,881			—	1,881
Citibank	1,648	_		—	1,648	_	_		—	_
Barclays Capital	1,395	_		—	1,395	855			_	855
Credit Suisse	1,152	_		—	1,152	_	_		—	
JPMorgan Chase & Co.	948			_	948				—	_
Royal Bank of Canada	400	_		—	400	1,194	_		—	1,194
RJ O'Brien & Associates, LLC	_	_		—	_	1,531	_		—	1,531
Bank of Oklahoma	_	_		—	_	629	_		_	629
Jefferies Group, Inc	_			_	_	967			—	967
Other	1,466	_		_	1,466	2,809	_		_	2,809
	\$73,875	\$ —	\$	—5	\$73,875	\$33,709	\$ —	\$	_	\$33,709

# Offsetting of Derivative Liabilities and Financial Liabilities

Following is a summary of net derivative liabilities and assets sold under agreements to repurchase. Assets sold under agreements to repurchase do not qualify for setoff accounting.

	June 30, 2017		Net	December 3	1, 2016	Net
		Gross	amounts		Gross	amounts
		amounts	of liabilities		amounts	of liabilities
	Gross	offset	presented	Gross	offset	presented
	amounts	in the	in the	amounts	in the	in the
	of	consolidated	consolidated	of	consolidated	consolidated
	recognized	balance	balance	recognized	balance	balance
	liabilities (in thousand	sheet	sheet	liabilities	sheet	sheet
Derivative liabilities:	(III uiro usuiro	-,				
Not subject to master netting						
arrangements:						
Interest rate lock commitments	\$3,147	\$ —	\$3,147	\$3,292	\$ —	\$3,292
	3,147		3,147	3,292		3,292
Subject to master netting arrangements:						
Forward purchase contracts	7,631	_	7,631	7,619	<u> </u>	7,619
Forward sales contracts	655		655	17,974	_	17,974
Netting		(2,577)	(2,577)		(19,312)	(19,312)
_	8,286	(2,577)	5,709	25,593	(19,312)	6,281
	11,433	(2,577)	8,856	28,885	(19,312)	9,573
Assets sold under agreements to repurchase:						
UPB	3,498,916		3,498,916	3,784,685	_	3,784,685
Unamortized debt issuance costs	(917)	_	(917)	(684)	<del></del>	(684)
	3,497,999	<del></del>	3,497,999	3,784,001	_	3,784,001
	\$3,509,432	\$ (2,577)	\$3,506,855	\$3,812,886	\$ (19,312)	\$3,793,574

## Derivative Liabilities, Financial Liabilities and Collateral Pledged by Counterparty

The following table summarizes by significant counterparty the amount of derivative liabilities and assets sold under agreements to repurchase after considering master netting arrangements and financial instruments or cash pledged that do not meet the accounting guidance qualifying for setoff accounting. All assets sold under agreements to repurchase represent sufficient collateral or exceed the liability amount recorded on the consolidated balance sheet.

	June 30, 201 Net amount				December 33 Net amount		
	of	Gross amount	ts		o.f	Gross amount	ts
	of liabilities	not offset in t	he		of liabilities	not offset in t	he
	. 1	11.1 . 1			. 1	11.1 . 1	
	presented	consolidated			presented	consolidated	
	in the consolidated	balance sheet	Cash		in the consolidated	balance sheet	Cash
	balance	Financial	collate	raNet	balance	Financial	collateraNet
	sheet (in thousands	instruments	pledge	damount	sheet	instruments	pledgedamount
Interest rate lock	(111 1110 110 1111)	-,					
commitments	\$3,147	<b>\$</b> —	\$ -	-\$3,147	\$3,292	<b>\$</b> —	\$ —\$3,292
Credit Suisse First Boston Mortgage							
Capital LLC	1,003,884	(1,003,884)	_		1,181,441	(1,181,235)	— 206
Bank of America, N.A.	968,749	(968,749)			847,683	(847,683)	
Citibank	451,096	(451,096)	_		575,092	(573,589)	<b>—</b> 1,503
JPMorgan Chase & Co.	374,354	(374,354)	_		544,009	(542,542)	
Daiwa Capital Markets	162,742	(162,742)	_		177,316	(177,077)	<b>—</b> 239
Morgan Stanley Bank, N.A.	153,434	(153,434)	_		143,951	(142,055)	<b>—</b> 1,896
Wells Fargo, N.A.	110,234	(110,234)	_		116,648	(116,648)	
Barclays Capital	130,917	(130,917)	_		92,796	(92,796)	
Royal Bank of Canada	96,881	(96,881)	_		63,926	(63,926)	
BNP Paribas	46,625	(46,625)	_		47,785	(47,134)	<b>—</b> 651
Jefferies Group LLC	3,026		_	- 3,026	98		— 98
UBS Securities LLC	1,497	_	_	- 1,497	<u>—</u>	<u>—</u>	
Other	1,186	<del>_</del>	_	- 1,186	221	<del></del>	<b>—</b> 221
Unamortized debt issuance							
costs	(917)	917	_		(684)	684	
	\$3,506,855	\$(3,497,999)	\$ -	-\$8,856	\$3,793,574	\$(3,784,001)	\$ —\$9,573

Following are the net gains (losses) recognized by the Company on derivative financial instruments and the consolidated statements of operations line items where such gains and losses are included:

		Quarter ended June 30,		Six month June 30,	s ended
Derivative activity	Statement of operations line	2017 (in thousa	2016 nds)	2017	2016
Interest rate lock commitments	Net gain on mortgage loans	·	ŕ		
	acquired for sale	\$24,372	\$44,112	\$45,438	\$75,475
Hedged item:					
Interest rate lock commitments and	Net gain on mortgage loans				
mortgage loans acquired for sale	acquired for sale	\$(11,773)	\$(29,210)	\$(15,365)	\$(59,882)
Mortgage servicing rights	Net loan servicing fees	\$2,391	\$27,433	\$(6,307)	\$57,393
Fixed-rate assets and LIBOR- indexed					
repurchase agreements	Net gain on investments	\$(4,889)	\$862	\$(9,033)	\$698
CRT agreements	Net gain on investments	\$38,448	\$7,764	\$58,756	\$3,621

### Note 7—Fair Value

The Company's consolidated financial statements include assets and liabilities that are measured based on their fair values. Measurement at fair value may be on a recurring or nonrecurring basis depending on the accounting principles applicable to the specific asset or liability and whether the Manager has elected to carry the item at its fair value as discussed in the following paragraphs.

The Company groups its assets and liabilities at fair value in three levels, based on the markets in which the assets and liabilities are traded and the observability of the inputs used to determine fair value. These levels are:

Level 1—Quoted prices in active markets for identical assets or liabilities.

Level 2—Prices determined or determinable using other significant observable inputs. Observable inputs are inputs that other market participants would use in pricing the asset or liability and are developed based on market data obtained from sources independent of the Company. These may include quoted prices for similar assets or liabilities, interest rates, prepayment speeds, credit risk and other inputs.

Level 3—Prices determined using significant unobservable inputs. In situations where significant observable inputs are unavailable unobservable inputs may be used. Unobservable inputs reflect the Company's own judgments about the factors that market participants use in pricing assets and liabilities, and are based on the best information available in the circumstances.

As a result of the difficulty in observing certain significant valuation inputs affecting "Level 3" fair value assets and liabilities, the Manager is required to make judgments regarding these items' fair values. Different persons in possession of the same facts may reasonably arrive at different conclusions as to the inputs to be applied in valuing these assets and liabilities and to their fair values. Likewise, due to the general illiquidity of some of these assets and liabilities, subsequent transactions may be at values significantly different from those reported.

### Fair Value Accounting Elections

The Manager identified all of the Company's non-cash financial assets and MSRs relating to non-commercial real estate secured mortgage loans with initial interest rates of more than 4.5%, to be accounted for at fair value. The Manager has elected to account for these assets at fair value so such changes in fair value will be reflected in income as they occur and more timely reflect the results of the Company's performance.

The Manager has also identified the Company's asset-backed financing of a VIE and interest only security payable at fair value to be accounted for at fair value to reflect the generally offsetting changes in fair value of these borrowings to changes in fair value of mortgage loans at fair value or other assets collateralizing these financings. For other borrowings, the Manager has determined that historical cost accounting is more appropriate because under this method debt issuance costs are amortized over the term of the debt, thereby matching the debt issuance cost to the periods benefiting from the availability of the debt.

# Financial Statement Items Measured at Fair Value on a Recurring Basis

29

Following is a summary of financial statement items that are measured at fair value on a recurring basis:

	June 30, Level 1 (in thous	Level 2	Level 3	Total
Assets:				
Short-term investments	\$77,366	\$	\$	\$77,366
Mortgage-backed securities at fair value	_	1,065,540	_	1,065,540
Mortgage loans acquired for sale at fair value		1,318,603	_	1,318,603
Mortgage loans at fair value	_	343,192	1,184,620	1,527,812
Excess servicing spread purchased from PFSI			261,796	261,796
Derivative assets:				
Interest rate lock commitments			3,542	3,542
CRT Agreements	_	_	52,716	52,716
Forward purchase contracts		458	_	458
Forward sales contracts		13,358	_	13,358
MBS put options			_	
MBS call options		2,695	_	2,695
Call options on interest rate futures	2,531	_		2,531
Total derivative assets before netting	2,531	16,511	56,258	75,300
Netting			_	(1,425)
Total derivative assets after netting	2,531	16,511	56,258	73,875
Mortgage servicing rights at fair value		_	77,624	77,624
	\$79,897	\$2,743,846	\$1,580,298	\$4,402,616
Liabilities:				
Asset-backed financing of a VIE at fair value	\$	\$329,459	<b>\$</b> —	\$329,459
Interest-only security payable at fair value		_	6,577	6,577
Derivative liabilities:				
Interest rate lock commitments		_	3,147	3,147
Forward purchase contracts		7,631	_	7,631
Forward sales contracts		655		655
Total derivative liabilities before netting		8,286	3,147	11,433
Netting		_		(2,577)
Total derivative liabilities after netting	_	8,286	3,147	8,856
	\$—	\$337,745	\$9,724	\$344,892

Assets:   Short-term investments   \$122,088		December Level 1 (in thousand	Level 2	Level 3	Total
Mortgage-backed securities at fair value         —         865,061         —         865,061           Mortgage loans acquired for sale at fair value         —         1,673,112         —         1,673,112           Mortgage loans at fair value         —         367,169         1,354,572         1,721,741           Excess servicing spread purchased from PFSI         —         —         288,669         288,669           Derivative assets:         —         —         7,069         7,069           CRT Agreements         —         —         15,610         15,610           Forward purchase contracts         —         —         15,610         15,610           Forward purchase contracts         —         —         13,164         —         13,164           MBS gut options         —         1,697         —         1,697           MBS call options on interest rate futures         63         —         —         63           Put options on interest rate futures         2,469         —         —         2,469           Total derivative assets         2,532         45,882         22,679         71,093           Netting         —         —         64,136         64,136           Total derivative liabilit	Assets:				
Mortgage loans acquired for sale at fair value         —         1,673,112         —         1,673,112           Mortgage loans at fair value         —         367,169         1,354,572         1,721,741           Excess servicing spread purchased from PFSI         —         —         288,669         288,669           Derivative assets:         —         —         7,069         7,069           CRT Agreements         —         —         15,610         15,610           Forward purchase contracts         —         30,879         —         30,879           Forward purchase contracts         —         30,879         —         30,879           Forward sales contracts         —         13,164         —         13,164           MBS put options         —         1,697         —         1,697           MBS call options on interest rate futures         63         —         —         63           Put options on interest rate futures         2,469         —         —         2,469           Total derivative assets         2,532         45,882         22,679         71,093           Netting         —         —         —         64,136         64,136           Mortgage servicing rights at fair value	Short-term investments	\$122,088	\$	\$	\$122,088
Mortgage loans at fair value         —         367,169         1,354,572         1,721,741           Excess servicing spread purchased from PFSI         —         —         288,669         288,669           Derivative assets:         —         —         7,069         7,069           CRT Agreements         —         —         15,610         15,610           Forward purchase contracts         —         30,879         —         30,879           Forward sales contracts         —         13,164         —         13,164           MBS put options         —         1,697         —         1,697           MBS call options on interest rate futures         63         —         —         63           Put options on interest rate futures         2,469         —         —         2,469           Total derivative assets         2,532         45,882         22,679         71,093           Netting         —         —         —         64,136         64,136           Total derivative assets after netting         8,124,620         \$2,951,224         \$1,730,056         \$4,768,516           Liabilities:         —         —         64,136         64,136           Asset-backed financing of the VIE at fair value<	Mortgage-backed securities at fair value	_	865,061	_	865,061
Excess servicing spread purchased from PFSI         —         —         288,669         288,669           Derivative assets:         Interest rate lock commitments         —         —         7,069         7,069           CRT Agreements         —         —         15,610         15,610           Forward purchase contracts         —         30,879         —         30,879           Forward sales contracts         —         13,164         —         13,164           MBS put options         —         1,697         —         1,697           MBS call options         —         1,697         —         1,697           MBS call options on interest rate futures         63         —         —         63           Put options on interest rate futures         2,469         —         —         2,469           Total derivative assets         2,532         45,882         22,679         71,093           Netting         —         —         —         (37,384)         )           Total derivative assets after netting         2,532         45,882         22,679         33,709           Mortgage servicing rights at fair value         —         —         64,136         64,136           Liabil	Mortgage loans acquired for sale at fair value	_	1,673,112	_	1,673,112
Derivative assets:   Interest rate lock commitments	Mortgage loans at fair value	_	367,169	1,354,572	1,721,741
Interest rate lock commitments         —         —         7,069         7,069           CRT Agreements         —         —         15,610         15,610           Forward purchase contracts         —         30,879         —         30,879           Forward sales contracts         —         13,164         —         13,164           MBS put options         —         1,697         —         1,697           MBS call options on interest rate futures         63         —         —         63           Put options on interest rate futures         2,469         —         —         2,469           Total derivative assets         2,532         45,882         22,679         71,093           Netting         —         —         —         (37,384)         )           Total derivative assets after netting         2,532         45,882         22,679         33,709           Mortgage servicing rights at fair value         —         —         64,136         64,136           Liabilities:         —         —         4,114         4,114           Derivative liabilities:         —         —         3353,898         —         \$353,898           Interest rate lock commitments         —	Excess servicing spread purchased from PFSI	_		288,669	288,669
CRT Agreements         —         —         15,610         15,610           Forward purchase contracts         —         30,879         —         30,879           Forward sales contracts         —         13,164         —         13,164           MBS put options         —         1,697         —         1,697           MBS call options         —         142         —         142           Call options on interest rate futures         63         —         —         63           Put options on interest rate futures         2,469         —         —         2,469           Total derivative assets         2,532         45,882         22,679         71,093           Netting         —         —         —         (37,384)           Total derivative assets after netting         2,532         45,882         22,679         33,709           Mortgage servicing rights at fair value         —         —         64,136         64,136           Liabilities:         —         —         4,114         4,114           Derivative liabilities:         —         \$353,898         —         \$353,898           Interest rate lock commitments         —         —         3,292         3,292 <td>Derivative assets:</td> <td></td> <td></td> <td></td> <td></td>	Derivative assets:				
Forward purchase contracts         —         30,879         —         30,879           Forward sales contracts         —         13,164         —         13,164           MBS put options         —         1,697         —         1,697           MBS call options         —         142         —         142           Call options on interest rate futures         63         —         —         63           Put options on interest rate futures         2,469         —         —         2,469           Total derivative assets         2,532         45,882         22,679         71,093           Netting         —         —         —         (37,384)         )           Total derivative assets after netting         2,532         45,882         22,679         33,709           Mortgage servicing rights at fair value         —         —         64,136         64,136           Mortgage servicing rights at fair value         —         —         64,136         64,136           Liabilities:         —         —         \$353,898         —         \$353,898           Interest-only security payable at fair value         —         —         4,114         4,114           Derivative liabilities:	Interest rate lock commitments			7,069	7,069
Forward sales contracts         —         13,164         —         13,164           MBS put options         —         1,697         —         1,697           MBS call options         —         142         —         142           Call options on interest rate futures         63         —         —         63           Put options on interest rate futures         2,469         —         —         2,469           Total derivative assets         2,532         45,882         22,679         71,093           Netting         —         —         —         (37,384)         )           Total derivative assets after netting         2,532         45,882         22,679         33,709           Mortgage servicing rights at fair value         —         —         64,136         64,136           Mortgage servicing rights at fair value         —         —         64,136         64,136           Liabilities:         —         —         4,114         4,114           Liabilities:         —         —         4,114         4,114           Derivative liabilities:         —         —         3,292         3,292           Forward purchase contracts         —         —         7,619	CRT Agreements	_	_	15,610	15,610
MBS put options         —         1,697         —         1,697           MBS call options         —         142         —         142           Call options on interest rate futures         63         —         —         63           Put options on interest rate futures         2,469         —         —         2,469           Total derivative assets         2,532         45,882         22,679         71,093           Netting         —         —         —         (37,384)         )           Total derivative assets after netting         2,532         45,882         22,679         33,709           Mortgage servicing rights at fair value         —         —         64,136         64,136           Mortgage servicing rights at fair value         —         —         64,136         64,136           Liabilities:         Asset-backed financing of the VIE at fair value         —         \$353,898         —         \$353,898           Interest-only security payable at fair value         —         \$353,898         —         \$353,898           Interest rate lock commitments         —         —         3,292         3,292           Forward purchase contracts         —         7,619         —         7,619	Forward purchase contracts	_	30,879		30,879
MBS call options         —         142         —         142           Call options on interest rate futures         63         —         —         63           Put options on interest rate futures         2,469         —         —         2,469           Total derivative assets         2,532         45,882         22,679         71,093           Netting         —         —         —         (37,384)         )           Total derivative assets after netting         2,532         45,882         22,679         33,709           Mortgage servicing rights at fair value         —         —         64,136         64,136           Mortgage servicing rights at fair value         —         —         64,136         64,136           Liabilities:         —         —         4,114         4,114           Liabilities:         —         —         \$353,898         —         \$353,898           Interest-only security payable at fair value         —         —         4,114         4,114           Derivative liabilities:         —         —         3,292         3,292           Forward purchase contracts         —         —         7,619         —         7,619           Forward sales contrac	Forward sales contracts	_	13,164	_	13,164
Call options on interest rate futures       63       —       —       63         Put options on interest rate futures       2,469       —       —       2,469         Total derivative assets       2,532       45,882       22,679       71,093         Netting       —       —       —       —       (37,384)       )         Total derivative assets after netting       2,532       45,882       22,679       33,709         Mortgage servicing rights at fair value       —       —       64,136       64,136         Mortgage servicing rights at fair value       —       —       64,136       64,136         Liabilities:       —       \$353,898       \$       \$353,898         Interest-only security payable at fair value       —       \$353,898       \$       \$353,898         Interest rate lock commitments       —       —       4,114       4,114         Derivative liabilities:       —       —       3,292       3,292         Forward purchase contracts       —       7,619       —       7,619         Forward sales contracts       —       17,974       —       17,974         Total derivative liabilities after netting       —       —       —       —       (19	MBS put options		1,697	_	1,697
Put options on interest rate futures         2,469         —         —         2,469           Total derivative assets         2,532         45,882         22,679         71,093           Netting         —         —         —         (37,384)           Total derivative assets after netting         2,532         45,882         22,679         33,709           Mortgage servicing rights at fair value         —         —         64,136         64,136           Liabilities:         —         \$124,620         \$2,951,224         \$1,730,056         \$4,768,516           Liabilities:         —         —         \$353,898         —         \$353,898           Interest-only security payable at fair value         —         —         4,114         4,114           Derivative liabilities:         —         —         3,292         3,292           Forward purchase contracts         —         —         7,619         —         7,619           Forward sales contracts         —         17,974         —         17,974           Total derivative liabilities         —         —         —         —         17,974           Total derivative liabilities after netting         —         —         —         —	MBS call options		142	_	142
Total derivative assets         2,532         45,882         22,679         71,093           Netting         —         —         —         —         (37,384)         )           Total derivative assets after netting         2,532         45,882         22,679         33,709           Mortgage servicing rights at fair value         —         —         64,136         64,136           Liabilities:         —         \$124,620         \$2,951,224         \$1,730,056         \$4,768,516           Liabilities:         —         —         \$353,898         —         \$353,898           Interest-only security payable at fair value         —         —         4,114         4,114           Derivative liabilities:         —         —         3,292         3,292           Forward purchase contracts         —         7,619         —         7,619           Forward sales contracts         —         17,974         —         17,974           Total derivative liabilities         —         25,593         3,292         28,885           Netting         —         —         —         —         (19,312)         )           Total derivative liabilities after netting         —         25,593         3,292	Call options on interest rate futures	63			63
Netting         —         —         —         (37,384)         Total derivative assets after netting         2,532         45,882         22,679         33,709           Mortgage servicing rights at fair value         —         —         64,136         64,136           Liabilities:         —         \$124,620         \$2,951,224         \$1,730,056         \$4,768,516           Liabilities:         —         \$353,898         —         \$353,898           Interest-only security payable at fair value         —         4,114         4,114           Derivative liabilities:         —         —         4,114         4,114           Derivative liabilities:         —         —         3,292         3,292           Forward purchase contracts         —         7,619         —         7,619           Forward sales contracts         —         17,974         —         17,974           Total derivative liabilities         —         25,593         3,292         28,885           Netting         —         —         —         (19,312)         )           Total derivative liabilities after netting         —         25,593         3,292         9,573	Put options on interest rate futures	2,469	_	_	2,469
Total derivative assets after netting         2,532         45,882         22,679         33,709           Mortgage servicing rights at fair value         —         —         64,136         64,136           Liabilities:         —         \$2,951,224         \$1,730,056         \$4,768,516           Liabilities:         —         \$353,898         —         \$353,898           Interest-only security payable at fair value         —         4,114         4,114           Derivative liabilities:         —         —         3,292         3,292           Forward purchase contracts         —         7,619         —         7,619           Forward sales contracts         —         17,974         —         17,974           Total derivative liabilities         —         25,593         3,292         28,885           Netting         —         —         —         (19,312)           Total derivative liabilities after netting         —         25,593         3,292         9,573	Total derivative assets	2,532	45,882	22,679	71,093
Mortgage servicing rights at fair value       —       —       64,136       64,136         \$124,620       \$2,951,224       \$1,730,056       \$4,768,516         Liabilities:       Asset-backed financing of the VIE at fair value       \$=       \$353,898       \$=       \$353,898         Interest-only security payable at fair value       —       —       4,114       4,114         Derivative liabilities:       —       —       3,292       3,292         Forward purchase contracts       —       7,619       —       7,619         Forward sales contracts       —       17,974       —       17,974         Total derivative liabilities       —       25,593       3,292       28,885         Netting       —       —       —       (19,312)         Total derivative liabilities after netting       —       25,593       3,292       9,573	Netting	_	_	_	(37,384)
\$124,620       \$2,951,224       \$1,730,056       \$4,768,516         Liabilities:         Asset-backed financing of the VIE at fair value       \$=       \$353,898       \$=       \$353,898         Interest-only security payable at fair value       \$=       \$-       4,114       4,114         Derivative liabilities:         Interest rate lock commitments       \$=       \$-       3,292       3,292         Forward purchase contracts       \$=       7,619       \$=       7,619         Forward sales contracts       \$=       17,974       \$=       17,974         Total derivative liabilities       \$=       25,593       3,292       28,885         Netting       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=       \$=	Total derivative assets after netting	2,532	45,882	22,679	33,709
Liabilities:       Asset-backed financing of the VIE at fair value       \$= \$353,898       \$= \$353,898         Interest-only security payable at fair value       \$= 4,114       4,114         Derivative liabilities:       \$= 3,292       3,292         Interest rate lock commitments       \$= 7,619       \$= 7,619         Forward purchase contracts       \$= 17,974       \$= 17,974         Total derivative liabilities       \$= 25,593       3,292       28,885         Netting       \$= 25,593       3,292       9,573	Mortgage servicing rights at fair value		_	64,136	64,136
Asset-backed financing of the VIE at fair value \$— \$353,898 \$— \$353,898 Interest-only security payable at fair value — 4,114 4,114  Derivative liabilities:  Interest rate lock commitments — — 3,292 3,292  Forward purchase contracts — 7,619 — 7,619  Forward sales contracts — 17,974 — 17,974  Total derivative liabilities — 25,593 3,292 28,885  Netting — — — (19,312)  Total derivative liabilities after netting — 25,593 3,292 9,573		\$124,620	\$2,951,224	\$1,730,056	\$4,768,516
Interest-only security payable at fair value — — 4,114 4,114  Derivative liabilities:  Interest rate lock commitments — — 3,292 3,292  Forward purchase contracts — 7,619 — 7,619  Forward sales contracts — 17,974 — 17,974  Total derivative liabilities — 25,593 3,292 28,885  Netting — — — (19,312)  Total derivative liabilities after netting — 25,593 3,292 9,573	Liabilities:				
Derivative liabilities:         —         3,292         3,292           Interest rate lock commitments         —         7,619         —         7,619           Forward purchase contracts         —         17,974         —         17,974           Total derivative liabilities         —         25,593         3,292         28,885           Netting         —         —         —         (19,312)           Total derivative liabilities after netting         —         25,593         3,292         9,573	Asset-backed financing of the VIE at fair value	\$	\$353,898	<b>\$</b> —	\$353,898
Interest rate lock commitments         —         —         3,292         3,292           Forward purchase contracts         —         7,619         —         7,619           Forward sales contracts         —         17,974         —         17,974           Total derivative liabilities         —         25,593         3,292         28,885           Netting         —         —         —         (19,312)           Total derivative liabilities after netting         —         25,593         3,292         9,573	Interest-only security payable at fair value		_	4,114	4,114
Forward purchase contracts         —         7,619         —         7,619           Forward sales contracts         —         17,974         —         17,974           Total derivative liabilities         —         25,593         3,292         28,885           Netting         —         —         —         (19,312)           Total derivative liabilities after netting         —         25,593         3,292         9,573	Derivative liabilities:				
Forward sales contracts         —         17,974         —         17,974           Total derivative liabilities         —         25,593         3,292         28,885           Netting         —         —         —         (19,312)           Total derivative liabilities after netting         —         25,593         3,292         9,573	Interest rate lock commitments	_	_	3,292	3,292
Total derivative liabilities       —       25,593       3,292       28,885         Netting       —       —       —       (19,312)         Total derivative liabilities after netting       —       25,593       3,292       9,573	Forward purchase contracts		7,619	_	7,619
Netting — — — — (19,312 ) Total derivative liabilities after netting — 25,593 3,292 9,573	Forward sales contracts	_	17,974	_	17,974
Total derivative liabilities after netting — 25,593 3,292 9,573	Total derivative liabilities		25,593	3,292	28,885
	Netting	_	_	_	(19,312)
· ·	Total derivative liabilities after netting		25,593	3,292	9,573
7 40.7,.72 4.,.00 4007,000		\$—	\$379,491	\$7,406	\$367,585

The following is a summary of changes in items measured using Level 3 inputs on a recurring basis:

	Quarter ende Mortgage loans at fair	ed June 30, Excess servicing	2017 Interest rate lock	CRT	Mortgage servicing	
	value (in thousand	spread s)	commitment	ts (1)Agreements	rights	Total
Assets:						
Balance, March 31, 2017	\$1,229,553	\$277,484	\$ 8,721	\$ 25,629	\$69,683	\$1,611,070
Purchases and issuances	_	_	7,026	_	7	7,033
Repayments and sales	(32,433)	(14,278)		(11,361)		(58,072)
Capitalization of interest	10,814	4,366	_	_		15,180
Capitalization of advances	6,799				_	6,799
ESS received pursuant to a recapture agreement						
with PFSI	_	1,380	_	_	_	1,380
Servicing received as proceeds from sales of		,				
mortgage loans	_	_	_	_	12,334	12,334
Changes in fair value included in income arising from:						
Changes in instrument-specific credit						
risk	7,777		_			7,777
Other factors	(6,747)	(7,156)	17,346	38,448	(4,400)	
Other ractors	1,030	(7,156)		38,448	(4,400)	•
Transfers of mortgage loans to REO and real estate	1,030	(1,130	17,540	30,110	(1,100)	13,200
held for investment	(31,143)	<del></del>	_	_	_	(31,143)
Transfers of interest rate lock commitments to	(- , - ,					
mortgage loans acquired for sale			(32,698	) —		(32,698)
Balance, June 30, 2017	\$1,184,620	\$261,796	\$ 395	\$ 52,716	\$77,624	\$1,577,151
Changes in fair value recognized during the period						
relating to assets still held at June 30, 2017	\$3,037	\$(7,156)	\$ 395	\$ 27,087	\$(4,400)	\$18,963

<sup>(1)</sup> For the purpose of this table, the IRLC "Level 3" asset and liability positions are shown net.

	Quarter ended June 30, 2017 Interest-only security payable (in thousands)
Liabilities:	
Balance, March 31, 2017	\$ 4,601
Changes in fair value included	
in income arising from:	
Changes in instrument- specific credit risk	_
Other factors	1,976
	1,976
Balance, June 30, 2017	\$ 6,577
Changes in fair value recognized during the period relating to assets	
still held at June 30, 2017	\$ 1,976

	Quarter ende Mortgage loans at fair	ed June 30, 2 Excess servicing	2016 Interest rate lock	CRT	Mortgage servicing	
	value (in thousand	spread s)	commitmen	nts (1)Agreemen	ts rights	Total
Assets:						
Balance, March 31, 2016	\$2,047,563	\$321,976	\$ 9,335	\$ (4,218	) \$61,071	\$2,435,727
Purchases and issuances	_	_	_	_	_	
Repayments and sales	(387,661)	(17,400)		_	<del></del>	(405,061)
Capitalization of interest	16,421	5,713	_	_	<u> </u>	22,134
ESS received pursuant to a recapture						
agreement						
with PFSI		1,690			_	1,690
Interest rate lock commitments issued,						
net	_	_	17,036	_	_	17,036
Servicing received as proceeds from						
sales of mortgage loans		_		_	1,847	1,847
Proceeds from CRT Agreements	_	_	_	(3,859	) —	(3,859)
Changes in fair value included in						
income arising from:						
Changes in instrument-specific credit	(22.20= )					(22.20= )
risk	(22,287)		_	_		(22,287)
Other factors	8,824	(17,428)		7,878	(4,941)	
	(13,463)	(17,428)	27,076	7,878	(4,941)	
Transfers of mortgage loans to REO	(53,954)	_				(53,954)
Transfers of interest rate lock						
commitments to mortgage loans						
acquired for sale	<del></del>		(36,690	) —	<u> </u>	(36,690 )
Balance, June 30, 2016	\$1,608,906	\$294,551	\$ 16,757	\$ (199	) \$57,977	\$1,977,992
Changes in fair value recognized during the period						
relating to assets still held at June						
30, 2016	\$(5,335)	\$(17,428)	\$ 16,757	\$ 7,878	\$(4,941)	\$(3,069)

<sup>(1)</sup> For the purpose of this table, the IRLC and CRT Agreement "Level 3" asset and liability positions are shown net.

Quarter ended June 30, 2016 Interest-only

	security payable (in thousands)	
Liabilities:		
Balance, March 30, 2016	\$ 675	
Purchases and issuances	1,454	
Changes in fair value included		
in income arising from:		
Changes in instrument- specific credit risk	—	
Other factors	(466	)
	(466	)
Balance, June 30, 2016	\$ 1,663	
Changes in fair value recognized during the period relating to assets		
still held at June 30, 2016	\$ (466	)

	Six months e Mortgage loans at fair	ended June 3 Excess servicing	30, 2017 Interest rate lock	CRT	Mortgage servicing	
	value (in thousands	spread	commitmer	nts (1)Agreements	(1)rights	Total
Assets:						
Balance, December 31, 2016	\$1,354,572	\$288,669	\$ 3,777	\$ 15,610	\$64,136	\$1,726,764
Purchases and issuances	_	_	16,920	_	69	16,989
Repayments and sales	(146,008)	(28,910)		(21,650	) —	(196,568)
Capitalization of interest	20,717	9,013		<u> </u>	<u> </u>	29,730
Capitalization of advances	13,148	_				13,148
ESS received pursuant to a						
recapture agreement with						
DEGI		2.052				2.052
PFSI	_	2,953	_	_	_	2,953
Servicing received as proceeds from					10.013	10.012
sales of mortgage loans	<del>_</del>	<del></del>	_	_	19,812	19,812
Proceeds from CRT Agreements	_	_	_	_	_	_
Changes in fair value included in						
income arising from:						
Changes in instrument-specific	12.024					12.024
credit risk	13,934	(0.020 )	<u> </u>	— 50.756	— (6.202.)	13,934
Other factors	(9,688 )	(9,929)		58,756	(6,393)	
	4,246	(9,929)	28,518	58,756	(6,393)	75,198
Transfers of mortgage loans to REO and real estate held for						
investment	(62,055)				_	(62,055)
Transfers of interest rate lock						
commitments to						
mortgage loans acquired for sale	_	_	(48,820	) —	_	(48,820)
Balance, June 30, 2017	\$1,184,620	\$261,796	\$ 395	\$ 52,716	\$77,624	\$1,577,151
Changes in fair value recognized						
during the period						
relating to assets still held at June 30, 2017	\$2,290	\$(9,929)	\$ 395	\$ 37,106	\$ (6,393)	\$23,469

<sup>(1)</sup> For the purpose of this table, the IRLC and CRT Agreement "Level 3" asset and liability positions are shown net.

Six months ended June 30, 2017

	Interest-only security payable (in thousands)
Liabilities:	
Balance, December 31, 2016	\$ 4,114
Issuances	_
Changes in fair value included	
in income arising from:	
Changes in instrument- specific credit risk	—
Other factors	2,463
	2,463
Balance, June 30, 2017	\$ 6,577
Changes in fair value recognized during the period relating to assets	
still held at June 30, 2017	\$ 2,463

	Six months of Mortgage loans at fair	Excess servicing	30, 2016 Interest rate lock	CRT	Mortgage servicing	
	value (in thousand	spread ls)	commitmen	ts (1)Agreemen	nts rights	Total
Assets:						
Balance, December 31, 2015	\$2,100,394	\$412,425	\$ 4,646	\$ 593	\$66,584	\$2,584,642
Purchases and issuances		_	_	682	2,602	3,284
Repayments and sales	(419,726)	(97,326)	<u> </u>	_	_	(517,052)
Capitalization of interest	39,715	12,728	_	_	_	52,443
ESS received pursuant to a recapture						
agreement						
with PFSI		3,601				3,601
Interest rate lock commitments issued	<u> </u>	3,001				3,001
net	<u> </u>	_	27,733	_		27,733
Servicing received as proceeds from			21,133			21,133
sales						
of mortgage loans				_	5,147	5,147
Proceeds from CRT Agreements	_	_	_	(6,395	) —	(6,395)
Changes in fair value included in				,	,	
income arising						
from:						
Changes in instrument-specific credit						
risk	(19,004	) —	_	_	_	(19,004)
Other factors	19,936	(36,877)	47,742	4,921	(16,356)	19,366
	932	(36,877)	47,742	4,921	(16,356)	362
Transfers of mortgage loans to REO	(112,409)	) —		_		(112,409)
Transfers of interest rate lock						
commitments to						
mortgage loans acquired for sale	_		(63,364	) —	_	(63,364)
Balance, June 30, 2016	\$1,608,906	\$294,551	\$ 16,757	\$ (199	\$57,977	\$1,977,992
Changes in fair value recognized during the period						
relating to assets still held at June						
30, 2016						

<sup>(1)</sup> For the purpose of this table, the IRLC and CRT Agreement "Level 3" asset and liability positions are shown net.

Edgar Filing: PennyMac Mortgage Investment Trust - Form 10-Q

	Six months ended June 30, 2016 Interest-on security payable (in thousands)	ly
Liabilities:		
Balance, December 31, 2016	\$ —	
Issuances	2,136	
Changes in fair value included		
in income arising from:		
Changes in instrument- specific credit risk	_	
Other factors	(473	)
	(473	)
Balance, June 30, 2017	1,663	
Changes in fair value recognized during the period relating to assets		
still held at June 30, 2017	\$ (473	)

The information used in the preceding roll forwards represents activity for financial statement items measured at fair value on a recurring basis and identified as using "Level 3" inputs that are significant to the estimation of the fair values of the assets and liabilities at either the beginning or the end of the periods presented. The Company had transfers among the fair value levels arising from transfers of IRLCs to mortgage loans held for sale at fair value upon purchase of the respective mortgage loans.

Following are the fair values and related principal amounts due upon maturity of mortgage loans accounted for under the fair value option (including mortgage loans acquired for sale, mortgage loans held in a consolidated VIE, and distressed mortgage loans at fair value):

amount due amount due  Fair value upon maturity Difference Fair value upon maturity Difference (in thousands)
(in thousands)
· · · · · · · · · · · · · · · · · · ·
Mortgage loans acquired for sale at fair value:
Current through 89 days
delinquent: \$1,317,800 \$1,265,463 \$52,337 \$1,672,181 \$1,633,569 \$38,612
90 or more days delinquent:
Not in foreclosure 554 657 (103 ) 145 189 (44 )
In foreclosure 249 307 (58 ) 786 717 69
803 964 (161 ) 931 906 25
\$1,318,603 \$1,266,427 \$52,176 \$1,673,112 \$1,634,475 \$38,637
Mortgage loans at fair value:
Mortgage loans held in a
consolidated VIE:
Current through 89 days
delinquent: \$343,192 \$339,515 \$3,677 \$367,169 \$368,524 \$(1,355)
90 or more days delinquent:
Not in foreclosure — — — — — — —
In foreclosure — — — — — — —
343,192 339,515 3,677 367,169 368,524 (1,355)
Distressed mortgage loans at fair value:
Current through 89 days
delinquent: 626,024 803,280 (177,256) 611,584 818,665 (207,081)
90 or more days delinquent:
Not in foreclosure 259,840 372,666 (112,826) 305,431 425,460 (120,029)
In foreclosure 298,756 422,384 (123,628) 437,557 595,534 (157,977)
558,596 795,050 (236,454) 742,988 1,020,994 (278,006)
1,184,620 1,598,330 (413,710) 1,354,572 1,839,659 (485,087)
\$1,527,812 \$1,937,845 \$(410,033) \$1,721,741 \$2,208,183 \$(486,442)

Following are the changes in fair value included in current period income by consolidated statement of operations line item for financial statement items accounted for under the fair value option:

	Net gain on mortgage loans	Net	mortgage loan	Net gain	
	acquired for sale (in thousa	income	servicing fees	on investments	Total
Assets:					
Short-term investments	\$	\$	\$ <i>—</i>	\$ —	<b>\$</b> —
Mortgage-backed securities at fair value	_	(1,478)	_	4,027	2,549
Mortgage loans acquired for sale at fair value	36,746				36,746
Mortgage loans at fair value		11,376		4,885	16,261
ESS at fair value		4,366		(7,156	(2,790)
MSRs at fair value			(4,400	) —	(4,400)
	\$36,746	\$14,264	\$ (4,400	) \$ 1,756	\$48,366
Liabilities:					
Interest-only security payable	<b>\$</b> —	<b>\$</b> —	\$ <i>—</i>	\$ (1,976	\$(1,976)
Asset-backed financing of a VIE at fair value	_	(685)	_	(3,399	(4,084)
	\$	\$(685)	\$—	\$ (5,375	\$(6,060)

	Net gain on mortgage loans acquired	Net interest income	Net mortgage loan servicing	Net gain on	
	for sale (in thousa	(1) ands)	fees	investment	s Total
Assets:					
Short-term investments	<b>\$</b> —	\$	\$—	\$ —	<b>\$</b> —
Mortgage-backed securities at fair value		(750)	_	4,332	3,582
Mortgage loans acquired for sale at fair value	47,003				47,003
Mortgage loans at fair value		17,286	_	(13,511	) 3,775
ESS at fair value		5,713	_	(17,428	) (11,715)
MSRs at fair value			(4,941)		(4,941)
	\$47,003	\$22,249	\$ (4,941 )	\$ (26,607	\$37,704
Liabilities:					
Asset-backed financing of a VIE at fair value	<b>\$</b> —	\$(781)	\$—	\$ 890	\$109
	<b>\$</b> —	\$(781)	\$ <i>—</i>	\$ 890	\$109

(1) The amounts in the above table have been expanded to conform with current period presentation. The table includes the effect of capitalization of interest and accrual of unearned discounts on fair value.

	Net gain on mortgage loans	Net interest income	Net mortgage loan servicing fees	Net gain	Total
Assets:					
Short-term investments	<b>\$</b> —	<b>\$</b> —	\$ <i>—</i>	\$ —	<b>\$</b> —
Mortgage-backed securities at fair value	_	(2,796)	_	4,167	1,371
Mortgage loans acquired for sale at fair value	50,904				50,904
Mortgage loans at fair value	_	21,578	_	8,417	29,995
ESS at fair value		9,013	_	(9,929	) (916 )
MSRs at fair value			(6,393	) —	(6,393)
	\$50,904	\$27,795	\$ (6,393	\$ 2,655	\$74,961
Liabilities:					
Interest-only security payable	\$	\$—	\$—	\$ (2,463	\$(2,463)
Asset-backed financing of a VIE at fair value	_	(1,072)	_	(3,423	(4,495)
-	<b>\$</b> —	\$(1,072)	\$ <i>—</i>	\$ (5,886	\$ (6,958)

	Six mont Net gain on mortgage loans acquired for sale	Net	Net mortgage loan servicing fees	Net gain on investments	Total
	(in thousa	ands)			
Assets:					
Short-term investments	<b>\$</b> —	<b>\$</b> —	\$	\$ —	\$
Mortgage-backed securities at fair value	_	(738)		9,431	8,693
Mortgage loans acquired for sale at fair value	89,008				89,008
Mortgage loans at fair value	_	41,809	_	9,279	51,088
ESS at fair value		12,728		(36,877	) (24,149)
MSRs at fair value	_	_	(16,356)	<u> </u>	(16,356)
	\$89,008	\$53,799	\$(16,356)	\$ (18,167	) \$108,284
Liabilities:				` .	
Asset-backed financing of a VIE at fair value	\$—	\$536	<b>\$</b> —	\$ (8,963	) \$(8,427 )
	\$—	\$536	<b>\$</b> —	\$ (8,963	) \$(8,427 )

<sup>(1)</sup> The amounts in the above table have been expanded to conform with current period presentation. The table includes the effect of capitalization of interest and accrual of unearned discounts on fair value.

Financial Statement Items Measured at Fair Value on a Nonrecurring Basis

Following is a summary of financial statement items that were re-measured at fair value on a nonrecurring basis during the periods presented:

	June 30, 2017 Levleevel 1 2 Level 3 Total (in thousands)
Real estate acquired in settlement of loans	\$-\$ -\$87,046 \$87,046
MSRs at lower of amortized cost or fair value	<b>— —</b> 231,195 231,195
	\$-\$ -\$318,241 \$318,241
	December 31, 2016 Levleevel 1 2 Level 3 Total (in thousands)
Real estate acquired in settlement of loans	\$_\$ _\$125,683 \$125,683

MSRs at lower of amortized cost or fair value		— 173,765	173,765
	<b>\$</b> — <b>\$</b>	-\$299,448	\$299,448

The following table summarizes the fair value changes recognized during the period on assets held at period end that were measured at fair value on a nonrecurring basis:

	Quarter ended June 30.		Six month June 30,	s ended
	2017	2016	2017	2016
	(in thous	ands)		
Real estate asset acquired in settlement of loans	\$(6,303	) \$(5,836)	\$(11,279)	\$(11,106)
MSRs at lower of amortized cost or fair value	(4,089	) (23,170)	(2,585)	(40,876)
	\$(10.392	2) \$(29,006)	\$(13.864)	\$(51.982)

## Real Estate Acquired in Settlement of Loans

The Company evaluates its REO for impairment with reference to the respective properties' fair values less cost to sell on a nonrecurring basis. The initial carrying value of the REO is measured at cost as indicated by the purchase price in the case of purchased REO or as measured by the fair value of the mortgage loan immediately before REO acquisition in the case of acquisition in settlement of a mortgage loan. REO may be subsequently revalued due to the Company receiving greater access to the property, the property being held for an extended period or receiving indications that the property's fair value may not be supported by developing

market conditions. Any subsequent change in fair value to a level that is less than or equal to the property's cost is recognized in Results of real estate acquired in settlement of loans in the Company's consolidated statements of operations.

Mortgage Servicing Rights at Lower of Amortized Cost or Fair Value

The Company evaluates its MSRs at lower of amortized cost or fair value for impairment with reference to the asset's fair value. For purposes of performing its MSR impairment evaluation, the Company stratifies its MSRs at lower of amortized cost or fair value based on the interest rates borne by the mortgage loans underlying the MSRs. Mortgage loans are grouped into pools with 50 basis point interest rate ranges for fixed-rate mortgage loans with interest rates between 3.0% and 4.5% and a single pool for mortgage loans with interest rates below 3.0%. MSRs relating to adjustable rate mortgage loans with initial interest rates of 4.5% or less are evaluated in a single pool. If the fair value of MSRs in any of the interest rate pools is below the amortized cost of the MSRs, those MSRs are impaired.

When MSRs are impaired, the impairment is recognized in current-period results of operations and the carrying value of the MSRs is adjusted using a valuation allowance. If the fair value of the MSRs subsequently increases, the increase in fair value is recognized in current period income only to the extent of the valuation allowance for the respective impairment stratum.

The Manager periodically reviews the various impairment strata to determine whether the fair value of the impaired MSRs in a given stratum is likely to recover. When the Manager deems recovery of fair value to be unlikely in the foreseeable future, a write-down of the cost of the MSRs for that stratum to its estimated recoverable value is charged to the valuation allowance.

Fair Value of Financial Instruments Carried at Amortized Cost

Certain of the Company's borrowings are carried at amortized cost. The Company's Assets sold under agreements to repurchase, Mortgage loan participation and sale agreements, Notes payable, Exchangeable senior notes and Assets sold to PennyMac Financial Services, Inc. under agreements to repurchase are classified as "Level 3" fair value liabilities due to the Company's reliance on unobservable inputs to estimate these instruments' fair values.

The Manager has concluded that the fair values of Assets sold under agreements to repurchase, Mortgage loan participation and sale agreements, Notes payable and Assets sold to PennyMac Financial Services, Inc. under agreements to repurchase approximate the agreements' carrying values due to the borrowing agreements' short terms and variable interest rates. The fair value of the Exchangeable senior notes at June 30, 2017 and December 31, 2016 was \$247.2 million and \$240.7 million, respectively. The fair value of the Exchangeable senior notes is estimated using a broker indication of fair value.

### Valuation Techniques and Inputs

Most of the Company's assets, its Derivative liabilities, the Asset-backed financing of a VIE and the Interest-only security payable are carried at fair value with changes in fair value recognized in current period income. A substantial portion of these items are "Level 3" fair value assets and liabilities which require the use of unobservable inputs that are significant to the estimation of the fair values of the assets and liabilities. Unobservable inputs reflect the Manager's own judgments about the factors that market participants use in pricing an asset or liability, and are based on the best information available under the circumstances.

Due to the difficulty in estimating the fair values of "Level 3" fair value assets and liabilities, the Manager has assigned responsibility for estimating fair value of these assets and liabilities to specialized staff and subjects the valuation

process to significant executive management oversight. The Manager's Financial Analysis and Valuation group (the "FAV group") is responsible for estimating the fair values of "Level 3" fair value assets and liabilities other than IRLCs and maintaining its valuation policies and procedures.

With respect to the Company's non-IRLC "Level 3" fair value assets and liabilities, the FAV group reports to PCM's valuation committee, which oversees and approves the valuations. The FAV group monitors the models used for valuation of the Company's non-IRLC "Level 3" fair value assets and liabilities, including the models' performance versus actual results, and reports those results to PCM's valuation committee. PCM's valuation committee includes PFSI's executive chairman, and chief executive, chief financial, chief enterprise operations, chief risk and deputy chief financial officers.

The FAV group is responsible for reporting to PCM's valuation committee on a monthly basis on the changes in the valuation of the non-IRLC "Level 3" assets and liabilities, including major factors affecting the valuation and any changes in model methods and inputs. To assess the reasonableness of its valuations, the FAV group presents an analysis of the effect on the valuation of changes to the significant inputs to the models.

The fair value of the Company's IRLCs is developed by the Manager's Capital Markets Risk Management staff and is reviewed by the Manager's Capital Markets Operations group.

The following is a description of the techniques and inputs used in estimating the fair values of "Level 2" and "Level 3" fair value assets and liabilities:

#### Mortgage-Backed Securities

The Company categorizes its current holdings of MBS as "Level 2" fair value assets. Fair value of these MBS is established based on quoted market prices for the Company's MBS or similar securities. Changes in the fair value of MBS are included in Net gain (loss) on investments in the consolidated statements of operations.

### Mortgage Loans

Fair value of mortgage loans is estimated based on whether the mortgage loans are saleable into active markets:

- Mortgage loans that are saleable into active markets, comprised of the Company's mortgage loans acquired for sale at fair value and mortgage loans at fair value held in a VIE, are categorized as "Level 2" fair value assets. The fair values of mortgage loans acquired for sale at fair value are established using their quoted market or contracted price or market price equivalent. For the mortgage loans at fair value held in a VIE, the quoted fair values of all of the individual securities issued by the securitization trust are used to derive a fair value for the mortgage loans. The Company obtains indications of fair value from nonaffiliated brokers based on comparable securities and validates the brokers' indications of fair value using pricing models and inputs the Manager believes are similar to the models and inputs used by other market participants.
- Mortgage loans that are not saleable into active markets, comprised of distressed mortgage loans are categorized as "Level 3" fair value assets and their fair values are estimated using a discounted cash flow approach. Inputs to the discounted cash flow model include current interest rates, loan amount, payment status, property type, discount rates and forecasts of future interest rates, home prices, prepayment speeds, default speeds, loss severities and contracted selling price where applicable.

The valuation process for "Level 3" mortgage loans includes the computation by stratum of the mortgage loans' fair values and a review for reasonableness of various measures such as weighted average life, projected prepayment and default speeds, and projected default and loss percentages. The FAV group computes the effect on the valuation of changes in inputs such as interest rates, home prices, and delinquency status to assess the reasonableness of changes in the mortgage loan valuation.

Changes in fair value attributable to changes in instrument-specific credit risk are measured by the effect on fair value of the change in the respective mortgage loan's delinquency status and performance history at period-end from the later of the beginning of the period or acquisition date.

The significant unobservable inputs used in the fair value measurement of the Company's mortgage loans at fair value are discount rate, home price projections, voluntary prepayment speeds and default speeds. Significant changes in any of those inputs in isolation could result in a significant change to the mortgage loans' fair value measurement. Increases in home price projections are generally accompanied by an increase in voluntary prepayment speeds. Changes in the fair value of mortgage loans at fair value are included in Net gain (loss) on investments in the consolidated statements of operations.

Following is a quantitative summary of key inputs used in the valuation of mortgage loans at fair value:

Key inputs	June 30, 2017	December 31, 2016
Discount rate		
Range	2.9% –	
	15.0%	2.6% - 15.0%
Weighted average	7.3%	7.1%
Twelve-month projected housing price index change		
Range	2.8% –	
	4.2%	2.5% - 4.8%
Weighted average	3.9%	3.7%
Prepayment speed (1)		
Range	2.9% –	
-	6.2%	0.1% - 10.9%
Weighted average	3.8%	4.0%
Total prepayment speed (2)		
Range	8.9% –	
	23.3%	2.9% - 24.6%
Weighted average	17.0%	17.7%

- (1) Prepayment speed is measured using Life Voluntary Conditional Prepayment Rate ("CPR").
- (2) Total prepayment speed is measured using Life Total CPR.

Excess Servicing Spread Purchased from PFSI

The Company categorizes ESS as a "Level 3" fair value asset. The Company uses a discounted cash flow approach to estimate the fair value of ESS. The key inputs used in the estimation of the fair value of ESS include prepayment speed and discount rate. Significant changes to those inputs in isolation may result in a significant change in the ESS fair value measurement. Changes in these key inputs are not necessarily directly related.

ESS is generally subject to loss in fair value when interest rates decrease. Decreasing mortgage rates normally encourage increased mortgage refinancing activity. Increased refinancing activity reduces the expected life of the mortgage loans underlying the ESS, thereby reducing the cash flows expected to accrue to ESS. Reductions in the fair value of ESS affect income primarily through change in fair value. Changes in the fair value of ESS are included in Net gain (loss) on investments in the consolidated statements of operations.

Following are the key inputs used in determining the fair value of ESS:

	June 30,	December 31,
Key inputs	2017	2016
UPB of underlying mortgage loans (in thousands)	\$29,716,891	\$32,376,359
Average servicing fee rate (in basis points)	34	34
Average ESS rate (in basis points)	19	19

Edgar Filing: PennyMac Mortgage Investment Trust - Form 10-Q

Pricing spread (1)		
Range	3.8% - 4.4%	3.8% - 4.8%
Weighted average	4.2%	4.4%
Annual total prepayment speed (2)		
Range	7.7% -	
-	70.9%	7.0% - 41.3%
Weighted average	10.7%	10.5%
Life (in years)		
Range	0.7 - 8.1	1.4 - 8.6
Weighted average	6.6	6.8

<sup>(1)</sup> Pricing spread represents a margin that is applied to a reference interest rate's forward rate curve to develop periodic discount rates. The Company applies a pricing spread to the United States Dollar London Interbank Offered Rate ("LIBOR") curve for purposes of discounting cash flows relating to ESS.

<sup>(2)</sup> Prepayment speed is measured using Life Total CPR. 40

#### **Derivative Financial Instruments**

#### **Interest Rate Lock Commitments**

The Company categorizes IRLCs as "Level 3" fair value assets and liabilities. The Company estimates the fair value of IRLCs based on quoted Agency MBS prices, its estimate of the fair value of the MSRs it expects to receive in the sale of the mortgage loan and the probability that the mortgage loans will be purchased under the commitment (the "pull-through rate").

The significant unobservable inputs used in the fair value measurement of the Company's IRLCs are the pull-through rate and the MSR component of the Company's estimate of the fair value of the mortgage loans it has committed to purchase. Significant changes in the pull-through rate or the MSR component of the IRLCs, in isolation, may result in a significant change in fair value. The financial effects of changes in these inputs are generally inversely correlated as increasing interest rates have a positive effect on the fair value of the MSR component of IRLC value, but increase the pull-through rate for the mortgage loan principal and interest payment cash flow component that has decreased in fair value. Changes in fair value of IRLCs are included in Net gain on mortgage loans acquired for sale in the consolidated statements of operations.

Following is a quantitative summary of key unobservable inputs used in the valuation of IRLCs:

	June 30,	December 31,
Key inputs	2017	2016
Pull-through rate		
Range	60.5% -	60.7% -
	100.0%	100.0%
Weighted average	89.8%	88.5%
MSR value expressed as:		
Servicing fee multiple		
Range	2.0 - 5.8	2.6 - 6.0
Weighted average	4.9	5.0
Percentage of UPB		
Range	0.0% -	
	1.5%	0.7% - 1.5%
Weighted average	1.2%	1.3%

### **Hedging Derivatives**

The Company estimates the fair value of commitments to sell mortgage loans based on quoted MBS prices. Fair values of derivative financial instruments based on exchange traded market prices are categorized by the Company as "Level 1" fair value assets and liabilities; fair values of derivative financial instruments based on observable interest rate volatilities in the MBS market are categorized by the Company as "Level 2" fair value assets and liabilities. Changes in the fair value of hedging derivatives are included in Net gain on mortgage loans acquired for sale, Net gain (loss) on investments, or Net mortgage loan servicing fees, as applicable, in the consolidated statements of operations.

## Real Estate Acquired in Settlement of Loans

REO is measured based on its fair value on a nonrecurring basis and is categorized as a "Level 3" fair value asset. Fair value of REO is established by using a current estimate of fair value from a broker's price opinion or a full appraisal, or the price given in a current contract of sale.

REO fair values are reviewed by the Manager's staff appraisers when the Company obtains multiple indications of fair value and there is a significant difference between the fair values received. PCM's staff appraisers will attempt to resolve the difference between the indications of fair value. In circumstances where the appraisers are not able to generate adequate data to support a fair value conclusion, the staff appraisers will order an additional appraisal to determine fair value. Changes in the fair value of REO are included in Results of real estate acquired in settlement of loans in the consolidated statements of operations.

### Mortgage Servicing Rights

MSRs are categorized as "Level 3" fair value assets. The Company uses a discounted cash flow approach to estimate the fair value of MSRs. The key inputs used in the estimation of the fair value of MSRs include the applicable pricing spread, prepayment and default rates of the underlying mortgage loans, and annual per-loan cost to service mortgage loans, all of which are unobservable. Significant changes to any of those inputs in isolation could result in a significant change in the MSR fair value measurement. Changes in these key inputs are not necessarily directly related. Changes in the fair value of MSRs are included in Net mortgage loan servicing fees in the consolidated statements of operations.

MSRs are generally subject to loss in fair value when mortgage interest rates decrease. Decreasing mortgage interest rates normally encourage increased mortgage refinancing activity. Increased refinancing activity reduces the expected life of the underlying mortgage loans, thereby reducing the cash flows expected to accrue to the MSRs. Reductions in the fair value of MSRs affect income primarily through change in fair value and change in impairment. For MSRs backed by mortgage loans with historically low interest rates, factors other than interest rates (such as housing price changes) take on increasing influence on prepayment behavior of the underlying mortgage loans.

Following are the key inputs used in determining the fair value of MSRs at the time of initial recognition:

	Quarter endo 2017	ed June 30,	2016	
	Amortized	Fair	Amortized	Fair
		value nized and UP an amounts in	cost B of underlyinthousands)	value ng
MSR recognized	\$53,501	\$12,334	\$58,262	\$1,847
Key inputs				
UPB of underlying mortgage loans	\$4,477,209	\$1,157,902	\$4,846,994	\$200,495
Weighted-average annual servicing				
fee rate (in basis points)	25	25	25	25
Pricing spread (1)				
Range	7.6% -	7.6% -	7.2% –	7.2% –
	12.6%	7.6%	12.6%	7.6%
Weighted average	7.6%	7.6%	7.4%	7.3%
Annual total prepayment speed (2)				
Range	3.6% -	8.5% -	3.4% –	7.3% –
	26.0%	24.2%	47.4%	38.0%
Weighted average	8.5%	10.8%	9.4%	14.2%
Life (in years)				
Range	3.0 - 11.6	3.4 - 8.4	1.5 - 12.2	2.0 - 9.3
Weighted average	8.0	7.3	7.6	6.0
Annual per-loan cost of servicing				
Range	\$79 - \$79	\$79 - \$79	\$68 – \$79	\$68 - \$79
Weighted average	\$79	\$79	\$76	\$74

<sup>(1)</sup> The Company applies a pricing spread to the United States Dollar LIBOR curve for purposes of discounting cash flows relating to MSRs acquired as proceeds from the sale of mortgage loans.

Six months ended June 30, 2017 2016

Amortized Fair Amortized Fair

<sup>(2)</sup> Prepayment speed is measured using Life Total CPR.

Edgar Filing: PennyMac Mortgage Investment Trust - Form 10-Q

	cost	value	cost	value
	(MSR recog	nized and UP	B of underlyi	ng
	mortgage lo	an amounts ir	thousands)	
MSR recognized	\$104,711	\$19,812	\$91,124	\$5,147
Key inputs				
UPB of underlying mortgage loans	\$8,573,815	\$1,818,488	\$7,606,539	\$527,519
Weighted-average annual servicing				
fee rate (in basis points)	25	25	25	26
Pricing spread (1)				
Range	7.6% -	7.6% -	7.2%	7.2% –
-	12.6%	7.6%	-12.6%	7.6%
Weighted average	7.6%	7.6%	7.3%	7.3%
Annual total prepayment speed (2)				
Range	3.2% -	7.9% -	3.4% –	7.2% –
	28.7%	24.2%	49.2%	38.0%
Weighted average	8.0%	10.8%	9.8%	15.1%
Life (in years)				
Range	2.7 - 11.9	3.4 - 8.5	1.4 - 12.3	2.0 - 9.4
Weighted average	8.1	7.2	7.4	5.7
Annual per-loan cost of servicing				
Range	\$79 - \$79	\$79 - \$79	\$68 – \$79	\$68 – \$79
Weighted average	\$79	\$79	\$73	\$71

- (1) The Company applies a pricing spread to the United States Dollar LIBOR curve for purposes of discounting cash flows relating to MSRs acquired as proceeds from the sale of mortgage loans.
- (2) Prepayment speed is measured using Life Total CPR.

Following is a quantitative summary of key inputs used in the valuation of MSRs as of the dates presented, and the effect on the fair value from adverse changes in those inputs:

	June 30, 2017 Amortized Fair		December 31 Amortized	2016 Fair	
	cost value cost value (Carrying value, UPB of underlying mortgage loand effect on fair value				
	amounts in th	ousands)			
Carrying value	\$657,176	\$77,624	\$592,431	\$64,136	
Key inputs:					
UPB of underlying mortgage loans	\$56,219,587	\$7,058,662	\$50,539,707	\$5,763,957	
Weighted-average annual servicing					
fee rate (in basis points)	25	25	25	25	
Weighted-average note interest rate	3.8%	4.7%	3.8%	4.7%	
Pricing spread (1)	21071				
Range	7.6% -	7.6% -		7.6% –	
	13.1%	12.6%	7.6% - 13.0%	6 12.6%	
Weighted average	7.6%	7.6%	7.6%	7.6%	
Effect on fair value of (2):					
5% adverse change	\$(10,729)	\$(1,174)	\$(10,018)	\$(979)	
10% adverse change	\$(21,142)	\$(2,314)	\$(19,738)	\$(1,929)	
20% adverse change	\$(41,066)	\$(4,496)	\$(38,330)	\$(3,748)	
Prepayment speed (3)					
Range	7.1% -	7.3% -		6.8% –	
	26.6%	21.1%	6.7% - 25.7%	6 24.2%	
Weighted average	8.1%	10.9%	7.7%	10.7%	
Life (in years)					
Range	3.0 - 8.2	3.1 - 6.9	3.1 - 8.5	3.2 - 7.0	
Weighted average	7.7	6.9	8.0	7.0	
Effect on fair value of (2):					
5% adverse change	\$(10,741)	\$(1,687)	\$(9,436)	\$(1,379)	
10% adverse change	\$(21,135)	\$(3,307)	\$(18,578)	\$(2,704)	
20% adverse change	\$(40,945)	\$(6,356)	\$(36,037)	\$(5,202)	
Annual per-loan cost of servicing					
Range	\$78 - \$79	\$77 - \$79	\$78 – \$79	\$77 – \$79	
Weighted average	\$79	\$79	\$79	\$79	

Effect on fair value of (2):

5% adverse change	\$(5,108)	\$(651)	\$(4,650)	\$(555)
10% adverse change	\$(10,216)	\$(1,303)	\$(9,300)	\$(1,110)
20% adverse change	\$(20,432)	\$(2,606)	\$(18,600)	\$(2,220)

- (1) The Company applies a pricing spread to the United States Dollar LIBOR curve for purposes of discounting cash flows relating to MSRs.
- (2) For MSRs carried at fair value, an adverse change in one of the above-mentioned key inputs is expected to result in a reduction in fair value which will be recognized in income. For MSRs carried at lower of amortized cost or fair value, an adverse change in one of the above-mentioned key inputs may result in recognition of MSR impairment. The extent of the recognized MSR impairment will depend on the relationship of fair value to the carrying value of such MSRs.
- (3) Prepayment speed is measured using Life Total CPR.

The preceding sensitivity analyses are limited in that they were performed as of a particular point in time; only account for the estimated effect of the movements in the indicated inputs; do not incorporate changes in the inputs in relation to other inputs; are subject to the accuracy of various models and inputs used; and do not incorporate other factors that would affect the Company's overall financial performance in such events, including operational adjustments made by the Manager to account for changing circumstances. For these reasons, the preceding estimates should not be viewed as earnings forecasts.

### Securities Sold Under Agreements to Repurchase

Fair value of securities sold under agreements to repurchase is based on the accrued cost of the agreements, which approximates the fair values of the agreements, due to the short maturities of such agreements.

#### Note 8—Mortgage Loans Acquired for Sale at Fair Value

Mortgage loans acquired for sale at fair value is comprised of recently originated mortgage loans purchased by the Company for resale. Following is a summary of the distribution of the Company's mortgage loans acquired for sale at fair value:

Loan type	June 30, 2017	December 31, 2016		
	(in thousand	s)		
Conventional:				
Agency-eligible	\$1,050,956	\$ 847,810		
Jumbo	_	6,042		
Held for sale to PLS — Government insured or guaranteed	246,259	804,616		
Commercial real estate	14,572	8,961		
Repurchased pursuant to representations and warranties	6,816	5,683		
	\$1,318,603	\$ 1,673,112		
Mortgage loans pledged to secure:				
Assets sold under agreements to repurchase	\$1,260,939	\$ 1,627,010		
Mortgage loan participation and sale agreements	39,657	26,738		
	\$1,300,596	\$ 1,653,748		

The Company is not approved by Ginnie Mae as an issuer of Ginnie Mae-guaranteed securities which are backed by government-insured or guaranteed mortgage loans. The Company transfers government-insured or guaranteed mortgage loans that it purchases from correspondent lenders to PLS, which is a Ginnie Mae-approved issuer, and earns a sourcing fee ranging from two to three and one-half basis points, generally based on the average number of calendar days that mortgage loans are held prior to purchase by PLS.

### Note 9—Mortgage Loans at Fair Value

Mortgage loans at fair value are comprised of mortgage loans that are not acquired for sale and, to the extent they are not held in a VIE securing an asset-backed financing, may be sold at a later date pursuant to a management determination that such a sale represents the most advantageous liquidation strategy for the identified mortgage loan.

Following is a summary of the distribution of the Company's mortgage loans at fair value:

	June 30, 2017		December 3	-
		Unpaid		Unpaid
	Fair	principal	Fair	principal
Loan type	value (in thousand	balance (s)	value	balance
Distressed mortgage loans:				
Nonperforming mortgage loans	\$558,596	\$795,050	\$742,988	\$1,020,994
Performing mortgage loans:				
Fixed interest rate	299,201	395,748	296,901	408,943
Interest rate step-up	257,164	333,360	232,700	317,409
Adjustable-rate/hybrid	69,659	74,172	81,983	92,313
	626,024	803,280	611,584	818,665
	1,184,620	1,598,330	1,354,572	1,839,659
Fixed interest rate jumbo mortgage loans held in a VIE	343,192	339,515	367,169	368,524
	\$1,527,812	\$1,937,845	\$1,721,741	\$2,208,183
Mortgage loans at fair value pledged to secure:				
Assets sold under agreements to repurchase	\$1,178,019		\$1,345,021	
Asset-backed financing of a VIE at fair value	343,192		367,169	
-	\$1,521,211		\$1,712,190	

Following is a summary of certain concentrations of credit risk in the portfolio of distressed mortgage loans at fair value:

Concentration	June 30, 2017 (percentair val	itages are of
Portion of mortgage loans originated between 2005 and 2007	73%	72%
Mortgage loans with unpaid-principal balance-to-current		
-property-value in excess of 100%	40%	41%
States contributing 5% or more of mortgage loans	New	New York
	York	
		California
	California	
		New Jersey
	New	J
	Jersey	Florida
	Florida	Massachusetts
	Massac	chusetts

Note 10—Real Estate Acquired in Settlement of Loans

Following is a summary of financial information relating to REO:

	Ouarter en	ded June 30,	Six months ended June 30,		
	2017 (in thousar	2016	2017	2016	
Balance at beginning of period	\$224,831	\$ 327,212	\$274,069	\$341,846	
Transfers from mortgage loans at fair value					
and advances	29,154	53,558	54,030	114,052	
Transfer of real estate acquired in settlement of					
mortgage loans to real estate held for investment	(5,101)	(8,082	) (11,745)	(12,266)	
Results of REO:					
Valuation adjustments, net	(7,151)	(7,283	) (15,326)	(17,928)	
Gain on sale, net	3,686	4,718	7,615	9,327	

Edgar Filing: PennyMac Mortgage Investment Trust - Form 10-Q

	(3,465)	(2,565)	(7,711)	(8,601)
Proceeds from sales	(38,385)	(70,665)	(101,609)	(135,573)
Balance at end of period	\$207,034	\$ 299,458	\$207,034	\$299,458
	June 30, 2017 (in thousan	December 31, 2016 nds)		
REO pledged to secure assets sold under agreements				
to repurchase REO held in a consolidated subsidiary whose stock	\$56,842	\$ 167,430		
is pledged to secure financings of such properties	51,512 \$108,354	48,283 \$ 215,713		

Note 11—Mortgage Servicing Rights

Carried at Lower of Amortized Cost or Fair Value:

Following is a summary of MSRs carried at lower of amortized cost or fair value:

Quarter Six months ended ended June June 30, 30, 20172016 2017 2016 (in thousands)

**Amortized Cost:**