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	_	_	_	_	_	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		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	~ -, · / -, · - /	\$ 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

⁽¹⁾ 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	\$ —	\$ —	\$ —	\$ —

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

⁽¹⁾ 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	\$ —	\$146,872	\$ —	
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)	-	(7,316)		
	\$32,853	\$7,764	\$51,440	\$3,621	
Payments made to settle losses	\$262	\$ —	\$411	\$ —	
•					

	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	<u> </u>	(101,000	1,139,000	
Treasury future buy contracts		6,400	(6,400	—	
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 c ollater	al	Net
	sheet	instrum	e nts eived	l a	amount	sheet	instrur	ne nts 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)		(684)
	3,497,999		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	\$ —	\$ -	-\$3,147	\$3,292	\$ —	\$ —\$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)	— 1,503
JPMorgan Chase & Co.	374,354	(374,354)	_		544,009	(542,542)	
Daiwa Capital Markets	162,742	(162,742)	_		177,316	(177,077)	— 239
Morgan Stanley Bank, N.A.	153,434	(153,434)	_		143,951	(142,055)	— 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)	— 651
Jefferies Group LLC	3,026		_	- 3,026	98		— 98
UBS Securities LLC	1,497	_	_	- 1,497	<u>—</u>	<u>—</u>	
Other	1,186	_	_	- 1,186	221		— 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	\$ —	\$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: — — \$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	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	\$ —	\$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)		_	_	_	(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

⁽¹⁾ 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)		_		(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			(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)

⁽¹⁾ 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	_		_	_	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

⁽¹⁾ 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						

⁽¹⁾ 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>	\$ —	\$ —
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	\$ —	\$ —	\$ <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	\$ —	\$	\$—	\$ —	\$ —
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	\$ —	\$(781)	\$—	\$ 890	\$109
	\$ —	\$(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	\$ —	\$ —	\$ <i>—</i>	\$ —	\$ —
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)
-	\$ —	\$(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	\$ —	\$ —	\$	\$ —	\$
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	\$ —	\$ (8,963) \$(8,427)
	\$—	\$536	\$ —	\$ (8,963) \$(8,427)

⁽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.

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 Levelvel 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	— — 231,195 231,195
	\$-\$ -\$318,241 \$318,241
	December 31, 2016 Levelvel 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
	\$ — \$	-\$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 months ended June 30,	
	2017	2016	2017	2016
	(in thous	sands)		
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)
	\$(10.39)	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

⁽¹⁾ 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.

⁽²⁾ 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

⁽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.

Six months ended June 30, 2017 2016

Amortized Fair Amortized Fair

⁽²⁾ 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	7 Fair	December 31 Amortized	, 2016 Fair
	cost (Carrying val and effect on		cost nderlying mort	value gage loans
	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		0.00,1	
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:

		TT '1	December 3	-
		Unpaid		Unpaid
	Fair	principal	Fair	principal
Loan type	value (in thousand	balance ls)	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
	Califor	nia
		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:

	_			ended June
	Quarter en	ded June 30,	30,	
	2017	2016	2017	2016
	(in thousar	nds)		
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 ended June 30, 2017 2016 (in thousands)	Six months ended June 30, 2017 2016
Amortized Cost:		
Balance at beginning of period	\$639,455 \$ 422,676	\$606,103 \$404,101
MSRs resulting from mortgage loan sales	53,501 58,262	104,711 91,124
Amortization	(19,523) (15,531) (37,381) (29,818)
Sales) — (106)
Balance at end of period	673,433 465,301	673,433 465,301
Valuation Allowance:		
Balance at beginning of period	(12,168) (28,650) (13,672) (10,944)
Additions to impairment valuation allowance	(4,089) (23,170) (2,585) (40,876)
Balance at end of period	(16,257) (51,820) (16,257) (51,820)
MSRs, net	\$657,176 \$ 413,481	\$657,176 \$413,481
Fair value at beginning of period	\$662,584 \$ 405,635	\$626,334 \$424,154
Fair value at end of period	\$682,437 \$ 417,094	
	June 30, 2017 December 31, 2016 (in thousands)	
MSRs carried at lower of cost or fair value pledged		
to secure notes payable	\$647,169 \$ 592,431	

The following table summarizes the Company's estimate of future amortization of its existing MSRs carried at amortized cost. This estimate was developed with the inputs used in the June 30, 2017 valuation of MSRs. The inputs underlying the following estimate will change as market conditions and portfolio composition and behavior change, causing both actual and projected amortization levels to change over time.

Estimated
MSR
amortization
(in
thousands)
\$ 78,845
72,092
65,627

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

2021	59,403
2022	53,535
Thereafter	343,931
Total	\$ 673,433

Carried at Fair Value:

Following is a summary of MSRs carried at fair value:

	Quarter ended June 30, 2017 2016 (in thousands)	Six month June 30, 2017	ns ended 2016
Balance at beginning of period	\$69,683 \$ 61,071	\$64,136	\$66,584
Purchases	7 —	69	2,602
MSRs resulting from mortgage loan sales	12,334 1,847	19,812	5,147
Changes in fair value:			
Due to changes in valuation inputs used in valuation			
model (1)	(2,303) (2,508) (4,328)	(11,460)
Other changes in fair value (2)	(2,097) $(2,433)$) (2,065)	(4,896)
	(4,400) (4,941) (6,393)	(16,356)
Balance at end of period	\$77,624 \$ 57,977	\$77,624	\$57,977
	June 30, 2017 December 31, 201 (in thousands)	6	
MSRs carried at fair value pledged to secure notes payable	\$76,727 \$ 64,136		

⁽¹⁾ Principally reflects changes in pricing spread (discount rate) and prepayment speed inputs, primarily due to changes in market interest rates.

Servicing fees relating to MSRs are recorded in Net mortgage loan servicing fees on the Company's consolidated statements of operations and are summarized below:

	Quarter ended		Six months ended	
	June 30,		June 30,	
	2017	2016	2017	2016
	(in thousa	ands)		
Contractually-specified servicing fees	\$39,705	\$29,991	\$76,986	\$57,770
Ancillary and other fees:				
Late charges	1,203	1,450	2,240	2,407
Other	176	137	363	273
	\$41,084	\$31,578	\$79,589	\$60,450

⁽²⁾ Represents changes due to realization of expected cash flows.

Following is a summary of financial information relating to assets sold under agreements to repurchase:

	Quarter ended June 30,		Six months en	ided June
	2017	2016	30, 2017	2016
	_01,		2017	2010
W7 1 1 . 1	(dollars in tho	· ·	2.70	2.10
Weighted-average interest rate (1)	2.82 %	2.17 %	2.70 %	2.19 %
Average balance	\$3,420,836	\$3,268,774	\$3,344,772	\$3,033,038
Total interest expense	\$23,941	\$22,056	\$46,123	\$42,468
Maximum daily amount outstanding	\$4,361,565	\$4,331,706	\$4,563,762	\$4,402,724

⁽¹⁾ Excludes the effect of amortization of debt issuance costs of \$1.9 million and \$4.2 million for the quarter and six months ended June 30, 2017, respectively, and \$2.2 million and \$4.3 million for the quarter and six months ended June 30, 2016, respectively.

	June 30, 2017 (dollars in the	December 31 2016 busands)	1,
Carrying value:			
Unpaid principal balance	\$3,498,916	\$ 3,784,685	
Unamortized debt issuance costs	(917)	(684)
	\$3,497,999	\$ 3,784,001	
Weighted-average interest rate	2.69 %	2.70	%
Available borrowing capacity (1):			
Committed	\$252,420	\$518,932	
Uncommitted	2,408,141	1,092,253	
	\$2,660,561	\$ 1,611,185	
Margin deposits placed with counterparties included in Other assets	\$8,792	\$ 29,634	
Fair value of assets securing agreements to repurchase:			
Mortgage-backed securities	\$1,065,540	\$ 863,802	
Mortgage loans acquired for sale at fair value	\$1,260,939	\$ 1,627,010	
Mortgage loans at fair value	\$1,178,019	\$ 1,345,021	
Real estate acquired in settlement of loans	\$108,353	\$ 215,713	
Real estate held for investment	\$13,602	\$ <i>-</i>	
CRT Agreements:			
Deposits securing CRT agreements	\$410,512	\$414,610	
Derivative assets	\$19,291	\$ 9,078	

⁽¹⁾ At June 30, 2017, available borrowing capacity includes \$500 million of temporary increases in credit limits expiring on various dates through September 30, 2017.

Following is a summary of maturities of outstanding assets sold under agreements to repurchase by facility maturity date:

Remaining Maturity at June 30, 2017	Contractual balance
	(in
	thousands)
Within 30 days	\$1,347,445
Over 30 to 90 days	153,433
Over 90 days to 180 days	246,264
Over 180 days to 1 year	1,751,774
Over one year to two years	_
•	\$3,498,916
Weighted average maturity (in months)	5.3

The Company is subject to margin calls during the period the agreements are outstanding and therefore may be required to repay a portion of the borrowings before the respective agreements mature if the fair value (as determined by the applicable lender) of the assets securing those agreements decreases.

The amount at risk (the fair value of the assets pledged plus the related margin deposit, less the amount advanced by the counterparty and interest payable) and maturity information relating to the Company's assets sold under agreements to repurchase is summarized by counterparty below as of June 30, 2017:

Mortgage loans acquired for sale, Mortgage loans and REO sold under agreements to repurchase

Weighted-average
repurchase

Counterparty	Amount at risk (in thousands)	agreement maturity	Facility maturity
Credit Suisse First Boston Mortgage			
Capital LLC	\$ 85,097	September 20, 2017	April 27, 2018
Citibank, N.A.	\$ 174,564	August 1, 2017	March 2, 2018
JPMorgan Chase & Co.	\$ 109,212	August 23, 2017	October 13, 2017
Bank of America, N.A.	\$ 22,821	September 21, 2017	May 25, 2018
Morgan Stanley	\$ 9,424	September 17, 2017	August 25, 2017
Barclays Bank PLC	\$ 11,382	September 18, 2017	December 1, 2017

Securities sold under agreements to repurchase

	Weighted average
Amount at	
risk	maturity
(in	
thousands)	
\$ 1,106	July 5, 2017
\$ 17,286	July 17, 2017
\$ 5,719	July 18, 2017
\$ 5,393	July 10, 2017
\$ 3,507	July 17, 2017
	risk (in thousands) \$ 1,106 \$ 17,286 \$ 5,719 \$ 5,393

CRT Agreements

		Weighted average
	Amount at	
Counterparty	risk	maturity
	(in	
	thousands)	
Credit Suisse First Boston Mortgage Capital LLC	\$ 57,732	July 11, 2017
Bank of America, N.A.	\$ 31,238	July 12, 2017
BNP Paribas Corporate & Institutional Banking	\$ 19,302	July 12, 2017

Note 13—Mortgage Loan Participation and Sale Agreements

Certain borrowing facilities secured by mortgage loans acquired for sale are in the form of mortgage loan participation and sale agreements. Participation certificates, each of which represents an undivided beneficial ownership interest in a pool of mortgage loans that have been pooled with Fannie Mae or Freddie Mac, are sold to a lender pending the securitization of such mortgage loans and the sale of the resulting security. A commitment between the Company and a nonaffiliate to sell such security is also assigned to the lender at the time a participation certificate is sold.

The purchase price paid by the lender for each participation certificate is based on the trade price of the security, plus an amount of interest expected to accrue on the security to its anticipated delivery date, minus a present value adjustment, any related hedging costs and a holdback amount. The holdback amount is based on a percentage of the purchase price and is not required to be paid to the Company until the settlement of the security and its delivery to the lender.

Mortgage loan participation and sale agreements are summarized below:

	Quarter ended June 30,		Six months ended June 30,	
	2017	2016	2017	2016
	(dollars in	thousands)		
Weighted-average interest rate (1)	2.30 %	1.69 %	2.20 %	1.68 %
Average balance	\$71,724	\$70,701	\$68,131	\$69,649
Total interest expense	\$449	\$333	\$816	\$661
Maximum daily amount outstanding	\$98,721	\$96,335	\$98,721	\$97,672

(1) Excludes the effect of amortization of debt issuance costs of \$31,000 and \$63,000 for the quarter and six months ended June 30, 2017, respectively, and \$31,000 and \$68,000 for the quarter and six months ended June 30, 2016, respectively.

	June 30, 2017 (dollars in	December 3 2016 thousands)	31,
Carrying value:		,	
Amount outstanding	\$38,470	\$ 25,917	
Unamortized debt issuance costs	(125)	_	
	\$38,345	\$ 25,917	
Weighted-average interest rate	2.47 %	2.02	%
Mortgage loans acquired for sale pledged to secure			
mortgage loan participation and sale agreements	\$39,657	\$ 26,738	

Note 14—Federal Home Loan Bank Advances

On January 12, 2016, the Federal Housing Finance Agency ("FHFA") issued a final rule establishing new requirements for membership in the Federal Home Loan Banks. The final rule excludes captive insurance companies such as the Company's insurance subsidiary, Copper Insurance, LLC, from membership.

For captive insurance companies that became members since the rule was proposed in 2014, including Copper Insurance, LLC, membership must be terminated within one year, and no additional advances may be made. Accordingly, the Company has repaid all of the advances outstanding as of June 30, 2016.

The FHLB advances are summarized below:

	Si	x months ended	
	Ju	ne 30,	
	20	16	
	(de	ollars in thousands)	
Weighted-average interest rate		0.49	%
Average balance	\$	49,019	
Total interest expense	\$	122	
Maximum daily amount outstanding	\$	201,130	

Note 15—Notes Payable

On March 24, 2017, the Company, through PennyMac Corp ("PMC") and PMH, entered into a Loan and Security Agreement with Barclays Bank PLC ("Barclays"), pursuant to which PMC and PMH may finance certain mortgage servicing rights (inclusive of any related excess servicing spread arising therefrom and that maybe transferred from PMC to PMH from time to time) relating to mortgage loans pooled into Freddie Mac securities (collectively, the "Freddie MSRs"), in an aggregate loan amount not to exceed \$170 million. The note matures on December 1, 2017, subject to a wind down period of up to one year following such maturity date.

On March 24, 2017, the Company, through PMC and PMH, entered into a second Amended and Restated Loan and Security Agreement with Citibank, N.A., Pursuant to which PMC and PMH finance certain MSRs (inclusive of any related excess servicing spread and/or junior excess strips arising therefrom and that may be transferred from PMC to PMH from time to time) relating to mortgage loans pooled into Fannie Mae securities (collectively, the "Fannie MSRs") in an aggregate loan amount not to exceed \$400 million, all of which is committed. The note matures on March 2, 2018.

Following is a summary of financial information relating to the notes payable:

	•		Six months ended June 30,		
	2017	2016	2017	2016	
	(dollars in the	housands)			
Weighted-average interest rate (1)	6.04 %	4.63 %	5.40 %	4.65 %	
Average balance	\$119,447	\$188,330	\$189,526	\$200,973	
Total interest expense	\$3,095	\$2,991	\$7,399	\$6,334	
Maximum daily amount outstanding	\$160,106	\$211,103	\$275,106	\$234,476	

(1) Excludes the effect of amortization of debt issuance costs of \$1.3 million and \$2.2 million for the quarter and six months ended June 30, 2017, respectively, and \$788,000 and \$1.6 million for the quarter and six months ended June 30, 2016, respectively.

	June 30,	December 3	1,
	2017	2016	
	(dollars in the	housands)	
Carrying value:			
Amount outstanding	\$159,980	\$ 275,106	
Unamortized debt issuance costs		_	
	\$159,980	\$ 275,106	
Weighted-average interest rate	5.34 %	4.73	%
MSRs pledged to secure notes payable	\$723,896	\$ 656,567	

Note 16—Asset-Backed Financing of a Variable Interest Entity at Fair Value

Following is a summary of financial information relating to the asset-backed financing of a VIE:

Quarter e	ended June	Six mont	hs ended
30,		June 30,	
2017	2016	2017	2016
(dollars i	n thousands)		

Weighted-average fair value	\$337,844	\$334,233	\$342,822	\$325,112	
Interest expense	\$3,596	\$3,606	\$7,005	\$4,958	
Weighted-average effective interest rate	3.41	% 3.34	% 3.44	% 3.34 %)

	June 30,	
	2017 D	ecember 31, 2016
	(dollars in tho	usands)
Carrying value	\$329,459 \$	353,898
UPB	\$339,515 \$	355,494
Weighted-average interest rate	3.50 %	3.50 %

The asset-backed financing of a VIE is a non-recourse liability and secured solely by the assets of a consolidated VIE and not by any other assets of the Company. The assets of the VIE are the only source of funds for repayment of the certificates.

Note 17—Exchangeable Senior Notes

PMC issued in a private offering \$250 million aggregate principal amount of Exchangeable Notes due May 1, 2020. The Exchangeable Notes bear interest at a rate of 5.375% per year, payable semiannually. The Exchangeable Notes are exchangeable into common shares of the Company at a rate of 33.8667 common shares per \$1,000 principal amount of the Exchangeable Notes as of June 30, 2017, which is an increase over the initial exchange rate of 33.5149. The increase in the calculated exchange rate was the result of quarterly cash dividends exceeding the quarterly dividend threshold amount of \$0.57 per share in prior reporting periods, as provided in the related indenture.

Following is financial information relating to the Exchangeable Notes:

	Quarter ended June		Six month	s ended	
	30,		June 30,		
	2017	2016	2017	2016	
	(in thousar	nds)			
Weighted-average UPB	\$250,000	\$250,000	\$250,000	\$250,000	
Interest expense	\$3,631	\$3,616	\$7,260	\$7,228	
_					
		June 30,	Decemb	er 31,	
		2017	2016		
		(in thous	ands)		
Carrying value:					
UPB		\$250,00	0 \$ 250,0	00	

(3,371) (3,911 \$246,629 \$ 246,089

Note 18—Liability for Losses Under Representations and Warranties

Following is a summary of the Company's liability for losses under representations and warranties:

Unamortized debt issuance costs

	Quarter ende 2017 (in thousands	2016	Six mont June 30, 2017	hs ended 2016
Balance, beginning of period	\$11,447	\$18,712	\$15,350	\$20,171
Provision for losses:				
Pursuant to mortgage loan sales	607	650	1,280	1,221
Reduction in liability due to change in estimate	(1,305) —	(5,881)	(1,724)
Losses incurred	(52) (104) (52)	(410)
Recoveries	_	_	_	_
Balance, end of period	\$10,697	\$19,258	\$10,697	\$19,258
UPB of mortgage loans subject to representations and				
warranties at end of period	\$62,530,609	\$46,339,653		

Note 19—Commitments and Contingencies

Litigation

From time to time, the Company may be involved in various proceedings, claims and legal actions arising in the ordinary course of business. As of June 30, 2017, the Company was not involved in any such proceedings, claims or legal actions that in management's view would reasonably be likely to have a material adverse effect on the Company.

Commitments

The following table summarizes the Company's outstanding contractual commitments:

	June 30,
	2017
	(in
	thousands)
Commitments to purchase mortgage loans acquired for sale	\$1,931,374
Commitments to fund Deposits securing CRT agreements (1)	\$247,942

(1) Certain deposits of cash collateral on CRT Agreements are made upon the first to occur of fulfillment of the aggregation obligation or the lapse of the aggregation period.

Note 20—Shareholders' Equity

Issuance of Preferred Shares of Beneficial Interest

On March 9, 2017, the Company issued 4,600,000 of its 8.125% Series A Fixed-to-Floating Rate Cumulative Redeemable Preferred Shares of Beneficial Interest, \$0.01 par value per share ("Series A Preferred Shares"). From, and including, the date of original issuance to, but not including, March 15, 2024, the Company will pay cumulative dividends on the Series A Preferred Shares

at a fixed rate of 8.125% per annum based on the \$25.00 per share liquidation preference. From, and including, March 15, 2024 and thereafter, the Company will pay cumulative dividends on the Series A Preferred Shares at a floating rate equal to three-month LIBOR as calculated on each applicable dividend determination date plus a spread of 5.831% per annum based on the \$25.00 per share liquidation preference. PMT will pay quarterly cumulative dividends on the Series A Preferred Shares, in arrears, on the 15th day of each March, June, September and December, beginning on June 15, 2017 (provided that if any dividend payment date is not a business day, then the dividend that would otherwise have been payable on that dividend payment date may be paid on the next succeeding business day).

The Series A Preferred Shares will not be redeemable before March 15, 2024, except in connection with the Company's qualification as a REIT for U.S. federal income tax purposes or upon the occurrence of a change of control of the Company as described in the prospectus supplement filed with the SEC on March 6, 2017. On or after March 15, 2024 or within 120 days of the occurrence of a change in control, the Company may, at its option, redeem any or all of the Series A Preferred Shares at \$25.00 per share plus any accumulated and unpaid dividends thereon to, but not including, the redemption date.

The Series A Preferred Shares have no stated maturity, are not subject to any sinking fund or mandatory redemption and will remain outstanding indefinitely unless redeemed or repurchased by the Company or converted into common shares of beneficial interest, \$0.01 par value per share, of PMT in connection with a change of control by the holders of the Series A Preferred Shares.

Common Share Repurchases

During August 2015, the Company's board of trustees authorized a common share repurchase program under which the Company may repurchase up to \$150 million of its outstanding common shares. During February 2016, the Company's board of trustees approved an increase to its share repurchase program pursuant to which the Company is now authorized to repurchase up to \$200 million of its common shares.

The following table summarizes the Company's share repurchase activity:

	Quarter			
	ended June	Six mor	nths	
	30,	ended Ju	une 30,	
				Cumulative
	2012/016	2017	2016	Total (1)
	(in thousand	s)		
Common shares repurchased	— 1,186	139	6,342	8,551
Cost of common shares repurchased	\$-\$18,363	\$2,307	\$82,834	\$ 117,015

(1) Amounts represent the share repurchase program total from its inception in August 2015 through June 30, 2017. The repurchased common shares were canceled upon settlement of the repurchase transactions and returned to the authorized but unissued common share pool.

Conditional Reimbursement of IPO Underwriting Costs

As more fully described in Note 3—Transactions with Related Parties, on February 1, 2013, the Company entered into a Reimbursement Agreement, by and among the Company, the Operating Partnership and PCM. The Reimbursement Agreement provides that, to the extent the Company is required to pay PCM performance incentive fees under the management agreement, the Company will reimburse PCM for underwriting costs it paid on the IPO offering date at a rate of \$10 in reimbursement for every \$100 of performance incentive fees earned. The reimbursement is subject to a maximum reimbursement in any particular 12-month period of \$1.0 million, and the maximum amount that may be reimbursed under the agreement is \$2.9 million. No payments were made during the quarters ended June 30, 2017 and June 30, 2016.

The Reimbursement Agreement also provides for the payment to the IPO underwriters of the amount that the Company agreed to pay to them at the time of the IPO if the Company satisfied certain performance measures over a specified period of time. As PCM earns performance incentive fees under the management agreement, the IPO underwriters will be paid at a rate of \$20 of payments for every \$100 of performance incentive fees earned by PCM. The payment to the underwriters is subject to a maximum reimbursement in any particular 12-month period of \$2.0 million and the maximum amount that may be paid under the agreement is \$5.9 million. No payments were made during the quarters and six months ended June 30, 2017 and June 30, 2016. The Reimbursement Agreement expires on February 1, 2019.

Note 21—Net Gain on Mortgage Loans Acquired for Sale

Net gain on mortgage loans acquired for sale is summarized below:

	Quarter en 30,	ded June	Six months ended June 30,	
	2017 (in thousan	2016	2017	2016
From non-affiliates:	(III tilousul	ids)		
Cash loss:				
Mortgage loans	\$(26,688)	\$(20,592)	\$(82,595)	\$(25,173)
Hedging activities	(19,720)		(3,463)	
	(46,408)	(49,710)	(86,058)	(86,867)
Non cash gain:				
Receipt of MSRs in mortgage loan sale transactions	65,835	60,109	124,523	96,271
Provision for losses relating to representations and				
warranties provided in mortgage loan sales:				
Pursuant to mortgage loans sales	(607)	(650)	(1,280)	(1,221)
Reduction in liability due to change in estimate	1,305	_	5,881	1,724
Change in fair value of financial instruments				
held at end of period:				
IRLCs	(8,327)	7,423	(3,383)	,
Mortgage loans	(5,657)	5,015	2,471	11,752
Hedging derivatives	7,947	(92)	(11,902)	1,812
	(6,037)	12,346	(12,814)	25,675
Total from non-affiliates	14,088	22,095	30,252	35,582
From PFSI—cash gain	3,204	2,131	6,065	3,693
	\$17,292	\$24,226	\$36,317	\$39,275

Note 22—Net Gain (Loss) on Investments

Net gain (loss) on investments is summarized below:

	Quarter ended June		Six month	hs ended
	30,		June 30,	
	2017	2016	2017	2016
	(in thousa	ands)		
Net gain (loss) on investments:				
From non-affiliates:				
Mortgage-backed securities	\$4,027	\$4,332	\$4,167	\$9,431

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

Distressed mortgage loans at fair value	1,030	(13,463)	4,246	932
Mortgage loans held in a VIE at fair value	3,855	(48)	4,171	8,347
CRT Agreements	32,853	7,764	51,440	3,621
Asset-backed financing of a VIE at fair value	(3,399)	890	(3,423)	(8,963)
Hedging derivatives	(4,889)	862	(9,033)	698
	33,477	337	51,568	14,066
From PFSI—ESS	(5,885)	(15,824)	(7,255)	(33,451)
	\$27,592	\$(15,487)	\$44,313	\$(19,385)

Note 23—Net Interest Income

Net interest income is summarized below:

	Quarter e June 30,	Quarter ended June 30,		s ended
	2017 (in thousa	2016 ands)	2017	2016
Interest income:				
From nonaffiliates:				
Short-term investments	\$103	\$ —	\$385	\$377
Mortgage-backed securities	7,734	2,756	14,506	5,468
Mortgage loans acquired for sale at fair value	12,995	13,596	24,497	22,860
Mortgage loans at fair value:				
Distressed	19,592	23,042	39,244	52,228
Held in a VIE	3,876	4,951	7,605	10,480
Deposits securing CRT Agreements	855	235	1,264	375
Placement fees relating to custodial funds	2,811	1,341	3,882	1,341
Other	54	132	90	275
	48,020	46,053	91,473	93,404
From PFSI—ESS	4,366	5,713	9,013	12,728
	52,386	51,766	100,486	106,132
Interest expense:				
To nonaffiliates:				
Assets sold under agreements to repurchase	23,941	22,056	46,123	42,468
Mortgage loan participation and sale agreements	449	333	816	661
FHLB advances			_	122
Notes payable	3,095	2,991	7,399	6,334
Asset-backed financings of VIEs at fair value	3,596	3,606	7,005	4,958
Exchangeable Notes	3,631	3,616	7,260	7,228
Interest shortfall on repayments of mortgage loans				
serviced for Agency securitizations	1,368	1,589	2,430	2,561
Interest on mortgage loan impound deposits	321	180	742	441
	36,401	34,371	71,775	64,773
To PFSI—Assets sold under agreement to repurchase		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

Note 24—Net Mortgage Loan Servicing Fees

Net mortgage loan servicing fees are summarized below:

	Quarter ended 2017 (in thousands	2016	Six months en 2017	nded June 30, 2016
From non-affiliates:				
Servicing fees (1)	\$41,084	\$31,578	\$79,589	\$60,450
Effect of MSRs:				
Carried at lower of amortized cost or fair value:				
Amortization	(19,523	(15,531) (37,381	(29,818)
Additions to impairment valuation allowance	(4,089	(23,170) (2,585	(40,876)
Gain on sale	<u> </u>	11	_	11
Carried at fair value—change in fair value	(4,400	(4,941) (6,393	(16,356)
Gains (losses) on hedging derivatives	2,391	27,433	(6,307	57,393
	(25,621	(16,198) (52,666	(29,646)
	15,463	15,380	26,923	30,804
From PFSI—MSR recapture income	234	311	526	441
Net mortgage loan servicing fees	\$15,697	\$15,691	\$27,449	\$31,245
Average servicing portfolio	\$61,414,348	\$45,647,524	\$59,710,787	\$44,531,795

⁽¹⁾ Includes contractually specified servicing and ancillary fees, net of Agency guarantee fees.

Note 25—Share-Based Compensation Plans

As of June 30, 2017 and December 31, 2016, the Company had one share-based compensation plan. The following table summarizes the Company's share-based compensation activity:

	Quarter ended June 30,		Six month June 30,	s ended
	2017	2016	2017	2016
	(dollars in	thousands)		
Restricted share units granted	_	_	133,838	217,997
Performance share units granted	_		125,772	112,079
Total share units granted	_	_	259,610	330,076
Grant date fair value of restricted share units granted	\$—	\$ —	\$2,281	\$2,699
Grant date fair value of performance share units granted	_	_	1,722	1,351
Total fair value of share units granted	\$	\$ —	\$4,003	\$4,050
Restricted share units vested	131,441	222,533	284,142	298,582
Performance share units vested				

Total share units vested	131,441	222,533	284,142	298,582
Compensation expense	\$1,600	\$1,965	\$3,127	\$3,013

Note 26— Other Expenses

Other expenses are summarized below:

	Quarter ended June 30,		Six months ended June 30,	
	2017	2016	2017	2016
	(in thou	sands)		
Common overhead allocation from PFSI	\$1,592	\$2,434	\$3,026	\$4,996
Real estate held for investment	1,353	930	2,441	1,487
Technology	396	332	714	766
Insurance	330	316	668	634
Other	1,581	946	2,995	1,590
	\$5 252	\$4 958	\$9 844	\$9 473

Note 27—Income Taxes

The Company's effective tax rate was 9.6% and (5.7)% for the quarter and six months ended June 30, 2017 and 35.4% and (219.8)% for the quarter and six months ended June 30, 2016, respectively. The Company's taxable REIT subsidiary recognized a tax expense of \$2.8 million on income of \$7.2 million and a tax benefit of \$3.8 million on a loss of \$7.6 million for the quarter and six months ended June 30, 2017, respectively, while the Company's reported consolidated pretax income was \$31.8 million and \$54.4 million for the quarter and six months ended June 30, 2017, respectively. For the same periods in 2016, the Company's taxable REIT subsidiary recognized tax benefits of \$3.7 million and \$6.1 million on losses of \$9.3 million and \$15.3 million, respectively, while the Company's reported consolidated pretax loss was \$8.2 million and pretax income was \$2.9 million during such periods, respectively. The relative values between the tax benefit or expense at the taxable REIT subsidiary and the Company's consolidated pretax income drive the fluctuation in the effective tax rate. The primary difference between the Company's effective tax rate and the statutory tax rate is due to nontaxable REIT income resulting from the dividends paid deduction.

In general, cash dividends declared by the Company will be considered ordinary income to shareholders for income tax purposes. Some portion of the dividends may be characterized as capital gain distributions or a return of capital.

Note 28—Segments and Related Information

During the six months ended June 30, 2017, the Company changed the composition of its operating segments. The reporting used by the Company's chief operating decision maker changed as the Company's investment activities have become more diversified. The Manager has focused this broadened investment base on two classes of investments: credit sensitive and interest rate sensitive mortgage related assets. As this focus has developed, the Manager's reporting on and management of the Company's investments has also developed along these lines. Accordingly, during the six months ended June 30, 2017, management re-evaluated this new information in relation to its definition of its operating segments.

The Company has redefined its segment reporting to separately distinguish its investment activities between credit sensitive and interest rate sensitive investments and certain corporate activities.

Credit sensitive investment strategies include investments in distressed mortgage loans, REO, CRT Agreements, non-Agency subordinated bonds and small balance commercial real estate mortgage loans. Interest rate sensitive strategies include investments in MSRs, 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.

Segment results for the quarter and six months ended June 30, 2016 have been restated to conform prior year presentation to the new segment composition.

Financial highlights by operating segment are summarized below:

		Credit	Interest rate		
	Corresponde	entensitive	sensitive		
Quarter ended June 30, 2017	production (in thousand	strategies	strategies	Corporate	Total
Net investment income:					
Net gain on mortgage loans acquired for sale	\$17,143	\$149	\$ —	\$ —	\$17,292
Net gain (loss) on investments	_	34,140	(6,548	<u> </u>	27,592
Net mortgage loan servicing fees	_	29	15,668		15,697
Net interest income:					
Interest income	12,820	20,739	18,672	155	52,386
Interest expense	(8,962	(13,809	(15,655)	_	(38,426)
	3,858	6,930	3,017	155	13,960
Other income (loss)	10,497	(1,079) —	_	9,418
	31,498	40,169	12,137	155	83,959
Expenses:					
Mortgage loan fulfillment, servicing and management					
fees payable to PFSI	21,108	3,522	6,576		31,206
Management fees				5,638	5,638
Other	2,302	6,197	145	6,645	15,289
	23,410	9,719	6,721	12,283	52,133
Pre-tax income (loss)	\$8,088	\$30,450	\$5,416	\$(12,128)	•
Total assets at end of period	\$1,343,484	\$2,108,662	\$2,410,429	\$147,669	\$6,010,244

		Credit	Interest rate			
	Corresponde	entensitive	sensitive			
Quarter ended June 30, 2016	production (in thousand	strategies ls)	strategies	Corporate	Total	
Net investment income:						
Net gain on mortgage loans acquired for sale	\$24,322	\$(96) \$—	\$ —	\$24,226	
Net gain (loss) on investments		(4,561) (10,926) —	(15,487)
Net mortgage loan servicing fees			15,691		15,691	
Net interest income:						
Interest income	13,402	23,834	14,398	132	51,766	
Interest expense	(8,176	(15,280) (13,137) —	(36,593)
-	5,226	8,554	1,261	132	15,173	. —
Other income	8,535	(520) —	_	8,015	

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

	38,083	3,377	6,026	132	47,618
Expenses:					
Mortgage loan fulfillment and servicing fees					
payable to PFSI	19,111	11,426	5,001		35,538
Management fees	<u> </u>	<u> </u>	<u>—</u>	5,199	5,199
Other	1,796	5,817	292	7,135	15,040
	20,907	17,243	5,293	12,334	55,777
Pre-tax income (loss)	\$17,176	\$(13,866)	\$733	\$(12,202)	\$(8,159)
Total assets at end of period	\$1,531,745	\$2,426,977	\$1,695,858	\$112,982	\$5,767,562
58					

	Corresponde	Credit ensitive	Interest rate sensitive		
Six months ended June 30, 2017	production (in thousand	strategies	strategies	Corporate	Total
Net investment income:	(III tilousulle	,			
Net gain on mortgage loans acquired for sale	\$36,154	\$163	\$	\$	\$36,317
Net gain (loss) on investments	_	56,133	(11,820	· —	44,313
Net mortgage loan servicing fees		44	27,405	<u>—</u>	27,449
Net interest income:			,,		_,,,,,,
Interest income	24,176	41,060	34,775	475	100,486
Interest expense	(16,863	(28,082)	(30,660)) —	(75,605)
- And the second	7,313	12,978	4,115	475	24,881
Other income (loss)	18,813	(3,346) —	6	15,473
other meome (1888)	62,280	65,972	19,700	481	148,433
Expenses:	02,200	03,772	15,700	101	110,133
Mortgage loan fulfillment, servicing and management					
fees payable to PFSI	37,682	7,870	12,710		58,262
Management fees		<u>_</u>		10,646	10,646
Other	4,039	8,225	830	11,998	25,092
	41,721	16,095	13,540	22,644	94,000
Pre-tax income (loss)	\$20,559	\$49,877	\$6,160	\$(22,163)	·
Total assets at period end	\$1,343,484	\$2,108,662	\$2,410,429	\$147,669	\$6,010,244
		Credit	Interest rate		
	Corresponde	enstensitive	sensitive		
Six months ended June 30, 2016	production (in thousand	strategies ls)	strategies	Corporate	Total
Net investment income:					
Net gain on mortgage loans acquired for sale	\$39,619	\$(344) \$—	\$—	\$39,275
Net gain (loss) on investments	<u> </u>	5,243	(24,628	_	(19,385)
Net mortgage loan servicing fees	_	<u> </u>	31,245	_	31,245
Net interest income:			,		
Interest income	22,412	53,779	29,672	269	106,132
Interest expense	(13,531	(32,095) (22,971)	<u> </u>	(68,597)
1	, -	, , , , ,			, , , ,

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

	8,881	21,684	6,701	269	37,535
Other income (loss)	15,462	(4,298	<u> </u>	_	11,164
	63,962	22,285	13,318	269	99,834
Expenses:					
Mortgage loan fulfillment, servicing and management					
fees payable to PFSI	32,046	18,234	9,646	_	59,926
Management fees	_	_	_	10,551	10,551
Other	3,081	9,667	594	13,130	26,472
	35,127	27,901	10,240	23,681	96,949
Pre-tax income	\$28,835	\$(5,616)	\$3,078	\$(23,412)	\$2,885
Total assets at period end	\$1,531,745	\$2,426,977	\$1,695,858	\$112,982	\$5,767,562

Note 29—Supplemental Cash Flow Information

	Six month June 30, 20	5 01140 0
	2017	2016
	(in thousar	nds)
Cash paid for interest	\$78,021	\$76,198
Income taxes paid, net	\$191	\$388
Non-cash investing activities:		
Receipt of MSRs as proceeds from sales of mortgage loans	\$124,523	\$96,271
Transfer of mortgage loans and advances to real estate		
acquired in settlement of loans	\$54,030	\$114,052
Transfer of real estate acquired in settlement of mortgage		
loans to real estate held for investment	\$11,745	\$12,266
Receipt of ESS pursuant to recapture agreement with PFSI	\$2,953	\$3,601
Capitalization of servicing advances pursuant to mortgage loan		
modifications	\$13,148	\$ —
Non-cash financing activities:		
Transfer of mortgage loans at fair value financed under agreements to		
repurchase REO financed under agreements	\$—	\$15,191
Dividends payable	\$31,655	\$32,082

Note 30—Regulatory Capital and Liquidity Requirements

PMC is a seller-servicer for Fannie Mae and Freddie Mac. The Company is required to comply with the following minimum capital and liquidity eligibility requirements to remain in good standing with each Agency:

- A minimum net worth of a base of \$2.5 million plus 25 basis points of UPB for total 1-4 unit residential mortgage loans serviced;
- A tangible net worth/total assets ratio greater than or equal to 6%; and
- Liquidity equal to or exceeding 3.5 basis points multiplied by the aggregate UPB of all mortgages secured by 1-4 unit residential properties serviced for Freddie Mac and Fannie Mae ("Agency Mortgage Servicing") plus 200 basis points multiplied by the sum of nonperforming (90 or more days delinquent) Agency Mortgage Servicing that exceeds 6% of Agency Mortgage Servicing.

Such Agencies' capital and liquidity requirements, the calculations of which are defined by each entity, are summarized below:

June 30, 2017

\$459,274 \$160,696

\$392,056 \$143,259

			Tangible Net Worth /		
	NI -4 XX741	(1)	Total Assets	T 1 1 414	- (1)
	Net Worth	1(1)	Ratio (1)	Liquidity	/ (1)
Fannie Mae and Freddie Mac	Actual	Required	ActualRequired	Actual	Required
	(in thousa	nds)		(in thous	ands)

12%

12%

% \$48,453 \$22,147

% \$26,670 \$19,706

(1) Calculated in accordance with the Agencies' capital and liquidity requirements.

June 30, 2017

December 31, 2016

Noncompliance with the Agencies' capital and liquidity requirements can result in the Agencies taking various remedial actions up to and including removing the Company's ability to sell loans to and service loans on behalf of the Agencies.

Note 31—Recently Issued Accounting Pronouncements

In May 2014, the FASB issued ASU 2014-09, Revenue from Contracts with Customers (Subtopic 606) ("ASU 2014-09"), which supersedes the guidance in the Revenue Recognition topic of the ASC. ASU 2014-09 clarifies the principles for recognizing revenue in order to improve comparability of revenue recognition practices across entities and industries with certain scope exceptions including financial instruments, leases, and guarantees. ASU 2014-09 provides guidance intended to assist in the identification of contracts with customers and separate performance obligations within those contracts, the determination and allocation of the transaction price to those identified performance obligations and the recognition of revenue when a performance obligation has been satisfied. ASU 2014-09 also requires disclosures regarding the nature, amount, timing, and uncertainty of revenues and cash flows from contracts with customers.

Upon adoption, ASU 2014-09 provides for transition through either a full retrospective approach requiring the restatement of all presented prior periods or a modified retrospective approach, which allows the new recognition standard to be applied to only those contracts that are not completed at the date of transition. If the modified retrospective approach is adopted, a cumulative-effect adjustment to retained earnings is performed with additional disclosures required including the amount by which each line item is affected by the transition as compared to the guidance in effect before adoption and an explanation of the reasons for significant changes in these amounts.

The FASB has issued several amendments to ASU 2014-09, including:

- In August 2015, ASU 2015-14, Revenue From Contracts With Customers ("ASU 2015-14"). This update deferred the initial effective date of ASU 2014-09. As a result of the issuance of ASU 2015-14, ASU 2014-09 is effective for annual reporting periods beginning on or after December 15, 2017, and interim periods within those annual periods. Early adoption is permitted only as of annual reporting periods beginning after December 15, 2016, including interim reporting periods within that reporting period.
- In March 2016, ASU 2016-08, Principal Versus Agent Considerations (Reporting Revenue Gross versus Net). The amendments to this update are intended to improve the implementation guidance on principal versus agent considerations in ASU 2014-09 by clarifying how an entity should identify the unit of accounting (i.e. the specified good or service) and how an entity should apply the control principle to certain types of arrangements.
- In May 2016, ASU 2016-12, Narrow-Scope Improvements and Practical Expedients. The amendments to this update clarify certain core recognition principles and provide practical expedients available at transition. The improvements address collectability, sales tax presentation, noncash consideration, contract modifications and completed contracts at transition.
- In December 2016, ASU 2016-20, Technical Corrections and Improvements to Topic 606, Revenue from Contracts with Customers. The amendments to this update:
- oClarify that guarantee fees within the scope of the Guarantees topic of the ASC (other than product or service warranties) are not within the scope of the Revenue from Contracts with Customers topic of the ASC. Entities should see the Derivatives and Hedging topic of the ASC, for guarantees accounted for as derivatives.
- oClarify the Other Assets and Deferred Costs—Contracts with Customers subtopic of the ASC that when performing impairment testing an entity should (a) consider expected contract renewals and extensions and (b) include both the amount of consideration it already has received but has not recognized as revenue and the amount it expects to receive in the future.
- oClarify the interaction of impairment testing with guidance in other ASC topics that impairment testing first should be performed on assets not within the scope of the Other Assets and Deferred Costs, Intangibles-Goodwill and Other and the Property, Plant, and Equipment topics (such as assets within the Inventory topic of the ASC), then assets within the scope of the Other Assets and Deferred Costs topic of the ASC, then asset groups and reporting units within the scope of the Other Assets and Deferred Costs, Intangibles-Goodwill and Other and the Property, Plant, and Equipment topics of the ASC.

- oClarify that all contracts within the scope of the Financial Services Insurance topic of the ASC are excluded from the scope of the Revenue from Contracts with Customers topic.
- oProvide optional exemptions from the disclosure requirement for remaining performance obligations for specific situations in which an entity need not estimate variable consideration to recognize revenue and expands the information that is required to be disclosed when an entity applies one of the optional exemptions.

- oClarify that the disclosure of revenue recognized from performance obligations satisfied (or partially satisfied) in previous periods applies to all performance obligations and is not limited to performance obligations with corresponding contract balances.
- In February 2017, ASU 2017-05, Other Income—Gains and Losses from the Derecognition of Nonfinancial Assets (Subtopic 610-20) ("ASU 2017-05"). The amendments to this update clarify the scope of the Other Income—Gains and Losses from the Derecognition of Nonfinancial Assets subtopic of the ASC, and to add guidance for partial sales of nonfinancial assets. ASU 2017-05 clarifies that:
- oA financial asset is within the scope of the Other Income—Gains and Losses from the Derecognition of Nonfinancial Assets subtopic of the ASC if it meets the definition of an in substance nonfinancial asset and defines the term in substance nonfinancial asset, in part, as a financial asset promised to a counterparty in a contract if substantially all of the fair value of the assets (recognized and unrecognized) that are promised to the counterparty in the contract is concentrated in nonfinancial assets.
- oIt excludes all businesses and nonprofit activities from the scope of the Other Income Gains and Losses from the Derecognition of Nonfinancial Assets subtopic of the ASC. Derecognition of all businesses and nonprofit activities should be accounted for in accordance with the Consolidation—Overall subtopic of the ASC.
- o An entity should identify each distinct nonfinancial asset or in substance nonfinancial asset promised to a counterparty and derecognize each asset when a counterparty obtains control of it.
- o An entity should allocate consideration to each distinct asset by applying the guidance in the Revenue from Contracts with Customers topic of the ASC on allocating the transaction price to performance obligations.
 - An entity must derecognize a distinct nonfinancial asset or distinct in substance nonfinancial asset in a partial sale transaction when it (1) does not have (or ceases to have) a controlling financial interest in the legal entity that holds the asset in accordance with the Consolidations topic and (2) transfers control of the asset in accordance with the Revenue from Contracts with Customers topic of the ASC. Once an entity transfers control of a distinct nonfinancial asset or distinct in substance nonfinancial asset, it is required to measure any noncontrolling interest it receives (or retains) at fair value.

The Manager has evaluated the effect of adoption of ASU 2014-09 and its amendments and their effect on the Company's consolidated financial statements, and has concluded that ASU 2014-09 will not have an effect on such financial statements.

In January 2016, the FASB issued ASU 2016-01, Financial Instruments—Overall: Recognition and Measurement of Financial Assets and Financial Liabilities ("ASU 2016-01"). ASU 2016-01 affects the accounting for equity investments, financial liabilities under the fair value option, the presentation and disclosure requirements for financial instruments, and the valuation allowance assessment when recognizing deferred tax assets resulting from unrealized losses on available-for-sale debt securities.

ASU 2016-01 requires that:

- All equity investments in unconsolidated entities (other than those accounted for using the equity method of accounting) with readily determinable fair values will generally be measured at fair value through earnings.
- When the fair value option has been elected for financial liabilities, changes in fair value due to instrument-specific credit risk will be recognized separately in other comprehensive income. The accumulated gains and losses due to these changes will be reclassified from accumulated other comprehensive income to earnings if the financial liability is settled before maturity.
- For financial instruments measured at amortized cost, public business entities will be required to use the exit price when measuring the fair value of financial instruments for disclosure purposes.
- Financial assets and financial liabilities shall be presented separately in the notes to the financial statements, grouped by measurement category (e.g., fair value, amortized cost, lower of cost or fair value) and form of financial asset (e.g., loans, securities).

•

Public business entities will no longer be required to disclose the methods and significant assumptions used to estimate the fair value of financial instruments carried at amortized cost.

Entities will have to assess the realizability of a deferred tax asset related to a debt security classified as available for sale in combination with the entity's other deferred tax assets.

The classification and measurement guidance will be effective for public business entities in fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. Early adoption of the provision to record fair value changes for financial liabilities under the fair value option resulting from instrument-specific credit risk in other comprehensive income is permitted and can be elected for all financial statements of fiscal years and interim periods that have not yet been issued or that have not yet been made available for issuance. The Manager does not believe that the adoption of ASU 2016-01 will have a significant effect on its consolidated financial statements.

In March 2016, the FASB issued ASU 2016-09, Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting ("ASU 2016-09"). ASU 2016-09 simplifies several aspects of the accounting for share-based payment award transactions, including:

Modifies the accounting for income taxes relating to share-based payments. All excess tax benefits and tax deficiencies (including tax benefits of dividends on share-based payment awards) will be recognized as income tax expense or benefit in the consolidated statement of income. The tax effects of exercised or vested awards will be treated as discrete items in the reporting period in which they occur. An entity will recognize excess tax benefits regardless of whether the benefit reduces taxes payable in the current period. Under current GAAP, excess tax benefits are recognized in additional paid-in capital; tax deficiencies are recognized either as an offset to accumulated excess tax benefits, if any, or in the consolidated statement of income in the period they reduce income taxes payable. Changes the classification of excess tax benefits on the consolidated statement of cash flows. In the consolidated statement of cash flows, excess tax benefits will be classified along with other income tax cash flows as an operating activity. Under current GAAP, excess tax benefits are separated from other income tax cash flows and classified as a financing activity.

Changes the requirement to estimate the number of awards that are expected to vest. Under ASC 2016-09, an entity can make an entity-wide accounting policy election to either estimate the number of awards that are expected to vest as presently required or account for forfeitures when they occur. Under current GAAP, accruals of compensation cost are based on the number of awards that are expected to vest.

Changes the tax withholding requirements for share-based payment awards to qualify for equity accounting. The threshold to qualify for equity classification permits withholding up to the maximum statutory tax rates in the applicable jurisdictions. Under current GAAP, for an award to qualify for equity classification is that an entity cannot partially settle the award in cash in excess of the employer's minimum statutory withholding requirements. Establishes GAAP for the classification of employee taxes paid when an employer withholds shares for tax withholding purposes. Cash paid by an employer when directly withholding shares for tax- withholding purposes should be classified as a financing activity. This guidance establishes GAAP related to the classification of withholding taxes in the statement of cash flows as there is no such guidance under current GAAP.

ASU 2016-09 is effective for annual periods beginning after December 15, 2016, and interim periods within those annual periods. Early adoption is permitted for any organization in any interim or annual period. The adoption ASU 2016-09 did not have a significant effect on the Company's consolidated financial statements.

Note 32—Subsequent Events

Management has evaluated all events and transactions through the date the Company issued these consolidated financial statements. During this period:

During July 2017, the Company entered into an agreement to sell \$149 million in UPB of performing loans from the distressed portfolio. The sale is scheduled to settle in August 2017. Although definitive documentation has been executed, this transaction is subject to continuing due diligence and customary closing conditions. There can be no assurance regarding the size of the transaction or that the transaction will be completed at all.

On July 5, 2017, the Company closed on an offering of 7,000,000 shares of 8.00% Series B Fixed-to-Floating Rate Cumulative Redeemable Preferred Shares of Beneficial Interest, liquidation preference \$25.00 per share, \$0.01 par value per share (the "Series B Preferred Shares"). In connection with the closing, PennyMac GP OP, Inc., a wholly-owned subsidiary of the Company and the general partner of the Operating Partnership amended the Operating Partnership's Amended and Restated Limited Partnership Agreement to designate limited partnership units (the "Series B Preferred Units") with substantially the same terms as the Series B Preferred Shares to be issued to the Company in exchange for the net proceeds from the Company's sale of the Series B Preferred Shares.

The Company received net proceeds from the offering of approximately \$169.3 million, after deducting the underwriting discounts and commissions and the Company's estimated expenses. On July 12, 2017, after the underwriters had exercised their option to purchase 800,000 additional Series B Preferred Shares during the 30-day over-allotment period, the Company received additional net proceeds of approximately \$19.4 million.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis of financial condition and results of operations should be read with the consolidated financial statements and the related notes of PennyMac Mortgage Investment Trust ("PMT") included within this Quarterly Report on Form 10-Q.

Statements contained in this Quarterly Report on Form 10-Q may constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These statements involve known and unknown risks, uncertainties and other factors, which may cause actual results to be materially different from those expressed or implied in such statements. You can identify these forward-looking statements by words such as "may," "will," "should," "expect," "anticipate," "believe," "estimate," "intend," "plan" and other similar expressions. You should consider our forward-looking statements in light of the risks discussed under the heading "Risk Factors," as well as our consolidated financial statements, related notes, and the other financial information appearing elsewhere in this Quarterly Report on Form 10-Q and our other filings with the United States Securities and Exchange Commission ("SEC"). The forward-looking statements contained in this Quarterly Report on Form 10-Q are made as of the date hereof and we assume no obligation to update or supplement any forward-looking statements.

The following discussion and analysis provides information that we believe is relevant to an assessment and understanding of our consolidated results of operations and financial condition. Unless the context indicates otherwise, references in this Quarterly Report on Form 10-Q to the words "we," "us," "our" and the "Company" refer to PMT.

Our Company

We are a specialty finance company that invests primarily in residential mortgage loans and mortgage-related assets. Our objective is to provide attractive risk-adjusted returns to our investors over the long-term, primarily through dividends and secondarily through capital appreciation. We have pursued this objective largely by investing in distressed mortgage assets and acquiring, pooling and selling newly originated prime credit quality residential mortgage loans ("correspondent production") and retaining the mortgage servicing rights ("MSRs") relating to such mortgage loans. We have also invested in mortgage-backed securities ("MBS") and excess servicing spread ("ESS") on MSRs acquired by PennyMac Loan Services, LLC ("PLS"). In 2015, we began investing in credit risk transfer agreements ("CRT Agreements") on certain of the mortgage loans acquired through our correspondent production activity. Our assets are transitioning away from distressed mortgage loans to investments obtained through our correspondent production such as CRT and MSRs. We have also invested in excess servicing spread ("ESS") on MSRs acquired by PennyMac Loan Services, LLC ("PLS"), and commercial real estate loans that finance multifamily and other commercial real estate.

We are externally managed by PNMAC Capital Management, LLC ("PCM"), an investment adviser that specializes in and focuses on, U.S residential mortgage loans. Most of our mortgage loan portfolio is serviced by PLS.

Our objective is to provide attractive risk-adjusted returns to our investors over the long-term, primarily through dividends and secondarily through capital appreciation. Our targeted investments are in the U.S. mortgage market, including credit sensitive assets such as distressed mortgage loans, CRT Agreements related to our correspondent production, non-Agency subordinate bonds, small-balance commercial real estate (including multifamily) loans and subordinate interests; and interest rate sensitive assets such as MSRs, ESS, MBS, and non-Agency senior MBS.

We have invested in distressed mortgage loans through direct acquisitions of mortgage loan portfolios from institutions such as banks and mortgage companies. A substantial portion of the nonperforming mortgage loans we have purchased has been acquired from or through one or more subsidiaries of JPMorgan Chase & Co. and of Citigroup Inc.

We seek to maximize the value of the distressed mortgage loans that we acquired using means that are appropriate for the particular loan, including both proprietary and nonproprietary loan modification programs, special servicing and other initiatives focused on avoiding foreclosure, when possible. When we are unable to effect a cure for a mortgage loan delinquency, our objective is timely acquisition and/or liquidation of the property securing the mortgage loan through the use, in part, of short sales and deed-in-lieu of foreclosure programs. During the quarter and six months ended June 30, 2017 and 2016, we did not acquire distressed mortgage loans. During the quarter and six months ended June 30, 2017, we received proceeds from liquidation, payoffs, paydowns and sales from our portfolio of mortgage loans and real estate acquired in settlement of loans ("REO") totaling \$85.8 million and \$276.6 million, respectively. During the quarter and six months ended June 30, 2016, we received proceeds from liquidation, payoffs, paydowns and sales from our portfolio of mortgage loans and REO totaling \$481.3 million and \$594.0 million, respectively.

During the quarter and six months ended June 30, 2017, we purchased newly originated prime credit quality loans with fair values totaling \$17.1 billion and \$31.6 billion, respectively, as compared to \$15.3 billion and \$25.5 billion for the same periods in 2016, in furtherance of our correspondent production business. To the extent that we purchase mortgage loans that are insured by the U.S. Department of Housing and Urban Development ("HUD") through the Federal Housing Administration (the "FHA"), or insured or guaranteed by the Veterans Administration (the "VA") or U.S. Department of Agriculture ("USDA"), we and PLS have agreed that PLS will fulfill and purchase such mortgage loans, as PLS is a Ginnie Mae-approved issuer and we are not. This arrangement has enabled us to compete with other correspondent lenders that purchase both government and conventional mortgage loans. We receive a sourcing fee from PLS ranging from two to three and one-half basis points, generally based on the average number of calendar days that mortgage loans are held by us prior to purchase by PLS, on the unpaid principal balance ("UPB") of each mortgage loan. During the quarter and six months ended June 30, 2017, we received sourcing fees totaling \$3.2 million and \$6.1 million relating to \$10.6 billion and \$20.2 billion in UPB of mortgage loans at fair value that we sold to PLS, as compared to \$2.8 million and \$4.8 million relating to \$9.4 billion and \$15.9 billion in UPB loans that we sold to PLS for the same periods in 2016.

During the quarter and six months ended June 30, 2017, we received MSRs with fair values at initial recognition totaling \$65.8 million and \$124.5 million, respectively, compared to \$60.1 million and \$96.3 million for the same periods in 2016.

We believe that CRT Agreements are a long-term investment that can produce attractive risk-adjusted returns through our own mortgage production while aligning with Fannie Mae's strategic goal to attract private capital investment in GSE credit risk. We believe there is significant potential for investment in front-end credit risk transfer and MSRs that result from our correspondent production activities as we redeploy capital from the liquidation of distressed whole mortgage loans. During the quarter and six months ended June 30, 2017, we made investments in CRT Agreements totaling \$41.4 million and \$57.1 million, respectively, and commitments to fund an additional \$98.7 million and \$146.9 million of such agreements, respectively, and held CRT related investments (composed of restricted cash and derivative financial instruments) totaling \$555.8 million at June 30, 2017, compared to investments of \$465.7 million at December 31, 2016.

We supplement these activities through our participation in other mortgage-related activities, including:

- Acquisition of REIT-eligible mortgage-backed or mortgage-related securities. We purchased MBS with fair values totaling \$251.9 million during the six months ended June 30, 2017, none of which were purchased during the quarter ended June 30, 2017, as compared to \$199.2 million and \$249.9 million, respectively, during the quarter and six months ended June 30, 2016.
- Acquisition of ESS relating to MSRs held by PFSI. We did not purchase any ESS from PFSI during 2016 or 2017. However, during the quarter and six months ended June 30, 2017, we received \$1.4 million and \$3.0 million, respectively, of ESS pursuant to a recapture agreement with PFSI, compared to receipt of \$1.7 million and \$3.6 million, respectively, of ESS pursuant to such recapture agreement for the same periods in 2016.
- Acquisition of small balance (typically under \$10 million) commercial real estate loans. During the quarter and six months ended June 30, 2017, we acquired \$18.7 million and \$39.8 million, respectively, in fair value of small balance commercial real estate loans as compared to \$1.3 million and \$6.1 million, respectively, for the same periods in 2016
- To the extent that we transfer correspondent production loans into private label securitizations, retention of a portion of the securities created in the securitization transaction. Our private label securitization is accounted for as a financing arrangement. Sales of securities included in the securitization are treated as issuances of debt. During the quarter and six months ended June 30, 2017, we did not issue any of such securities.

Our board of trustees has authorized a repurchase program under which we may repurchase up to \$200 million of our outstanding common shares. We did not purchase any shares during the quarter ended June 30, 2017. We repurchased

approximately 139,000 common shares at a cost of \$2.3 million for the six months ended June 30, 2017 and approximately 6.3 million common shares at a cost of \$82.8 million for the six months ended June 30, 2016. A cumulative total of approximately 8.6 million common shares have been repurchased at a cost of \$117.0 million under the program since its inception. The repurchased common shares were canceled upon settlement of the repurchase transactions and returned to the authorized but unissued share pool.

We believe that we qualify to be taxed as a real estate investment trust ("REIT"). We believe that we will not be subject to federal income tax on that portion of our income that is distributed to shareholders as long as we meet certain asset, income and share ownership tests. If we fail to qualify as a REIT, and do not qualify for certain statutory relief provisions, our profits will be subject to income taxes and we may be precluded from qualifying as a REIT for the four tax years following the year we lose our REIT qualification. A portion of our activities, including our correspondent production business, is conducted in our taxable REIT subsidiary ("TRS"), which is subject to corporate federal and state income taxes. Accordingly, we have made a provision for income taxes with respect to the operations of our TRS. We expect that the effective rate for the provision for income taxes may be volatile in future periods. Our goal is to manage the business to take full advantage of the tax benefits afforded to us as a REIT.

Results of Operations

The following is a summary of our key performance measures:

	Quarter ended June 30,		Six months June 30,	ended
	2017	2016	2017	2016
	(in thousan	nds, except	per share an	nounts)
Net investment income	\$83,959	\$47,618	\$148,433	\$99,834
Expenses	52,133	55,777	94,000	96,949
Provision for (benefit from) income taxes	3,046	(2,892)	(3,083)	(6,344)
Net income (loss)	\$28,780	\$(5,267)	\$57,516	\$9,229
Pre-tax income (loss) by segment:				
Correspondent production	\$8,088	\$17,176	\$20,559	\$28,835
Credit sensitive strategies	30,450	(13,866)	49,877	(5,616)
Interest rate sensitive strategies	5,416	733	6,160	3,078
Corporate	(12,128)	(12,202)	(22,163)	(23,412)
	\$31,826	\$(8,159)	\$54,433	\$2,885
Earnings (loss) per share:				
Basic	\$0.39	\$(0.08)	\$0.81	\$0.12
Diluted	\$0.38	\$(0.08)	\$0.78	\$0.12
Dividends declared and paid per share	\$0.47	\$0.47	\$0.94	\$0.94
Per share closing prices:				
During the period:				
High	\$18.33	\$16.23	\$18.33	\$16.23
Low	\$17.20	\$13.07	\$16.37	\$11.21
At end of period	\$18.29	\$16.23		

	June 30,	December 31,
	2017	2016
Total assets (in thousands)	\$6,010,244	\$ 6,357,502
Book value per common share	\$20.04	\$ 20.26

During the quarter and six months ended June 30, 2017, we recorded net income of \$28.8 million, or \$0.38 per diluted share, and net income of \$57.5 million, or \$0.78 per diluted share, respectively. Our net income for the quarter and six months ended June 30, 2017 reflects net gain on mortgage loans acquired for sale of \$17.3 million and \$36.3 million, respectively, supplemented by net gain on investments of \$27.6 million and \$44.3 million, respectively, net mortgage loan servicing fees of \$15.7 million and \$27.4 million, respectively, and net interest income of \$14.0 million and \$24.9 million, respectively. During the quarter and six months ended June 30, 2017, we issued interest rate lock commitments ("IRLCs") totaling \$18.2 billion and \$32.7 billion, respectively, and purchased \$17.1 billion and \$31.6 billion, respectively, in fair value of newly originated mortgage loans, respectively. Net gains on such mortgage loans included \$65.8 million and \$124.5 million of MSRs retained upon sale of such loans. At June 30, 2017, we held mortgage loans acquired for sale with fair values totaling \$1.3 billion, \$246.3 million of which were pending sale to PLS.

During the quarter and six months ended June 30, 2016, we recorded a net loss of \$5.3 million, or \$(0.08) per diluted share, and net income of \$9.2 million, or \$0.12 per diluted share, respectively. Our net income for the quarter and six months ended June 30, 2016 reflects net interest income of \$15.2 million and \$37.5 million, and net mortgage loan servicing fees of \$15.7 million and \$31.2 million, respectively, offset by net losses on our investments totaling \$15.5 million and \$19.4 million, respectively. During the quarter and six months ended June 30, 2016, we issued IRLCs totaling \$16.0 billion and \$26.4 billion, respectively, and purchased \$15.3 billion and \$25.5 billion, respectively, in fair value of newly originated mortgage loans. We recognized net gains on such IRLCs and mortgage loans totaling approximately \$24.2 million and \$39.3 million, respectively, including \$60.1 million and \$96.3 million of MSRs retained upon sale of such loans. At June 30, 2016, we held mortgage loans acquired for sale with fair values totaling \$1.5 billion, \$619.0 million of which were pending sale to PLS.

Our net income increased during the quarter and six months ended June 30, 2017, as compared to the same periods in 2016, primarily due to increased gains from our investments in CRT Agreements and reduced loss from our investments in ESS. Net gains on investments were \$27.6 million and \$44.3 million, respectively, for the quarter and six months ended June 30, 2017, representing increases of \$43.1 million and \$63.7 million from the same periods in 2016.

In our correspondent production activities, our pretax income decreased during the quarter and six months ended June 30, 2017, as compared to the same periods in 2016, by \$9.1 million and \$8.3 million from \$17.2 million and \$28.8 million to \$8.1 million and \$20.6 million, respectively. We received proceeds of \$5.8 billion and \$10.6 billion from the sale of mortgage loans to nonaffiliates during the quarter and six months ended June 30, 2017, as compared to \$5.2 billion and \$8.5 billion during the same periods in 2016. We issued \$7.0 billion and \$12.2 billion, respectively, of IRLCs relating to Agency mortgage loans in the quarter and six months ended June 30, 2017, respectively, an increase of \$1.1 billion and \$2.4 billion from the same periods in 2016. Our net gain on mortgage loans acquired for sale decreased due to a decrease in production margin that more than offset increased production volume. Our increase in mortgage volume reflects the continued growth in the number of our correspondent sellers which more than offset the effect of the smaller mortgage origination market in 2017. The decrease in our margins reflects the effects of heightened competition resulting from the smaller mortgage origination market.

Net Investment Income

Net investment income includes non-cash fair value adjustments and the fair value of assets created and liabilities incurred in mortgage loan sale transactions and the capitalization and amortization of certain assets and liabilities. Because we have elected, or are required by generally accepted accounting principles, to record our financial assets (comprised of MBS, mortgage loans acquired for sale at fair value, mortgage loans at fair value, ESS, and derivatives), a portion of our MSRs and our asset-backed financing at fair value and interest-only security payable, a substantial portion of the income or loss we record with respect to such assets and liabilities results from non-cash changes in fair value. Net investment income also includes non-cash interest income arising from capitalization of delinquent interest on mortgage loans upon completion of the modification of such loans and accrual of unearned discounts relating to MBS, mortgage loans held in a VIE, and asset-backed financing.

The amounts of non-cash income items included in net investment income are as follows:

	Quarter ended June 30,		Six months June 30,	ended
	2017 (dollars in	2016 thousands)	2017	2016
Net gain on mortgage loans acquired for sale:	`	Ź		
Receipt of MSRs in mortgage loan sale transactions	\$65,835	\$60,109	\$124,523	\$96,271
Provision for losses relating to representations and	· ·	· ,	,	. ,
warranties provided in mortgage loan sales	(60 =)	(C T O)	(4.000.)	(1.001.)
Pursuant to mortgage loans sales	(607)	(650)	(1,280)	(1,221)
Reduction in liability due to change in estimate	1,305	_	5,881	1,724
Change in fair value during the period of financial				
instruments held at period end:				
IRLCs	(8,327)	7,423	(3,383)	12,111
Mortgage loans acquired for sale	(5,657)	5,015	2,471	11,752
Hedging derivatives	7,947	(92)	(11,902)	1,812
	60,496	71,805	116,310	122,449
Net gain (loss) on investments:				
Mortgage-backed securities:				
Agency	4,027	3,713	4,167	7,433
Non Agency		619	<u> </u>	1,998
Mortgage loans:				
at fair value	(284)	(14,275)	2,517	(1,427)
at fair value held in a variable interest entity	3,855	(48)	4,171	8,347
ESS	(5,885)	(15,824)	(7,255)	(33,451)
CRT Agreements	27,087	3,905	37,106	(2,774)
Interest-only security payable at fair value	(5,595)	466	(7,316)	473
Asset-backed financing of a VIE	(3,399)	890	(3,423)	(8,963)
e e e e e e e e e e e e e e e e e e e	19,806	(20,554)	29,967	(28,364)
Net mortgage loan servicing fees—MSR valuation adjustment		(25,678)	(6,913)	(52,336)
Net interest income:				
Capitalization of interest pursuant to mortgage loan				
modifications	10,814	16,421	20,717	39,715
Accrual of unearned discounts and amortization of	10,014	10,421	20,717	37,713
rectail of uncarried discounts and unfortization of				
premiums on MBS, mortgage loans and				
asset-backed financing	(1,601)	(4,974)	(3,007)	1,086
	9,213	11,447	17,710	40,801
	\$83,123	\$37,020	\$157,074	\$82,550
Net investment income	\$83,959	\$47,618	\$148,433	\$99,834
Non-cash items as a percentage of net investment income	99 %			
13011-cash hemis as a percentage of flet investment income	7) 70	70 70	100 %	05 70

Cash is generated when mortgage loan investments are paid off, paid down or sold, when payments of principal and interest occur on such mortgage loans, generally after they are modified, or when the property securing a mortgage loan that has been settled through acquisition of the property securing the mortgage loan has been sold. We receive proceeds on the sale of mortgage loans acquired for sale that include both cash and our estimate of the fair value of MSRs and we recognize a liability for potential losses relating to representations and warranties created in the mortgage loan sales transactions. We receive cash related to MSRs in the form of mortgage loan servicing fees and we pay cash relating to our provision for representations and warranties when we repurchase mortgage loans from investors. Cash flows relating to hedging instruments are generally produced when the instruments mature or when we effectively cancel the transactions through an offsetting trade.

The following table illustrates the proceeds received during the period from dispositions and paydowns of distressed mortgage loan investments and REO, net gain in fair value that we accumulated over the period during which we owned mortgage loan investments and REO liquidated during the period, and additional net gain realized upon liquidation of such assets:

	Quarter en	ded June 30,				
	2017			2016		
	•	Accumulated	Gain on		Accumulated	Gain on
	Proceeds (in thousar	gains (losses) (1)	liquidation (2)	Proceeds	gains (1)	liquidation (2)
Mortgage loans	\$32,257	\$ 3,832	\$ 1,385	\$43,360	\$ 4,813	\$ 1,208
REO	38,386	(4,229)	2,636	70,666	(348)	4,718
	70,643	(397)	4,021	114,026	4,465	5,926
Distressed mortgage loan						
sales	492	3	(72)	344,302	59,812	(396)
	\$71,135	\$ (394)	\$ 3,949	\$458,328	\$ 64,277	\$ 5,530
	Six mont	hs ended June 30.	,	2016		
		Accumulated	Gain on		Accumulated	I Gain on
	Proceeds (in thousa	gains (losses) (ands)	1) liquidation (2) Proceeds	gains (1)	liquidation (2)
Mortgage loans	\$57,633	\$ 6,812	\$ 1,772	\$74,916	\$ 8,079	\$ 2,748
REO	101,587	(8,404	7,615	135,573	1,239	9,327
	159,220	(1,592) 9,387	210,489	9,318	12,075
Distressed mortgage loan sales						
(3)	74,028	9,576	(27) 344,302	59,812	(396)
	****			*	* **	A

\$ 9,360

\$554,791 \$ 69,130

\$233,248 \$ 7,984

The amounts included in accumulated gains and gains on liquidation do not include the cost of managing the liquidated assets which may be substantial depending on the collection status of the mortgage loan at acquisition and on our success in working with the borrower to resolve the distress in the mortgage loan. Accumulated gains include the amount of accumulated valuation gains and losses recognized throughout the holding period and, in the case of REO, include estimated direct transaction costs to be incurred in the sale of the property. Accordingly, the preceding amounts do not represent periodic earnings on a cash basis and the amount of gain will have accumulated over varying periods depending on the holding periods for individual assets.

\$ 11,679

⁽¹⁾ Represents valuation gains and losses recognized during the period we held the respective asset but excludes the gain or loss recorded upon sale or repayment of the respective asset.

⁽²⁾ Represents the gain or loss recognized upon sale or repayment of the respective asset.

⁽³⁾ Excludes \$14.8 million in proceeds received during the six months ended June 30, 2017 from the sale of seasoned loans originally acquired in our correspondent production business.

The primary expenses incurred at a loan level in managing our portfolio of distressed assets are servicing and activity fees. From the time of acquisition of the distressed assets through their deboarding dates, we incurred servicing and activity fees of \$3.1 million and \$9.4 million for assets liquidated during the quarter and six months ended June 30, 2017, respectively, as compared to \$20.9 million and \$24.7 million during the same periods in 2016.

During the quarter and six months ended June 30, 2017, we recorded net investment income of \$84.0 million and \$148.4 million, respectively, comprised primarily of \$17.3 million and \$36.3 million, respectively, of net gain on mortgage loans acquired for sale, \$27.6 million and \$44.3 million, respectively, of net gain on investments, \$15.7 million and \$27.4 million, respectively, of net loan servicing fees, \$14.0 million and \$24.9 million, respectively, of net interest income, and \$10.5 million and \$18.8 million of mortgage loan origination fees, partially offset by \$3.5 million and \$7.7 million of losses from results of REO.

During the quarter and six months ended June 30, 2016, we recorded net investment income of \$47.6 million and \$99.8 million, respectively, comprised primarily of \$24.2 million and \$39.3 million of net gain on mortgage loans acquired for sale, \$15.7 million and \$31.2 million of net loan servicing fees, \$15.2 million and \$37.5 million of net interest income and \$8.5 million and \$15.4 million of loan origination fees, partially offset by \$2.6 million and \$8.6 million of losses from results of REO and \$15.5 million and \$19.4 million of net loss on investments.

Net Gain on Mortgage Loans Acquired for Sale

Our net gain on mortgage loans acquired for sale is summarized below:

	Quarter ended 2017 (in thousands	2016	Six months er 2017	nded June 30, 2016
From non-affiliates:				
Cash loss:				
Mortgage loans	\$(26,688)	\$(20,592)	\$(82,595)	\$(25,173)
Hedging activities	(19,720	(29,118) (3,463	(61,694)
	(46,408	(49,710	(86,058)	(86,867)
Non cash gain:				
Receipt of MSRs in mortgage loan sale transactions	65,835	60,109	124,523	96,271
Provision for losses relating to representations and				
warranties provided in mortgage loan sales				
Pursuant to mortgage loan sales	(607	(650)	(1,280)	(1,221)
Reduction in liability due to change in estimate	1,305	<u> </u>	5,881	1,724
Change in fair value during the period of financial				
instruments held at period end:				
IRLCs	(8,327	7,423	(3,383)	12,111
Mortgage loans	(5,657)	5,015	2,471	11,752
Hedging derivatives	7,947	(92	(11,902)	1,812
	(6,037	12,346	(12,814)	25,675
Total from non-affiliates	14,088	22,095	30,252	35,582
From PFSI-cash gain	3,204	2,131	6,065	3,693
	\$17,292	\$24,226	\$36,317	\$39,275
Interest rate lock commitments issued:				
Loans acquired for sale to nonaffiliates:				
Conventional mortgage loans	\$7,021,582	\$5,957,344	\$12,205,932	\$9,814,169
Jumbo mortgage loans	_	7,131		18,525
	7,021,582	5,964,475	12,205,932	9,832,694
Mortgage loans sold to PFSI:				
Government-insured or guaranteed mortgage loans	11,209,339	10,023,370	20,501,258	16,534,133
	\$18,230,921	\$15,987,845	\$32,707,190	\$26,366,827
Purchases of mortgage loans acquired for sale to				
nonaffiliates:				
At fair value	\$6,134,723	\$5,356,013	\$10,893,377	\$8,729,745
UPB	\$5,918,027	\$5,174,019	\$10,549,933	\$8,433,382
	June 30, 2017 (in thousands	December 31, 2016		
Fair value of mortgage loans acquired for sale held:	·			

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

Conventional mortgage loans	\$1,050,956	\$847,810
Jumbo mortgage loans	_	6,042
Government-insured or guaranteed mortgage		
loans acquired for sale to PFSI	246,259	804,616
Commercial mortgage loans	14,572	8,961
Mortgage loans repurchased pursuant to		
representations and warranties	6,816	5,683
	\$1,318,603	\$1,673,112

Our net gain on mortgage loans acquired for sale includes both cash and non-cash elements. We receive proceeds on sale that include both cash and our estimate of the fair value of MSRs. We also recognize a liability for potential losses relating to representations and warranties created in the mortgage loan sales transactions.

The decrease in gain on mortgage loans acquired for sale during the quarter and six months ended June 30, 2017, as compared to the same periods in 2016 was due to the effect of decreased margins which more than offset an increase in mortgage loan volume. Our increase in mortgage volume reflects the continued growth in our correspondent network which more than the offset the effect of the smaller mortgage market in 2017. The decrease in our margins reflects the effects of heightened price competition in the smaller mortgage market.

Provision for Losses on Representations and Warranties

We provide for our estimate of the future losses that we may be required to incur as a result of our breach of representations and warranties to the purchasers. Our agreements with the purchasers include representations and warranties related to the mortgage loans we sell. The representations and warranties require adherence to purchaser and issuer origination and underwriting guidelines, including but not limited to the validity of the lien securing the mortgage loan, property eligibility, borrower credit, income and asset requirements, and compliance with applicable federal, state and local law.

In the event of a breach of our representations and warranties, we may be required to either repurchase the mortgage loans with the identified defects or indemnify the investor or insurer. In such cases, we bear any subsequent credit loss on the mortgage loans. Our credit loss may be reduced by any recourse we have to correspondent lenders that, in turn, had sold such mortgage loans to us and breached similar or other representations and warranties. In such event, we have the right to seek a recovery of related repurchase losses from that correspondent lender.

The method we use to estimate the liability for representations and warranties is a function of estimated future defaults, mortgage loan repurchase rates, the potential severity of loss in the event of default and the probability of reimbursement by the correspondent mortgage loan seller. We establish a liability at the time mortgage loans are sold and review our liability estimate on a periodic basis.

Following is a summary of the indemnification and repurchase activity and UPB of mortgage loans subject to representations and warranties:

	Quarter end	ed June 30,	Six monended Ju	une 30,
	2017	2016	2017	2016
	(in thousand	,		
	(UPB of mo	ortgage loans)		
Indemnification activity:				
Mortgage loans indemnified by PMT at beginning				
of period	\$6,925	\$5,239	\$4,856	\$5,566
New indemnifications	_		2,069	_
Less:				
Indemnified mortgage loans repurchased	_	_		
Indemnified mortgage loans repaid or refinanced	253		253	327
Mortgage loans indemnified by PMT at end of period	\$6,672	\$5,239	\$6,672	\$5,239
Mortgage loans with deposits received from correspondent	\$391	\$645	\$391	\$645

lenders collateralizing prospective indemnification losses

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

\$1,968	\$2,808	\$6,079	\$6,350
1,759	3,561	4,245	3,269
1,248	19	2,426	1,678
\$(1,039) \$(772) \$(592)	\$1,403
\$52	\$104	\$52	\$410
\$62,530,609	\$46,339,653		
\$10,697	\$19,258		
	1,759 1,248 \$(1,039 \$52 \$62,530,609	1,759 3,561 1,248 19 \$(1,039) \$(772 \$52 \$104 \$62,530,609 \$46,339,653	1,759 3,561 4,245 1,248 19 2,426 \$(1,039) \$(772) \$(592) \$52 \$104 \$52 \$62,530,609 \$46,339,653

During the quarter and six months ended June 30, 2017, we repurchased mortgage loans with UPBs totaling \$2.0 million and \$6.1 million and recorded net losses charged to the liability for representations and warranties of \$52,000 for the quarter and six months ended June 30, 2017, as compared to repurchases of \$2.8 million and \$6.4 million and recorded net losses of \$104,000 and \$410,000, respectively, during the same periods in 2016. The losses we have recorded to date have been moderated by our ability to recover most of the losses inherent in the repurchased mortgage loans from the correspondent sellers. As the outstanding balance of mortgage loans we purchase and sell subject to representations and warranties increases and the mortgage loans sold season, we expect the level of repurchase activity and associated losses may increase.

The amount of the liability for representations and warranties is difficult to estimate and requires considerable judgment. The level of mortgage loan repurchase losses is dependent on economic factors, investor loss mitigation strategies, our ability to recover any losses inherent in the repurchased mortgage loan from the selling correspondent originator and other external conditions that may change over the lives of the underlying mortgage loans. We may be required to incur losses related to such representations and warranties for several periods after the mortgage loans are sold or liquidated.

As economic fundamentals change, and as investor and Agency evaluations of their loss mitigation strategies (including claims under representations and warranties) change and as economic conditions affect our correspondent sellers' ability or willingness to fulfill their recourse obligations to us, the level of repurchase activity and ensuing losses will change, and we may be required to record adjustments to our recorded liability for losses on representations and warranties which may be material to our financial condition and income. Such adjustments are included as a component of our Net gains on mortgage loans acquired for sale at fair value. We recorded a \$1.3 million and \$5.9 million reduction in liabilities for representations and warranties during the quarter and six months ended June 30, 2017 due to our revised expectation of lower than originally anticipated losses along with effects of certain mortgage loans reaching specified performance histories identified by the Agencies as sufficient to limit repurchase claims relating to such mortgage loans.

Loan Origination Fees

Loan origination fees represent fees we charge correspondent sellers relating to our purchase of mortgage loans from those sellers. The increase in fees during the quarter and six months ended June 30, 2017, as compared to the same periods in 2016 is reflective of the increase in the volume of mortgage loans we purchased during the 2017 periods.

Net Gain (Loss) on Investments

Net gain (loss) on investments is summarized below:

	Quarter ended June 30,		Six mont June 30,	hs ended	
	2017	2016	2017	2016	
	(in thous	ands)			
Net gain (loss) on investments:					
From non-affiliates:					
Mortgage-backed securities	\$4,027	\$4,332	\$4,167	\$9,431	
Mortgage loans at fair value:					

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

Distressed	1,030	(13,463)	4,246	932
Held in a VIE	3,855	(48)	4,171	8,347
CRT Agreements	32,853	7,764	51,440	3,621
Asset-backed financings of a VIE at fair value	(3,399)	890	(3,423)	(8,963)
Hedging derivatives	(4,889)	862	(9,033)	698
	33,477	337	51,568	14,066
From PFSI—ESS	(5,885)	(15,824)	(7,255)	(33,451)
	\$27,592	\$(15,487)	\$44,313	\$(19,385)

The increase in net gain (loss) on investments during the quarter and six months ended June 30, 2017, as compared to the same periods in 2016, was caused by gains in our CRT Agreements during the periods ended June 30, 2017 as compared to the periods ended June 30, 2016 as a result of both tightening of credit spreads during 2017 as compared to 2016 and growth in our investments in CRT Agreements. This improvement was supplemented by a significantly reduced loss on the Company's investment in ESS during the quarter ended June 30, 2017. This improvement reflects relative stability of the interest rate environment during the quarter and six months ended June 30, 2017, along with a smaller average investment in ESS as compared to 2016.

Mortgage-Backed Securities

During the quarter and six months ended June 30, 2017, we recognized net valuation gains on MBS of \$4.0 million and \$4.2 million, respectively, as compared to net valuation gains of \$4.3 million and \$9.4 million for the quarter and six months ended June 30, 2016. The decrease in gains we recorded for the quarter ended June 30, 2017 reflects the effects of a more significant decrease in mortgage interest rates during the quarter ended June 30, 2016, as compared to the quarter ended June 30, 2017.

Mortgage Loans at Fair Value - Distressed Mortgage Loans

Net gains on our investment in distressed mortgage loans at fair value are summarized below:

	Overter and	ad Juna 20	Six months	ended June
	Quarter end 2017 (in thousand	2016	2017	2016
Valuation changes:	`			
Performing loans	\$15,466	\$(8,356	\$21,436	\$(3,472)
Nonperforming loans	(15,750) (5,919	(18,919	2,044
	(284) (14,275	2,517	(1,428)
Gain on payoffs	1,348	1,208	1,763	2,757
Loss on sales	(34) (396) (34	(397)
	\$1,030	\$(13,463	\$4,246	\$932
Average portfolio balance	\$1,199,786	\$1,791,429	\$1,264,752	\$1,925,605
Interest and fees capitalized	\$10,814	\$16,421	\$20,717	\$39,715
Number of mortgage loans relating to gain recognized on				
payoffs	90	138	168	244
UPB of mortgage loans relating to gain recognized on				
payoffs	\$31,181	\$43,645	\$55,927	\$69,918
Number of mortgage loans relating to loss recognized on				
sales	2	1,552	340	1,552
UPB of mortgage loans relating to loss recognized on sales	\$788	\$419,435	\$104,555	\$418,935

Because we have elected to record our mortgage loans at fair value, a substantial portion of the income we record with respect to such mortgage loans results from changes in fair value. Valuation changes amounted to a loss of \$0.3 million and a gain of \$2.5 million in the quarter and six months ended June 30, 2017, respectively, as compared to losses of \$14.3 million and \$1.4 million for the same periods in 2016. We recognize gain (loss) relating to mortgage loans subject to pending sales contracts in the valuation changes. Gains on sales represent settlement adjustments realized at the date of sale.

The valuation changes on performing mortgage loans reflect the effects of capitalization of delinquent interest on loans we modify. When we capitalize interest in a loan modification, we increase the carrying value of the mortgage loan. However, the fair value of the mortgage loan does not immediately increase significantly. Therefore, the interest

income we recognize is offset by a valuation loss of corresponding magnitude. Changes in other inputs may result in further valuation changes to the mortgage loan, and subsequent performance of a modified mortgage loan will be reflected in its future fair value. During the quarter and six months ended June 30, 2017, we capitalized interest totaling \$10.8 million and \$20.7 million, respectively, as compared to \$16.4 million and \$39.7 million for the quarter and six months ended June 30, 2016.

Implementing long-term, sustainable loan modification is one means by which we endeavor to increase the fair value of the distressed mortgage loans which we have typically purchased at discounts to their UPB.

Valuation gains on performing mortgage loans increased during the quarter and six months ended June 30, 2017, as compared to the prior periods in 2016, due to strong observed market activity in the periods for portfolios with similar performance characteristics. Valuation losses on the nonperforming mortgage loans increased during the quarter and six months ended June 30, 2017, as compared to the same periods in 2016, as home price indications were below prior forecasts, in addition to increased uncertainty regarding the realization of cash flows on the remaining population of loans.

Absent sale or securitization of reperforming and modified mortgage loans, and unlike liquidation of a defaulted mortgage loan, we expect that recovery of our investment in a performing modified mortgage loan will take place generally over a period of several years, during which we earn and collect interest income on such mortgage loan. Our current expectation is that we will receive cash on modified mortgage loans through monthly borrower payments, payoffs or acquisition of the property securing the mortgage loans and liquidation of the property in the event the borrower subsequently defaults.

Large-scale refinancing of modified distressed mortgage loans is not expected to occur for an extended period. Borrowers who have recently modified their mortgage loans typically have credit profiles that do not qualify them for refinancing or have mortgage loans on properties whose loan-to-value ratios exceed current underwriting guidelines for new mortgage loans. Further, modified mortgage loans generally require a period of acceptable borrower performance for consideration in most Agency refinance programs.

The following tables present a summary of mortgage loan modifications completed:

	Quarter ended June 30, 2017 2016						Six m 2017	onths en	ded	June 3 2016	•	
	Balance				Balan	ce				N. 1 D.1		
	Numb			Numb			Numb Balance			Numb&alance		
	. C	of		- C	of		- C	- C		. C	- C	
	of	1		of	1		of	of		of	of	
Modification type (1)	loans	loans		loans	loans		loons	loons (2	`	loons	loons (2	`
Modification type (1)		rs in tho			(2)		ioans	loans (2)	ioans	loans (2	,
Rate reduction	225	\$60,433			\$46,80	60	400	\$110,36	.1	393	\$103,79	Q.
Term extension	294	\$85,342		271	\$73,48		538	\$160,01		606	\$105,79	
Capitalization of interest and fees	323	\$91,838		295	\$80,2		588	\$171,70		647	\$177,96	
Principal forbearance	158	\$52,654		101	\$28,10		273	\$92,110		192	\$56,995	
Principal reduction	109	\$29,492		177	\$52,02		200	\$57,981		386	\$112,83	
Total (1)	323	\$91,838		295	\$80,2		588	\$171,70		647	\$177,96	
Defaults of mortgage loans modified	0_0	Ψ, 1,000		_,_	φου, Ξ .			Ψ1/1,/0		0.7	Ψ177,920	•
in the prior year period		\$3,521			\$2,469	9		\$17,082	,		\$7,236	
As a percentage of relevant balance												
of loans before modification		6	%		6	%		15	%		14	%
Defaults during the period of mortgage												
loans modified since acquisitions (3)		\$20,941			\$14,6	75		\$72,249			\$51,363	,
As a percentage of relevant balance												
		_	~		4	64		1.7	~		1.5	64
of loans before modification		5	%		4	%		17	%		15	%
Repayments and sales of mortgage												
1 1'C' 1' .1 ' .1		Φ.Ε. 220			ф.41 7			\$20.774			Φ Ω Σ (42	
loans modified in the prior year period		\$5,338	%		\$417	%		\$20,774	%		\$25,643	
As a percentage of relevant balance		7	%		1	%		12	%		26	%

of loans before modification

- (1) Modification type categories are not mutually exclusive and a modification of a single loan may be counted in multiple categories. The total number of modifications noted in the table is therefore lower than the sum of all of the categories.
- (2)Before modification.
- (3) Represents defaults of mortgage loans during the period that have been modified by us at any point since acquisition.

The following table summarizes the average effect of the modifications noted above to the terms of the loans modified:

	Quarter	end	led June 30	,					Six mon	ths	ended Ju	ne	30,			
	2017			2	2016				2017				2016			
	Before	Af	fter	E	Before	A	fter		Before	A	fter		Before	A	fter	
Category	modific	atinox	on dification	n	nodifica	tina	m dification	1	modifica	a tina	ondification	n	modifica	tina	on dificat	tion
	(dollars	in t	housands)													
Loan balance	\$284	\$	316	\$	3272	\$	290		\$292	\$	324		\$275	\$	293	
Remaining term																
(months)	365		462		342		450		360		464		334		449	
Interest rate	4.11%		2.92 %)	4.62%		3.42	%	4.20%		3.00	%	4.80%		3.60	%
Forbeared principal	\$26	\$	37	\$	317	\$	18		\$25	\$	34		\$17	\$	18	

CRT Agreements

The activity in our CRT Agreements is summarized below:

	Occupation and In-	1 L 20	Six months ended June 30,			
	Quarter ended 2017 (in thousands	2016	2017	2016		
B of mortgage loans sold under CRT Agreements	\$3,760,825	\$ 3,162,746	\$5,595,121	\$5,084,744		
posits of cash securing CRT Agreements	\$41,355	\$ 126,031	\$57,148	\$192,737		
rease in commitments to fund Deposits securing dit						
sk transfer Agreements resulting from sale of						
rtgage						
oans under CRT Agreements	\$98,722	\$ —	\$146,872	\$ —		
ns recognized on CRT Agreements included in						
fet gain (loss) on investments						
ılized	\$11,361	\$ 3,859	\$21,650	\$6,395		
sulting from valuation changes	27,087	3,905	37,106	(2,774)		
	38,448	7,764	58,756	3,621		
ange in fair value of interest-only security						
	(7.707		(- 216)			
payable at fair value	(5,595) — • 7.764	(7,316) —		
. 1	\$32,853	\$ 7,764	\$51,440	\$3,621		
ments made to settle losses	\$262	\$ — \$ 225	\$411	\$— \$275		
erest earned on Deposits securing CRT Agreemen	ts \$855	\$ 235	\$1,264	\$375		
	I 20					
	June 30, 2017	December 31, 2016				
	(in thousands					
B of mortgage loans subject to credit guarantee	(III tilousalius)				
b of mortgage loans subject to credit guarantee						
bligations	\$19,301,982	\$ 14,379,850				
nmitments to fund Deposits securing CRT	Ψ17,501,702	Ψ 11,577,050				
eements	\$247,942	\$ 92,109				

⁽¹⁾ Carrying value of investments in CRT Agreements includes Deposits securing CRT Agreements and CRT derivatives.

The increase in gains recognized on CRT Agreements is due to growth in the portfolio of mortgage loans subject to CRT Agreements during 2017 as compared to 2016 and the effect of credit spread decreases (credit spreads represent the yield premium demanded by investors for securities similar to CRT Agreements as compared to a U.S. Treasury security) during 2017 on the fair value of the derivative assets included in the CRT Agreements. During 2016, we

experienced increased credit spreads related to our CRT Agreements resulting in unrealized losses.

ESS Purchased from PFSI

We recognized fair value losses relating to our investment in ESS totaling \$5.9 million and \$7.3 million for the quarter and six months ended June 30, 2017, as compared to fair value losses of \$15.8 million and \$33.5 million for the quarter and six months ended June 30, 2016, respectively. The reduction in losses was driven by the relative stability of the interest rate environment in 2017 compared to the same periods in 2016 along with a decrease in our average investment in ESS. Our average investment in ESS decreased from \$318.1 million and \$348.7 million for the quarter and six months ended June 30, 2016 to \$270.6 million and \$278.0 million for the quarter and six months ended June 30, 2017.

Net Mortgage Loan Servicing Fees

Our correspondent production activity is the primary source of our mortgage loan servicing portfolio. When we sell mortgage loans, we generally enter into a contract to service the mortgage loans and recognize the fair value of such contracts as MSRs. Under these contracts, we are required to perform mortgage loan servicing functions in exchange for fees and the right to other compensation.

The servicing functions, which are performed on our behalf by PLS, typically include, among other responsibilities, collecting and remitting mortgage loan payments; responding to borrower inquiries; accounting for principal and interest, holding custodial (impound) funds for payment of property taxes and insurance premiums; counseling delinquent mortgagors; and supervising foreclosures and property dispositions.

Net mortgage loan servicing fees are summarized below:

	Quarter ended	,	Six months en	*
	2017 (in thousands	2016	2017	2016
From non-affiliates:		,		
Servicing fees (1)	\$41,084	\$31,578	\$79,589	\$60,450
Effect of MSRs:				
Carried at lower of amortized cost or fair value:				
Amortization	(19,523)	(15,531	(37,381)	(29,818)
Additions to impairment valuation allowance	(4,089	(23,170	(2,585)	(40,876)
Gain on sale	-	11	-	11
Carried at fair value—change in fair value	(4,400	(4,941	(6,393)	(16,356)
Gains (losses) on hedging derivatives	2,391	27,433	(6,307)	57,394
	(25,621)	(16,198	(52,666)	(29,645)
From PFSI—MSR recapture income	234	311	526	440
Net mortgage loan servicing fees	\$15,697	\$15,691	\$27,449	\$31,245
Average servicing portfolio	\$61,414,348	\$45,647,524	\$59,710,787	\$44,531,795

(1) Includes contractually specified servicing and ancillary fees, net of guarantee fees.

Net mortgage loan servicing fees were unchanged during the quarter ended June 30, 2017 as compared to the quarter ended June 30, 2016, and decreased \$3.8 million, or 12%, during the six months ended June 30, 2017 as compared to the six months ended June 30, 2016. Net mortgage loan servicing fees remained unchanged during the quarter ended June 30, 2017 as compared to the quarter ended June 30, 2016 due to offsetting effects of increased servicing fees and increased amortization and fair value changes net of hedging results. The increase in servicing fees during the quarter ended June 30, 2017 as compared to the quarter ended June 30, 2016 was primarily attributable to growth in our mortgage loan servicing portfolio. The increase in amortization and fair value changes net of hedging results reflects reduced impairment that was more-than offset by reduced hedging gains and increased amortization of a larger mortgage servicing asset. The decrease in net mortgage loan servicing fees during the six months ended June 30, 2017 is driven by reduced benefit of hedging results relating to our MSR asset, partially offset by increased servicing fees.

We have entered into an MSR recapture agreement that requires PLS to transfer to us the MSRs with respect to new mortgage loans originated in refinancing transactions where PLS refinances a mortgage loan for which we previously held the MSRs. PLS is generally required to transfer MSRs relating to such mortgage loans (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, settle in cash with us in an amount equal to such fair market value in place of transferring such MSRs. We recognized MSR recapture income during the quarter and six months ended June 30, 2017 of \$234,000 and \$526,000, respectively, as compared to \$311,000 and \$440,000, respectively, for the quarter and six months ended June 30, 2016.

We have identified two classes of MSRs: originated MSRs backed by mortgage loans with initial interest rates of less than or equal to 4.5% and MSRs backed by mortgage loans with initial interest rates of more than 4.5%. Our accounting for MSRs is based on the class of MSRs. Originated MSRs backed by mortgage loans with initial interest rates of less than or equal to 4.5% are accounted for using the amortization method. Originated MSRs backed by

mortgage loans with initial interest rates of more than 4.5% are accounted for at fair value with changes in fair value recorded in current period income.

Our MSRs are summarized by the basis on which we account for the assets as presented below:

	June 30, 2017	December 31 2016	,
	(dollars in tho		
MSRs carried at fair value	\$77,624	\$64,136	
UPB of mortgage loans underlying MSRs	\$7,058,662	\$5,763,957	
MSR carried at lower of amortized cost or fair value:			
Amortized cost	\$673,433	\$606,103	
Valuation allowance	(16,257)	(13,672)
Carrying value	\$657,176	\$592,431	
Fair value	\$682,437	\$626,334	
UPB of mortgage loans underlying MSRs	\$56,219,587	\$50,539,707	
Total MSR:			
Carrying value	\$734,800	\$656,567	
Fair value	\$760,061	\$690,470	
UPB of mortgage loans underlying MSRs	\$63,278,249	\$56,303,664	
Average servicing fee rate (in basis points)			
MSRs carried at lower of amortized cost or fair value	25	25	
MSRs carried at fair value	25	25	
Average note interest rate:			
MSRs carried at lower of amortized cost or fair value	3.8	6 3.8	%
MSRs carried at fair value	4.7	6 4.7	%

Net Interest Income

Net interest income is summarized below:

	~	ended June (ncome/expe Discount/	-	Average	Annualize interest yield/cost	
	•	fees (1) n thousands	Total	balance	%	
Assets:						
Mortgage loans acquired for sale at fair value	\$12,995	\$ <i>—</i>	\$12,995	\$1,274,817	4.03	%
Short-term investments	103	_	103	24,198	1.68	%
Mortgage-backed securities:						
Agency	9,212	(1,478	7,734	1,087,889	2.81	%
Non-Agency prime jumbo						
	9,212	(1,478	7,734	1,087,889	2.81	%
Mortgage loans:						
Distressed	9,157	10,435	19,592	1,199,786	6.46	%
Held by variable interest entity	3,314	562	3,876	352,589	4.35	%
	12,471	10,997	23,468	1,552,375	5.98	%
Interest earned on deposits securing CRT Agreements	855	_	855	492,020	0.69	%
ESS from PFSI	4,366	_	4,366	270,643	6.38	%
Placement fees relating to custodial funds	2,811		2,811		_	
Other	54	—	54	—	_	
	42,867	9,519	52,386	4,701,942	4.41	%
Liabilities:						
Assets sold under agreements to repurchase	22,060	1,881	23,941	3,420,836	2.77	%
Mortgage loan participation and sale agreements	418	31	449	71,724	2.48	%
Notes payable	1,823	1,272	3,095	119,447	10.25	%
Asset-backed financings of a VIE at fair value	2,911	685	3,596	337,844	4.21	%
Exchangeable Notes	3,359	272	3,631	250,000	5.75	%
Assets sold to PFSI under agreements to repurchase	2,025	—	2,025	150,000	5.34	%
	32,596	4,141	36,737	4,349,851	3.34	%
Interest shortfall on repayments of mortgage loans						
serviced for Agency securitizations	1,368	_	1,368	_	_	
Interest on mortgage loan impound deposits	321	_	321		_	
	34,285	4,141	38,426	4,349,851	3.49	%
Net interest income	\$8,582	\$5,378	\$13,960			
Net interest margin					1.17	%
Net interest spread					0.91	%

⁽¹⁾ Amounts in this column represent amortization of premium and accrual of unearned discounts for assets and amortization of debt issuance costs for liabilities.

	~	ended June 3 ncome/expe Discount/	Average	Annualiz interest yield/cost		
	•	fees (1) n thousands	Total	balance	%	·
Assets:			,			
Mortgage loans acquired for sale at fair value	\$13,596	\$ <i>—</i>	\$13,596	\$1,422,945	3.78	%
Short-term investments	_	_	_	25,903	0.00	%
Mortgage-backed securities:						
Agency	2,823	(587) 2,236	349,951	2.53	%
Non-Agency prime jumbo	684	(164) 520	78,102	2.63	%
	3,507	(751	2,756	428,053	2.55	%
Mortgage loans:						
Distressed	6,621	16,421	23,042	1,791,429	5.09	%
Held by variable interest entity	4,086	865	4,951	437,542	4.48	%
	10,707	17,286	27,993	2,228,971	4.97	%
Interest earned on Deposits securing CRT Agreements	235	_	235	254,359	0.37	%
ESS from PFSI	5,713	_	5,713	318,065	7.11	%
Placement fees relating to custodial funds	1,341	_	1,341			
Other	132	_	132	_	—	
	35,231	16,535	51,766	4,678,296	4.38	%
Liabilities:						
Assets sold under agreements to repurchase	19,860	2,196	22,056	3,268,774	2.67	%
Mortgage loan participation and sale agreements	302	31	333	70,701	1.86	%
Notes payable	2,203	788	2,991	188,330	6.28	%
Asset-backed financings of VIEs at fair value	2,825	781	3,606	334,233	4.27	%
Exchangeable Notes	3,359	257	3,616	250,000	5.72	%
Note payable to PFSI	1,894	328	2,222	150,000	5.86	%
	30,443	4,381	34,824	4,262,038	3.23	%
Interest shortfall on repayments of mortgage loans						
serviced for Agency securitizations	1,589	_	1,589	_	_	
Interest on mortgage loan impound deposits	180	_	180			
·	32,212	4,381	36,593	4,262,038	3.40	%
Net interest income	\$3,019	\$ 12,154	\$15,173	,		
Net interest margin					1.37	%
Net interest spread					0.98	%

Amounts in this column represent amortization of premium and accrual of unearned discounts for assets and amortization of debt issuance costs for liabilities.

	Six months ended June 30, 2017										
	Interest is	Annualized									
		Discount	/	Average	interest yield/cos	st					
	Coupon	fees (1)	Total	balance	%						
	(dollars i	n thousand	s)								
Assets:											
Mortgage loans acquired for sale at fair value	\$24,497	\$ <i>—</i>	\$24,497	\$1,174,417	4.15	%					
Short-term investments	385	_	\$385	49,974	1.53	%					
Mortgage-backed securities:											
Agency	17,302	(2,796) 14,506	1,021,966	2.82	%					
Non-Agency prime jumbo											
	17,302	(2,796) 14,506	1,021,966	2.82	%					
Mortgage loans:											
Distressed	18,905	20,339	39,244	1,264,752	6.17	%					
Held by variable interest entity	6,744	861	7,605	356,271	4.25	%					
	25,649	21,200	46,849	1,621,023	5.75	%					
Interest earned on Deposits securing CRT Agreements	1,264		1,264	465,301	0.54	%					
ESS from PFSI	9,013		9,013	278,029	6.45	%					
Placement fees relating to custodial funds	3,882		3,882	_							
Other	90	_	90	_							
	82,082	18,404	100,486	4,610,710	4.33	%					
Liabilities:											
Assets sold under agreements to repurchase	41,943	4,180	46,123	3,344,772	2.74	%					
Mortgage loan participation and sale agreements	753	63	816	68,131	2.38	%					
Notes payable	5,164	2,235	7,399	189,526	7.76	%					
Asset-backed financings of a VIE at fair value	5,933	1,072	7,005	342,822	4.06	%					
Exchangeable Notes	6,719	541	7,260	250,000	5.78	%					
Note payable to PFSI	3,876	(46) 3,830	150,000	5.08	%					
	64,388	8,045	72,433	4,345,251	3.32	%					
Interest shortfall on repayments of mortgage loans											
serviced for Agency securitizations	2,430	_	2,430								
Interest on mortgage loan impound deposits	742		742	_							
	67,560	8,045	75,605	4,345,251	3.46	%					
Net interest income	\$14,522	\$ 10,359	\$24,881	\$265,459							
Net interest margin					1.07	%					
Net interest spread					0.87	%					

⁽²⁾ Amounts in this column represent amortization of premium and accrual of unearned discounts for assets and amortization of debt issuance costs for liabilities.
81

	Six months ended June 30, 2016									
		Discount	/		Average	interest yield/co				
	Coupon	fees (1)	To	tal	balance	%				
	(dollars i	n thousand	ls)							
Assets:										
Mortgage loans acquired for sale at fair value	\$22,860	\$ <i>-</i>	\$2	2,860	\$1,170,720	3.88	%			
Short-term investments	377		3	77	36,546	2.05	%			
Mortgage-backed securities:										
Agency	4,709	(581) 4	,128	289,627	2.83	%			
Non-Agency prime jumbo	1,497	(157) 1	,340	87,030	3.06	%			
	6,206	(738) 5	,468	376,657	2.89	%			
Mortgage loans:										
Distressed	12,513	39,715	5	2,228	1,925,605	5.39	%			
Held by variable interest entity	8,386	2,094	1	0,480	446,013	4.67	%			
	20,899	41,809	6	2,708	2,371,618	5.26	%			
Interest earned on Deposits securing CRT Agreements	375	_	3	75	213,082	0.35	%			
ESS from PFSI	12,728	_	1	2,728	348,669	7.26	%			
Placement fees relating to custodial funds	1,341		1	,341						
Other	275	_	2	75	_					
	65,061	41,071	1	06,132	4,517,292	4.67	%			
Liabilities:										
Assets sold under agreements to repurchase	38,185	4,283	4	2,468	3,033,038	2.78	%			
Mortgage loan participation and sale agreements	593	68	6	61	69,649	1.89	%			
Federal Home Loan Bank advances	122		1	22	49,019	0.50	%			
Notes payable	4,722	1,612	6	,334	200,973	6.27	%			
Asset-backed financings of VIEs at fair value	5,494	(536) 4	,958	325,112	3.03	%			
Exchangeable Notes	6,719	509								