

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

PennyMac Mortgage Investment Trust
Form 10-Q
May 07, 2018

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 March 31, 2018

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
(State or other jurisdiction of

incorporation or organization)

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

27-0186273
(IRS Employer

Identification No.)

91361
(Zip Code)

(818) 224-7442

(Registrant's telephone number, including area code)

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

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	Smaller reporting company
(Do not check if a 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 May 4, 2018
Common Shares of Beneficial Interest, \$0.01 par value	60,882,954

PENNYMAC MORTGAGE INVESTMENT TRUST

FORM 10-Q

March 31, 2018

TABLE OF CONTENTS

	Page
<u>Special Note Regarding Forward-Looking Statements</u>	1
<u>PART I. FINANCIAL INFORMATION</u>	4
Item 1. <u>Financial Statements (Unaudited):</u>	4
<u>Consolidated Balance Sheets</u>	4
<u>Consolidated Statements of Operations</u>	6
<u>Consolidated Statements of Changes in Shareholders' Equity</u>	7
<u>Consolidated Statements of Cash Flows</u>	8
<u>Notes to Consolidated Financial Statements</u>	10
Item 2. <u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	56
<u>Our Company</u>	56
<u>Results of Operations</u>	60
<u>Net Investment Income</u>	60
<u>Expenses</u>	72
<u>Balance Sheet Analysis</u>	75
<u>Asset Acquisitions</u>	76
<u>Investment Portfolio Composition</u>	77
<u>Cash Flows</u>	83
<u>Liquidity and Capital Resources</u>	84
<u>Off-Balance Sheet Arrangements and Aggregate Contractual Obligations</u>	86
Item 3. <u>Quantitative and Qualitative Disclosures About Market Risk</u>	88
Item 4. <u>Controls and Procedures</u>	90
<u>PART II. OTHER INFORMATION</u>	91
Item 1. <u>Legal Proceedings</u>	91
Item 1A. <u>Risk Factors</u>	91
Item 2. <u>Unregistered Sales of Equity Securities and Use of Proceeds</u>	91
Item 3. <u>Defaults Upon Senior Securities</u>	91
Item 4. <u>Mine Safety Disclosures</u>	91
Item 5. <u>Other Information</u>	91
Item 6. <u>Exhibits</u>	92

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, 2017, filed with the Securities and Exchange Commission (“SEC”) on March 1, 2018.

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;
- the occurrence of natural disasters or other events or circumstances that could impact our operations;
- 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;

1

our ability to maintain the desired relationship between our financing and the interest rates and maturities of our assets;

the timing and amount of cash flows, if any, from our investments;

unanticipated increases or volatility in financing and other costs, including a rise in interest rates;

the performance, financial condition and liquidity of borrowers;

the ability of our servicer, which also provides us with fulfillment services, to approve and monitor correspondent sellers and underwrite loans to investor standards;

incomplete or inaccurate information or documentation provided by customers or counterparties, or adverse changes in the financial condition of our customers and counterparties;

our indemnification and repurchase obligations in connection with mortgage loans we purchase and later sell or securitize;

the quality and enforceability of the collateral documentation evidencing our ownership and rights in the assets in which we invest;

increased rates of delinquency, default and/or decreased recovery rates on our investments;

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;

increased 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;

changes in government support of homeownership;

changes in government or government-sponsored home affordability programs;

limitations imposed on our business and our ability to satisfy complex rules for us to qualify as a real estate investment trust (“REIT”) for U.S. federal income tax purposes and qualify for an exclusion from the Investment Company Act of 1940 (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;
- our failure to deal appropriately with issues that may give rise to reputational risk; 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)

	March 31, 2018	December 31, 2017
	(in thousands, except share information)	
ASSETS		
Cash	\$ 102,167	\$ 77,647
Short-term investments	71,044	18,398
Mortgage-backed securities at fair value pledged to creditors	1,436,456	989,461
Mortgage loans acquired for sale at fair value (includes \$1,097,266 and \$1,249,277 pledged to creditors, respectively)	1,115,534	1,269,515
Mortgage loans at fair value (includes \$770,911 and \$1,081,893 pledged to creditors, respectively)	779,489	1,089,473
Excess servicing spread purchased from PennyMac Financial Services, Inc. at fair value pledged to secure assets sold to PennyMac Financial Services, Inc. under agreements to repurchase	236,002	236,534
Derivative assets (includes \$24,423 and \$26,058 pledged to creditors, respectively)	122,518	113,881
Real estate acquired in settlement of loans (includes \$105,484 and \$124,532 pledged to creditors, respectively)	141,506	162,865
Real estate held for investment (includes \$31,899 and \$31,128 pledged to creditors, respectively)	45,790	44,224
Mortgage servicing rights (includes \$957,013 and \$91,459 at fair value; \$941,686 and \$831,892 pledged to creditors)	957,013	844,781
Servicing advances	63,352	77,158
Deposits securing credit risk transfer agreements (includes \$392,453 and \$400,778 pledged to creditors, respectively)	622,330	588,867
Due from PennyMac Financial Services, Inc.	313	4,154
Other	96,972	87,975
Total assets	\$5,790,486	\$ 5,604,933
LIABILITIES		
Assets sold under agreements to repurchase	\$3,408,283	\$ 3,180,886
Mortgage loan participation purchase and sale agreements	—	44,488
Asset-backed financing of a variable interest entity at fair value	296,982	307,419
Exchangeable senior notes	247,471	247,186
Assets sold to PennyMac Financial Services, Inc. under agreements to repurchase	142,938	144,128
Interest-only security payable at fair value	7,796	7,070

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

Derivative liabilities	3,636	1,306
Accounts payable and accrued liabilities	63,196	64,751
Due to PennyMac Financial Services, Inc.	27,356	27,119
Income taxes payable	42,321	27,317
Liability for losses under representations and warranties	8,249	8,678
Total liabilities	4,248,228	4,060,348

Commitments and contingencies — Note 18

SHAREHOLDERS' EQUITY

Preferred shares of beneficial interest, \$0.01 par value per share, authorized 100,000,000 shares,

issued and outstanding 12,400,000 shares, liquidation preference \$310,000,000	299,707	299,707
Common shares of beneficial interest—authorized, 500,000,000 common shares of \$0.01 par value; issued and outstanding, 60,882,954 and 61,334,087 common shares, respectively	609	613
Additional paid-in capital	1,281,115	1,290,931
Accumulated deficit	(39,173)	(46,666)
Total shareholders' equity	1,542,258	1,544,585
Total liabilities and shareholders' equity	\$5,790,486	\$ 5,604,933

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):

	March 31, 2018	December 31, 2017
	(in thousands)	
ASSETS		
Mortgage loans at fair value	\$311,102	\$ 321,040
Derivative assets	103,995	98,640
Deposits securing credit risk transfer agreements	622,330	588,867
Other—interest receivable	893	904
	\$1,038,320	\$ 1,009,451
LIABILITIES		
Asset-backed financing at fair value	\$296,982	\$ 307,419
Interest-only security payable at fair value	7,796	7,070
Accounts payable and accrued liabilities—interest payable	893	904
	\$305,671	\$ 315,393

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

PENNYMAC MORTGAGE INVESTMENT TRUST AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF INCOME (UNAUDITED)

	Quarter ended March 31, 2018 2017 (in thousands, except per share amounts)	
Net investment income		
Net gain on mortgage loans acquired for sale:		
From nonaffiliates	\$4,986	\$16,624
From PennyMac Financial Services, Inc.	2,641	2,401
	7,627	19,025
Mortgage loan origination fees	7,037	8,290
Net gain (loss) on investments:		
From nonaffiliates	(7,733)	18,091
From PennyMac Financial Services, Inc.	7,751	(1,370)
	18	16,721
Net mortgage loan servicing fees:		
From nonaffiliates	55,560	11,460
From PennyMac Financial Services, Inc.	595	292
	56,155	11,752
Interest income:		
From nonaffiliates	37,046	43,453
From PennyMac Financial Services, Inc.	3,934	4,647
	40,980	48,100
Interest expense:		
To nonaffiliates	32,840	35,374
To PennyMac Financial Services, Inc.	1,976	1,805
	34,816	37,179
Net interest income	6,164	10,921
Results of real estate acquired in settlement of loans	(3,226)	(4,246)
Other	1,898	2,011
Net investment income	75,673	64,474
Expenses		
Earned by PennyMac Financial Services, Inc.:		
Mortgage loan fulfillment fees	11,944	16,570
Mortgage loan servicing fees	11,019	10,486
Management fees	5,696	5,008
Mortgage loan collection and liquidation	2,229	354
Real estate held for investment	1,438	1,088
Professional services	1,319	1,453
Compensation	1,268	1,892
Mortgage loan origination	272	1,512
Other	2,650	3,503
Total expenses	37,835	41,866
Income before provision for (benefit from) income taxes	37,838	22,608

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

Provision for (benefit from) income taxes	9,652	(6,129)
Net income	28,186	28,737
Dividends on preferred shares	6,234	571
Net income attributable to common shareholders	\$21,952	\$28,166
Earnings per common share		
Basic	\$0.36	\$0.42
Diluted	\$0.35	\$0.40
Weighted-average common shares outstanding		
Basic	60,761	66,719
Diluted	69,875	75,186
Dividends declared per common share	\$0.47	\$0.47

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)

	Preferred shares		Common shares			Additional paid-in capital	Accumulated deficit	Total
	Number of shares (in thousands, except per share amounts)	Amount	Number of shares	Par value				
Balance at December 31, 2016	—	\$—	66,697	\$667	\$1,377,171	\$ (26,724)	\$1,351,114	
Net income	—	—	—	—	—	28,737	28,737	
Share-based compensation	—	—	153	1	1,526	—	1,527	
Issuance of preferred shares	4,600	115,000	—	—	—	—	115,000	
Issuance costs relating to preferred shares	—	(3,828)	—	—	—	—	(3,828)	
Common share dividends (\$0.47 per share)	—	—	—	—	—	(31,653)	(31,653)	
Repurchase of common shares	—	—	(139)	(1)	(2,306)	—	(2,307)	
Balance at March 31, 2017	4,600	\$111,172	66,711	\$667	\$1,376,391	\$ (29,640)	\$1,458,590	
Balance at December 31, 2017	12,400	\$299,707	61,334	\$613	\$1,290,931	\$ (46,666)	\$1,544,585	
Cumulative effect of a change in accounting principle - Adoption of fair value accounting for mortgage servicing rights	—	—	—	—	—	14,361	14,361	
Balance at January 1, 2018	12,400	299,707	61,334	613	1,290,931	(32,305)	1,558,946	
Net income	—	—	—	—	—	28,186	28,186	
Share-based compensation	—	—	220	2	897	—	899	
Dividends								
Common shares (\$0.47 per share)	—	—	—	—	—	(28,818)	(28,818)	
Preferred shares	—	—	—	—	—	(6,236)	(6,236)	
Repurchase of common shares	—	—	(671)	(6)	(10,713)	—	(10,719)	
Balance at March 31, 2018	12,400	\$299,707	60,883	\$609	\$1,281,115	\$ (39,173)	\$1,542,258	

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

PENNYMAC MORTGAGE INVESTMENT TRUST AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)

	Quarter ended March 31,	
	2018	2017
	(in thousands)	
Cash flows from operating activities		
Net income	\$28,186	\$28,737
Adjustments to reconcile net income to net cash provided by operating activities:		
Net gain on mortgage loans acquired for sale at fair value	(7,627)	(19,025)
Net gain on investments	(18)	(16,721)
Change in fair value, amortization and impairment of mortgage servicing rights	(5,125)	27,046
Accrual of unearned discounts and amortization of premiums on mortgage-backed securities, mortgage loans at fair value, and asset-backed secured financing of a VIE	507	1,406
Capitalization of interest, advances and fees on mortgage loans at fair value	(2,180)	(9,903)
Accrual of interest on excess servicing spread purchased from PennyMac Financial Services, Inc.	(3,934)	(4,647)
Amortization of debt issuance costs and premiums, net	236	3,596
Results of real estate acquired in settlement of loans	3,226	4,246
Share-based compensation expense	899	1,527
Purchase of mortgage loans acquired for sale at fair value from nonaffiliates	(13,524,468)	(14,474,654)
Purchase of mortgage loans acquired for sale at fair value from PennyMac Financial Services, Inc.	(781,326)	(21,530)
Repurchase of mortgage loans subject to representation and warranties	(2,830)	(4,111)
Sale and repayment of mortgage loans acquired for sale at fair value to nonaffiliates	5,200,584	4,858,845
Sale of mortgage loans acquired for sale to PennyMac Financial Services, Inc.	9,212,188	10,016,788
Decrease in servicing advances	17,204	6,187
Decrease (increase) in due from PennyMac Financial Services, Inc.	3,767	(3,995)
(Increase) decrease in other assets	(25,462)	30,948
Decrease in accounts payable and accrued liabilities	(1,229)	(27,536)
Increase in due to PennyMac Financial Services, Inc.	237	4,340
Increase (decrease) in income taxes payable	9,652	(6,161)
Net cash provided by operating activities	122,487	395,383
Cash flows from investing activities		
Net (increase) decrease in short-term investments	(52,646)	102,205
Purchase of mortgage-backed securities at fair value	(500,573)	(251,872)
Sale and repayment of mortgage-backed securities at fair value	30,741	26,123
Sale and repayment of mortgage loans at fair value	276,467	127,556
Repayment of excess servicing spread by PennyMac Financial Services, Inc.	12,291	14,632
Net settlement of derivative financial instruments	(2,329)	(28)
Sale of real estate acquired in settlement of loans	32,437	63,224
Purchase of mortgage servicing rights	—	(62)
Deposit of cash securing credit risk transfer agreements	(41,789)	(15,793)

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

Distribution from credit risk transfer agreements	27,655	12,305
Increase in margin deposits	(9,823)	(36,267)
Net cash (used in) provided by investing activities	(227,569)	42,023

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

8

PENNYMAC MORTGAGE INVESTMENT TRUST AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)

	Quarter ended March 31,	
	2018	2017
	(in thousands)	
Cash flows from financing activities		
Sale of assets under agreements to repurchase	17,446,171	17,770,687
Repurchase of assets sold under agreements to repurchase	(17,218,539)	(18,054,705)
Issuance of mortgage loan participation certificates	1,208,189	1,559,494
Repayment of mortgage loan participation certificates	(1,252,708)	(1,512,435)
Repayments of assets sold to PennyMac Financial Services, Inc. under		
agreement to repurchase	(3,483)	(175,000)
Repayment of asset-backed financing of a variable interest entity at fair value	(3,915)	(13,944)
Advances under assets sold to to PennyMac Financial Services, Inc. under		
agreement to repurchase	2,293	—
Payment of debt issuance costs	(2,306)	(3,140)
Issuance of preferred shares	—	115,000
Payment of issuance costs related to preferred shares	—	(3,828)
Repurchase of common shares	(10,719)	(2,307)
Payment of dividends to preferred shareholders	(6,236)	—
Payment of dividends to common shareholders	(29,145)	(31,655)
Net cash provided by (used in) financing activities	129,602	(351,833)
Net increase in cash and restricted cash	24,520	85,573
Cash and restricted cash at beginning of quarter	77,647	34,476
Cash and restricted cash at end of quarter	\$ 102,167	\$ 120,049
Cash	\$ 102,167	\$ 120,049
Restricted cash	—	—
Total cash and restricted cash shown in the statement of cash flows	\$ 102,167	\$ 120,049

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

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”), real estate held for investment, 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 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 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.

Note 2—Basis of Presentation and Accounting Changes

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

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

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, 2017.

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.

Mortgage Servicing Rights

Effective January 1, 2018, the Company has elected to change the accounting for the classes of MSR's it accounted for using the amortization method through December 31, 2017, to the fair value method as allowed in the Transfers and Servicing topic of the Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC"). The Manager determined that a single accounting treatment across all MSR's is consistent with lender valuation under its financing arrangements and simplifies hedging activities. As the result of this change, the Company recorded an adjustment to increase its investment in MSR's by \$19.7 million, an increase in its liability for income taxes payable of \$5.3 million and in increase in shareholders' equity of \$14.4 million.

Revenue

As disclosed in Note 33 – Recently Issued Accounting Pronouncements to the consolidated financial statements included in the Company's Annual Report of form 10-K for the fiscal year ended December 31, 2017, the Manager has concluded that the Company's revenues are not subject to ASU 2014-09 as they are financial instruments or other contractual rights and obligations accounted for under the Receivables, Investments and Debt and Equity Securities, Transfers and Servicing, Financial Instruments and Derivatives and Hedging topics of the FASB's ASC.

Cash Flows

During the quarter ended March 31, 2018, the Company adopted FASB Accounting Standards Update 2016-18, Statement of Cash Flows (Topic 230) – Restricted Cash ("ASU 2016-18"). ASU 2016-18 requires that a statement of cash flows explain the change during the reporting period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. Therefore, amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. Accordingly, the Company retrospectively changed the presentation of its statements of cash flows to conform to the requirements of ASU 2016-18. The adoption of ASU 2016-18 had no effect on previously reported statements of cash flows.

Note 3—Concentration of Risks

As discussed in Note 1 — Organization above, PMT's operations and investing activities are centered in residential mortgage-related assets, including distressed mortgage loans and CRT Agreements.

Due to the nature of the Company's investments in distressed mortgage loans, PMT is exposed, to a greater extent than traditional mortgage investors, to the risks associated with loan performance and 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 fair values in the markets where the properties securing the Company's distressed mortgage loans are located;
- PCM's ability to identify and PLS' ability to execute optimal resolutions of distressed 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 distressed 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.

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

As detailed in Note 5 — Loan Sales and Variable Interest Entities, the Company invests in CRT Agreements whereby it 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 (“IO”) ownership interest in such mortgage loans. The Company’s retention of credit risk subjects it to risks associated with delinquency and foreclosure similar to the risks associated with owning the underlying mortgage loans, and exposes the Company to risk of loss greater than the risks associated with selling the mortgage loans to Fannie Mae without the retention of such credit risk. Further, the risks associated with delinquency and foreclosure may in some instances be greater than the risks associated with owning the underlying mortgage loans because the structure of certain of the CRT Agreements provides that the Company may be required to realize losses in the event of delinquency or foreclosure even where there is ultimately no loss realized with respect to the underlying loan (e.g., as a result of a borrower’s re-performance). In addition to the risks specific to credit, the Company is exposed to market risk and, as a result of prevailing market conditions or the economy generally, may be required to recognize losses associated with adverse changes to the fair value of the CRT Agreements.

Most 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., Citigroup Inc., and Bank of America Corporation, as presented in the following summary:

	March 31, 2018	December 31, 2017
(in thousands)		
JPMorgan Chase & Co.		
Mortgage loans at fair value	\$ 185,224	\$ 315,437
REO	59,178	66,294
	244,402	381,731
Citigroup Inc.		
Mortgage loans at fair value	181,334	280,488
REO	21,091	26,702
	202,425	307,190
Bank of America Corporation		
Mortgage loans at fair value	86,478	143,969
REO	26,050	27,970
	112,528	171,939
	\$ 559,355	\$ 860,860
Total carrying value of distressed mortgage loans at fair value and REO	\$ 609,893	\$ 931,298

Note 4—Transactions with Related Parties

Operating Activities

Correspondent Production Activities

The Company is provided fulfillment and other services by PLS under an amended and restated mortgage banking services agreement.

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

Pursuant to the terms of the agreement, the monthly fulfillment fee is an amount equal to (a) no greater than the product of (i) 0.35% and (ii) the aggregate initial unpaid principal balance (the "Initial UPB") of all mortgage loans purchased in such month, plus (b) in the case of all mortgage loans other than mortgage loans sold to or securitized through Fannie Mae or Freddie Mac, no greater than the product of (i) 0.50% and (ii) the aggregate Initial UPB of all such mortgage loans sold and securitized in such month; 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 the Company 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.

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

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.

The Company purchases newly originated loans from PLS under a mortgage loan participation purchase and sale agreement and a flow commercial mortgage loan purchase agreement. Historically, the Company has used the mortgage loan participation purchase and sale agreement for the purpose of purchasing from PLS prime jumbo residential mortgage loans. Beginning in the quarter ended September 30, 2017, the Company also purchases non-government insured or guaranteed mortgage loans from PLS under the mortgage loan participation purchase and sale agreement. The Company uses the flow commercial mortgage loan purchase agreement for the purpose of purchasing from PLS small balance commercial mortgage loans, including multifamily mortgage loans, originated as part of PLS's commercial lending activities.

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

	Quarter ended March 31, 2018 2017 (in thousands)	
Purchases of mortgage loans acquired for sale from PLS	\$781,326	\$21,530
Mortgage loans fulfillment fees earned by PLS	\$11,944	\$16,570
UPB of mortgage loans fulfilled by PLS	\$4,225,631	\$4,631,906
Sourcing fees received from PLS included in		
Net gain on mortgage loans acquired for sale	\$2,641	\$2,871
UPB of mortgage loans sold to PLS	\$8,847,873	\$9,574,717
Early purchase program fees paid to PLS included		
in Mortgage loan servicing fees	\$—	\$5
Tax service fee paid to PLS included in Other expense	\$1,208	\$1,379
	March 31, 2018	December 31, 2017 (in thousands)
Mortgage loans included in Mortgage loans acquired		
for sale at fair value pending sale to PLS	\$259,673	\$ 279,571

Mortgage Loan Servicing Activities

The Company, through its Operating Partnership, has an amended and restated mortgage loan servicing agreement with PLS dated as of September 12, 2016. 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 base servicing fee rates for distressed whole mortgage loans range from \$30 per month for current loans up to \$85 per month for loans where the borrower has declared bankruptcy. The base servicing fee rate for REO is \$75 per month.

•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.

13

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 has limited employees and 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 is also entitled to certain activity-based fees for distressed whole mortgage loans that are charged based on the achievement of certain events. These fees range from \$750 for a streamline modification to \$1,750 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 per mortgage loan in any 18-month period.

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 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 amended and restated 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 cash in an amount equal to 30% of the fair market value of the MSRs related to all the loans so originated. 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.

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

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

	Quarter ended March 31,	
	2018	2017
	(in thousands)	
Mortgage loans servicing fees:		
Mortgage loans acquired for sale at fair value:		
Base	\$56	\$65
Activity-based	122	143
	178	208
Mortgage loans at fair value:		
Distressed mortgage loans:		
Base	1,005	1,958
Activity-based	2,080	2,390
	3,085	4,348
Mortgage loans held in VIE:		
Base	34	31
Activity-based	—	—
	34	31
MSRs:		
Base	7,615	5,806
Activity-based	107	93
	7,722	5,899
	\$11,019	\$10,486
Average investment in:		
Mortgage loans acquired for sale at fair value	\$1,046,289	\$1,099,406
Mortgage loans at fair value:		
Distressed mortgage loans	\$738,333	\$1,327,421
Mortgage loans held in a VIE	\$314,717	\$361,110
Average MSR portfolio	\$73,694,438	\$57,927,056
MSR recapture income recognized included in Net		
mortgage loan servicing fees - from PennyMac Financial Service, Inc.	\$595	\$292

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 attributable to common shares of beneficial interest computed in accordance with GAAP and certain other non-cash charges determined after discussions between PCM and the Company’s independent trustees and after approval by a majority of the Company’s independent trustees.

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

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

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 the Company’s common shares (subject to a limit of no more than 50% paid in common shares), at the Company’s option.

Following is a summary of the base management and performance incentive fees payable to PCM recorded by the Company:

	Quarter ended	
	March 31,	
	2018	2017
	(in thousands)	
Base management	\$5,696	\$5,008
Performance incentive	—	—
	\$5,696	\$5,008

In the event of termination of the management agreement between the Company and PCM, PCM 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 PCM, in each case during the 24-month period before termination.

Expense Reimbursement and Amounts Payable to and Receivable from PCM

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 are 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.

Following is a summary of the Company’s reimbursements to PCM and its affiliates for expenses:

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

	Quarter ended March 31,	
	2018	2017
	(in thousands)	
Reimbursement of:		
Common overhead incurred by PCM and its affiliates	\$ 1,121	\$ 1,434
Expenses incurred on the Company's behalf, net	573	255
	\$ 1,694	\$ 1,689
Payments and settlements during the quarter (1)	\$ 7,658	\$ 24,393

(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.

16

Investing Activities

Spread Acquisition and MSR Servicing Agreements

On December 19, 2016, the Company, through a wholly-owned subsidiary, PennyMac Holdings, LLC (“PMH”), amended and restated a master spread acquisition and MSR servicing agreement with PLS (the “Spread Acquisition Agreement”), pursuant to which the Company may purchase from PLS, from time to time, the right to receive participation certificates representing beneficial ownership in ESS arising from Ginnie Mae MSRMs acquired by PLS, in which case PLS generally would be required to service or subservice the related mortgage loans for Ginnie Mae. The primary purpose of the amendment and restatement was to facilitate the continued financing of the ESS owned by the Company in connection with the parties’ participation in the GNMA MSR Facility (as defined below).

To the extent PLS refinances any of the mortgage loans relating to the ESS the Company has acquired, the Spread Acquisition Agreement also contains recapture provisions requiring that PLS transfer to the Company, at no cost, the ESS relating to a certain percentage of the unpaid principal balance of the newly originated mortgage loans. However, under the Spread Acquisition Agreement, in any month where the transferred ESS relating to newly originated Ginnie Mae mortgage loans is not equivalent to at least 90% of the product of the excess servicing fee rate and the unpaid principal balance of the refinanced mortgage loans, PLS is also required to transfer additional ESS or cash in the amount of such shortfall. Similarly, in any month where the transferred ESS relating to modified Ginnie Mae mortgage loans is not equivalent to at least 90% of the product of the excess servicing fee rate and the unpaid principal balance of the modified mortgage loans, the Spread Acquisition Agreement contains provisions that require PLS to transfer additional ESS or cash in the amount of such shortfall. To the extent the fair market value of the aggregate ESS to be transferred for the applicable month is less than \$200,000, PLS may, at its option, wire cash to the Company in an amount equal to such fair market value in lieu of transferring such ESS.

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

	Quarter ended March 31, 2018 2017 (in thousands)	
ESS:		
Received pursuant to a recapture agreement	\$904	\$1,573
Repayments and sales	\$12,291	\$14,632
Interest income	\$3,934	\$4,647
Net gain (loss) included in Net gain (loss) on investments:		
Valuation changes	\$6,921	\$(2,773)
Recapture income	830	1,403
	\$7,751	\$(1,370)

Financing Activities

PFSI held 75,000 of the Company’s common shares at both March 31, 2018 and December 31, 2017.

Repurchase Agreement with PLS

On December 19, 2016, the Company, through 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 acquired from PLS under the Spread Acquisition Agreement. PLS then re-pledges such participation certificates to PNM MAC 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 MSR s and ESS relating to such MSR s (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 MSR s 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 MSR s and ESS. The maximum principal balance of the VFN is \$1 billion.

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

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.

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. There were no reimbursements during the quarters ended March 31, 2018, and March 31, 2017.

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

	Quarter ended March 31, 2018 2017 (in thousands)	
Interest expense	\$1,976	\$1,805

	March 31, 2018	December 31, 2017
	(in thousands)	
Assets sold to PFSI under agreement to repurchase	\$142,938	\$ 144,128
Conditional Reimbursement payable to PFSI included in Accounts payable and accrued liabilities	\$870	\$ 870

Amounts Receivable from and Payable to PFSI

Amounts receivable from and payable to PFSI are summarized below:

	March 31, 2018	December 31, 2017
	(in thousands)	
Due from PFSI:		
MSR recapture receivable	\$207	\$ 282
Other	106	3,872
	\$313	\$ 4,154
Due to PFSI:		

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

Allocated expenses and expenses paid by PFSI on PMT's behalf	\$8,806	\$ 11,542
Management fees	5,696	5,901
Mortgage loan servicing fees	5,562	6,583
Fulfillment fees	4,471	346
Correspondent production fees	1,825	1,735
Conditional Reimbursement	870	870
Interest on Assets sold to PFSI under agreement to repurchase	126	142
	\$27,356	\$ 27,119

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:

	Quarter ended March 31,	
	2018	2017
	(in thousands)	
Cash flows:		
Proceeds from sales	\$5,200,584	\$4,858,845
Mortgage loan servicing fees received (1)	\$48,732	\$37,281

(1) Net of guarantee fees

The following table summarizes unpaid principal balance (“UPB”) information for mortgage loans that are accounted for as sales for the dates presented:

	March 31, 2018	December 31, 2017
	(in thousands)	
UPB of mortgage loans outstanding	\$74,783,511	\$71,639,351
Delinquent mortgage loans:		
30-89 days delinquent	\$360,518	\$532,673
90 or more days delinquent:		
Not in foreclosure	\$288,653	\$280,786
In foreclosure	\$31,989	\$25,258
Bankruptcy	\$56,032	\$52,202
Custodial funds managed by the Company (1)	\$1,005,744	\$879,321

(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 income.

Consolidated VIEs

Credit Risk Transfer Agreements

The Company, through 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 the 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. The Deposits securing CRT Agreements represent 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 (loss) on investments in the consolidated statements of income.

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

Following is a summary of the CRT Agreements:

	Quarter ended March 31,	
	2018	2017
	(in thousands)	
UPB of mortgage loans sold under CRT Agreements	\$3,210,478	\$1,834,295
Deposits securing CRT Agreements	\$41,789	\$15,793
Increase in commitments to fund Deposits securing CRT Agreements		
resulting from sale of mortgage loans under CRT Agreements	\$70,486	\$48,150
Interest earned on Deposits securing CRT Agreements	\$2,031	\$408
Gains recognized on CRT Agreements included in Net gain (loss) on investments		
Realized	\$19,329	\$10,288
Resulting from valuation changes	5,355	10,019
	24,684	20,307
Change in fair value of interest-only security payable at fair value	(2,133)	(1,720)
	\$22,551	\$18,587
Payments made to settle losses	\$828	\$149

	March 31,	December 31,
	2018	2017
	(in thousands)	
UPB of mortgage loans subject to credit guarantee obligations	\$29,726,369	\$26,845,392
Delinquency status (in UPB):		
Current	\$29,456,524	\$26,540,953
30—89 days delinquent	\$130,583	\$179,144
90—180 days delinquent	\$90,418	\$101,114
180 or more days delinquent	\$26,343	\$5,146
Foreclosure	\$8,335	\$5,463
Bankruptcy	\$14,166	\$13,572
Carrying value of CRT Agreements:		
Derivative assets	\$103,995	\$98,640
Deposits securing CRT agreements	\$622,330	\$588,867
Interest-only security payable at fair value	\$7,796	\$7,070
CRT Agreement assets pledged to secure assets sold		
under agreements to repurchase:		
Deposits securing CRT Agreements	\$392,453	\$400,778
Derivative assets	\$24,423	\$26,058
Commitments to fund Deposits securing credit risk transfer agreements	\$552,957	\$482,471

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 fair value of the certificates retained by the Company was \$14.1 million as of March 31, 2018. The Company includes the balance of certificates issued to nonaffiliates in Asset backed financing of a variable

interest entity at fair value.

20

Note 6—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 MSR's 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 assets at fair value 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 facility, thereby matching the debt issuance cost to the periods benefiting from the availability of the debt. Before January 1, 2018, originated MSR's backed by mortgage loans with initial interest rates of less than or equal to 4.5% were accounted for using the amortization method. Beginning January 1, 2018, the Company elected to account for all MSR's at fair value prospectively.

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

Financial Statement Items Measured at Fair Value on a Recurring Basis

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

	March 31, 2018			Total
	Level 1	Level 2	Level 3	
	(in thousands)			
Assets:				
Short-term investments	\$71,044	\$—	\$—	\$71,044
Mortgage-backed securities at fair value	—	1,436,456	—	1,436,456
Mortgage loans acquired for sale at fair value	—	1,107,844	7,690	1,115,534
Mortgage loans at fair value	—	311,102	468,387	779,489
Excess servicing spread purchased from PFSI	—	—	236,002	236,002
Derivative assets:				
Interest rate lock commitments	—	—	3,220	3,220
CRT Agreements	—	—	103,995	103,995
Repurchase agreement derivatives	—	—	5,892	5,892
Forward purchase contracts	—	11,400	—	11,400
Forward sale contracts	—	6	—	6
MBS put options	—	4,086	—	4,086
Call options on interest rate futures	492	—	—	492
Put options on interest rate futures	367	—	—	367
Total derivative assets before netting	859	15,492	113,107	129,458
Netting	—	—	—	(6,940)
Total derivative assets after netting	859	15,492	113,107	122,518
Mortgage servicing rights at fair value	—	—	957,013	957,013
	\$71,903	\$2,870,894	\$1,782,199	\$4,718,056
Liabilities:				
Asset-backed financing of a VIE at fair value	\$—	\$296,982	\$—	\$296,982
Interest-only security payable at fair value	—	—	7,796	7,796
Derivative liabilities:				
Interest rate lock commitments	—	—	511	511
Forward purchase contracts	—	1	—	1
Forward sales contracts	—	8,345	—	8,345
Total derivative liabilities before netting	—	8,346	511	8,857
Netting	—	—	—	(5,221)
Total derivative liabilities after netting	—	8,346	511	3,636
	\$—	\$305,328	\$8,307	\$308,414

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

	December 31, 2017			
	Level 1	Level 2	Level 3	Total
	(in thousands)			
Assets:				
Short-term investments	\$18,398	\$—	\$—	\$18,398
Mortgage-backed securities at fair value	—	989,461	—	989,461
Mortgage loans acquired for sale at fair value	—	1,261,380	8,135	1,269,515
Mortgage loans at fair value	—	321,040	768,433	1,089,473
Excess servicing spread purchased from PFSI	—	—	236,534	236,534
Derivative assets:				
Interest rate lock commitments	—	—	4,859	4,859
CRT Agreements	—	—	98,640	98,640
Repurchase agreement derivatives	—	—	3,748	3,748
Forward purchase contracts	—	4,343	—	4,343
Forward sale contracts	—	387	—	387
MBS put options	—	3,170	—	3,170
Put options on interest rate futures	656	—	—	656
Total derivative assets before netting	656	7,900	107,247	115,803
Netting	—	—	—	(1,922)
Total derivative assets after netting	656	7,900	107,247	113,881
Mortgage servicing rights at fair value	—	—	91,459	91,459
	\$19,054	\$2,579,781	\$1,211,808	\$3,808,721
Liabilities:				
Asset-backed financing of a VIE at fair value	\$—	\$307,419	\$—	\$307,419
Interest-only security payable at fair value	—	—	7,070	7,070
Derivative liabilities:				
Interest rate lock commitments	—	—	227	227
Forward purchase contracts	—	248	—	248
Forward sales contracts	—	2,830	—	2,830
Total derivative liabilities before netting	—	3,078	227	3,305
Netting	—	—	—	(1,999)
Total derivative liabilities after netting	—	3,078	227	1,306
	\$—	\$310,497	\$7,297	\$315,795

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

The following is a summary of changes in items measured at fair value on a recurring basis using Level 3 inputs that are significant to the estimation of the fair values of the assets and liabilities at either the beginning or end of the years presented:

	Quarter ended March 31, 2018							
	Mortgage loans acquired for sale at fair value (in thousands)	Mortgage loans at fair value	Excess servicing spread	Interest rate lock commitments (1)	CRT Agreements	Repurchase agreement derivatives	Mortgage servicing rights	Total
Assets:								
Balance, December 31, 2017	\$8,135	\$768,433	\$236,534	\$4,632	\$98,640	\$3,748	\$91,459	\$1,211,581
Cumulative effect of a change in accounting principle — Adoption of fair value accounting for mortgage servicing rights	—	—	—	—	—	—	773,035	773,035
Balance, January 1, 2018	8,135	768,433	236,534	4,632	98,640	3,748	864,494	1,984,616
Purchases and issuances	2,831	—	—	4,609	—	2,164	—	9,604
Repayments and sales	(3,539)	(272,513)	(12,291)	—	(19,329)	(8)	—	(307,680)
Capitalization of interest	—	2,180	3,934	—	—	—	—	6,114
Capitalization of advances	—	1,677	—	—	—	—	—	1,677
ESS received pursuant to a recapture agreement with PFSI	—	—	904	—	—	—	—	904
Servicing received as proceeds from sales of mortgage loans	—	—	—	—	—	—	66,546	66,546
Changes in fair value included in income arising from:	—	2,681	—	—	—	—	—	2,681

Changes in
instrument-specific
credit

risk								
Other factors	103	(12,632)	6,921	(19,467)	24,684	(12)	25,973	25,570
	103	(9,951)	6,921	(19,467)	24,684	(12)	25,973	28,251
Transfers of mortgage loans to REO and								
real estate held for investment	—	(21,439)	—	—	—	—	—	(21,439)
Transfers of mortgage loans acquired for								
sale at fair value from "Level 2" to								
"Level 3" (2)	160	—	—	—	—	—	—	160
Transfers of interest rate lock								
commitments to mortgage loans								
acquired for sale	—	—	—	12,935	—	—	—	12,935
Balance, March 31, 2018	\$7,690	\$468,387	\$236,002	\$2,709	\$103,995	\$5,892	\$957,013	\$1,781,688
Changes in fair value recognized during								
the quarter relating to assets still held at								
March 31, 2018	\$(14)	\$(9,040)	\$6,921	\$2,709	\$5,355	\$77	\$25,973	\$31,981

(1)For the purpose of this table, the interest rate lock commitment (“IRLC”) asset and liability positions are shown net.

(2)During the quarter ended March 31, 2018, the Manager identified certain “Level 2” fair value mortgage loans that were not salable into the prime mortgage market and therefore transferred them to “Level 3”.

	Quarter ended March 31, 2018 Interest-only security payable (in thousands)
Liabilities:	
Balance, December 31, 2017	\$ 7,070
Changes in fair value included in income arising from:	
Changes in instrument-specific credit risk	—
Other factors	726
	726
Balance, March 31, 2018	\$ 7,796
Changes in fair value recognized during the quarter relating to liability outstanding at	
March 31, 2018	\$ 726

	Quarter ended March 31, 2017						
	Mortgage loans at fair value (in thousands)	Excess servicing spread	Interest rate lock commitments	CRT Agreements	Mortgage servicing rights		Total
Assets:							
Balance, December 31, 2016	\$1,354,572	\$288,669	\$ 3,777	\$ 15,610	\$ 64,136		\$1,726,764
Purchases and issuances	—	—	17,762	—	62		17,824
Repayments and sales	(113,576)	(14,632)	—	(10,288)	—		(138,496)
Capitalization of interest	9,903	4,647	—	—	—		14,550
Capitalization of advances	6,349	—	—	—	—		6,349
ESS received pursuant to a recapture agreement							
with PFSI	—	1,573	—	—	—		1,573
Servicing received as proceeds from sales of							
mortgage loans	—	—	—	—	7,478		7,478
Changes in fair value included in income arising							
from:							
Changes in instrument-specific credit risk	4,970	—	—	—	—		4,970
Other factors	(1,754)	(2,773)	11,171	20,307	(1,993)		24,958
	3,216	(2,773)	11,171	20,307	(1,993)		29,928

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

Transfers of mortgage loans to REO and real estate						
held for investment	(30,911)	—	—	—	—	(30,911)
Transfers of interest rate lock commitments to						
mortgage loans acquired for sale	—	—	(23,989)	—	—	(23,989)
Balance, March 31, 2017	\$1,229,553	\$277,484	\$ 8,721	\$ 25,629	\$ 69,683	\$1,611,070
Changes in fair value recognized during the quarter						
relating to assets still held at March 31, 2017	\$485	\$(2,773)	\$ 8,721	\$ 10,019	\$(1,993)	\$14,459

(1) For the purpose of this table, the IRLC asset and liability positions are shown net.

	Quarter ended March 31, 2017 Interest-only security payable (in thousands)
Liabilities:	
Balance, December 31, 2016	\$ 4,114
Changes in fair value included in income arising from:	
Changes in instrument-specific credit risk	—
Other factors	487
	487
Balance, March 31, 2017	\$ 4,601
Changes in fair value recognized during the quarter relating to liability outstanding at	
March 31, 2017	\$ 487

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

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):

	March 31, 2018			December 31, 2017		
	Principal			Principal		
	amount due			amount due		
	Fair value	upon maturity	Difference	Fair value	upon maturity	Difference
	(in thousands)					
Mortgage loans acquired for sale at fair value:						
Current through 89 days delinquent:	\$1,114,282	\$1,084,121	\$30,161	\$1,268,121	\$1,221,125	\$46,996
90 or more days delinquent:						
Not in foreclosure	606	725	(119)	950	1,120	(170)
In foreclosure	646	683	(37)	444	496	(52)
	1,252	1,408	(156)	1,394	1,616	(222)
	\$1,115,534	\$1,085,529	\$30,005	\$1,269,515	\$1,222,741	\$46,774
Mortgage loans at fair value:						
Mortgage loans held in a consolidated VIE:						
Current through 89 days delinquent:	\$311,102	\$312,730	\$(1,628)	\$321,040	\$316,684	\$4,356
90 or more days delinquent:						
Not in foreclosure	—	—	—	—	—	—
In foreclosure	—	—	—	—	—	—
	—	—	—	—	—	—
	311,102	312,730	(1,628)	321,040	316,684	4,356
Distressed mortgage loans at fair value:						
Current through 89 days delinquent:	263,263	334,185	(70,922)	414,785	519,009	(104,224)
90 or more days delinquent:						
Not in foreclosure	97,971	155,224	(57,253)	166,749	257,038	(90,289)
In foreclosure	107,153	156,812	(49,659)	186,899	267,911	(81,012)
	205,124	312,036	(106,912)	353,648	524,949	(171,301)
	468,387	646,221	(177,834)	768,433	1,043,958	(275,525)
	\$779,489	\$958,951	\$(179,462)	\$1,089,473	\$1,360,642	\$(271,169)

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

Quarter ended March 31, 2018

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

	Net gain on mortgage loans acquired for sale (in thousands)	Net gain (loss) on investments	Net mortgage loan servicing fees	Net interest income	Total
Assets:					
Short-term investments	\$—	\$—	\$—	\$—	\$—
Mortgage-backed securities at fair value	—	(22,397)	—	440	(21,957)
Mortgage loans acquired for sale at fair value	(23,678)	—	—	—	(23,678)
Mortgage loans at fair value	—	(15,530)	—	1,774	(13,756)
ESS at fair value	—	6,921	—	3,934	10,855
MSRs at fair value	—	—	25,973	—	25,973
	\$(23,678)	\$(31,006)	\$25,973	\$6,148	\$(22,563)
Liabilities:					
Interest-only security payable	\$—	\$ 726	\$—	\$—	\$726
Asset-backed financing of a VIE at fair value	—	6,183	—	339	6,522
	\$—	\$ 6,909	\$—	\$339	\$7,248

26

	Quarter ended March 31, 2017					
	Net gain on mortgage loans acquired for sale (in thousands)		Net mortgage loan servicing fees		Net interest income	Total
Assets:						
Short-term investments	\$—	\$ —	\$—	\$—	\$—	\$—
Mortgage-backed securities at fair value	—	140	—	—	(1,318)	(1,178)
Mortgage loans acquired for sale at fair value	14,158	—	—	—	—	14,158
Mortgage loans at fair value	—	3,532	—	—	10,201	13,733
ESS at fair value	—	(2,773)	—	—	4,647	1,874
MSRs at fair value	—	—	(1,993)	—	—	(1,993)
	\$14,158	\$ 899	\$ (1,993)	\$ (1,993)	\$13,530	\$26,594
Liabilities:						
Interest-only security payable	\$—	\$ (487)	\$—	\$—	\$—	\$(487)
Asset-backed financing of a VIE at fair value	—	(24)	—	—	(387)	(411)
	\$—	\$ (511)	\$—	\$—	\$(387)	\$(898)

Financial Statement Items Measured at Fair Value on a Nonrecurring Basis

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

	March 31, 2018			
	Level 1		Level 3	Total
	1	2	Level 3	Total
	(in thousands)			
Real estate acquired in settlement of loans	\$—	\$—	\$57,675	\$57,675
	\$—	\$—	\$57,675	\$57,675
	December 31, 2017			
	Level 1		Level 3	Total
	1	2	Level 3	Total
	(in thousands)			
Real estate acquired in settlement of loans	\$—	\$—	\$71,380	\$71,380
MSRs at lower of amortized cost or fair value	—	—	312,995	312,995
	\$—	\$—	\$384,375	\$384,375

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

	Quarter ended	
	March 31,	
	2018	2017
	(in thousands)	
Real estate asset acquired in settlement of loans	\$ (4,769)	\$ (7,060)
MSRs at lower of amortized cost or fair value	—	1,504
	\$ (4,769)	\$ (5,556)

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. 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 income.

Mortgage Servicing Rights at Lower of Amortized Cost or Fair Value

Before the Company adopted fair value accounting for all of its existing classes of MSR on January 1, 2018, the Company evaluated its MSR 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 stratified its MSR at lower of amortized cost or fair value based on the interest rates borne by the mortgage loans underlying the MSR. Mortgage loans were 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%. MSR relating to adjustable rate mortgage loans with initial interest rates of 4.5% or less were evaluated in a single pool. If the fair value of MSR in any of the interest rate pools was below the amortized cost of the MSR, those MSR were impaired.

When MSR were impaired, the impairment was recognized in current-period income and the carrying value of the MSR was adjusted using a valuation allowance. If the fair value of the MSR subsequently increased, the increase in fair value was recognized in current period income only to the extent of the valuation allowance for the respective impairment stratum.

Before the adoption of fair value accounting for all MSR, the Manager periodically reviewed the various impairment strata to determine whether the fair value of the impaired MSR in a given stratum was likely to recover. When the Manager deemed recovery of fair value to be unlikely in the foreseeable future, a write-down of the cost of the MSR for that stratum to its estimated recoverable value was 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 purchase and sale agreements, 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 purchase and sale agreements 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 March 31, 2018 and December 31, 2017 was \$249.5 million and \$244.9 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 Asset-backed financing of a VIE, Interest-only security payable and Derivative liabilities 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 the Manager'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 the Manager's valuation committee. The Manager's valuation committee includes PFSI's executive chairman, chief executive, chief financial, chief risk and deputy chief financial officers.

The FAV group is responsible for reporting to the Manager's valuation committee on the changes in the valuation of the non-IRLC "Level 3" fair value 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 income.

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 most 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 primarily 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 or contracted selling price when applicable.

The valuation process for “Level 3” fair value 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 income.

Following is a quantitative summary of key inputs used in the valuation of mortgage loans at fair value (excluding loans held in a VIE):

Key inputs

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

	March 31, 2018	December 31, 2017
Discount rate		
Range	3.2% – 15.0%	2.9% – 15.0%
Weighted average	6.7%	6.9%
Twelve-month projected housing price index change		
Range	2.2% – 3.3%	3.6% – 4.6%
Weighted average	3.1%	4.4%
Prepayment speed (1)		
Range	3.1% – 6.6%	3.2% – 11.0%
Weighted average	4.2%	4.2%
Total prepayment speed (2)		
Range	10.6% – 10.8% – 22.8%	23.8%
Weighted average	16.2%	16.5%

(1) Prepayment speed is measured using Life Voluntary Conditional Prepayment Rate (“CPR”).

(2) Total prepayment speed is measured using Life Total CPR.

29

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 pricing spread (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.

Changes in the fair value of ESS are included in Net gain (loss) on investments in the consolidated statements of income.

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

Key inputs	March 31, 2018	December 31, 2017
UPB of underlying mortgage loans (in thousands)	\$26,236,839	\$27,217,199
Average servicing fee rate (in basis points)	34	34
Average ESS rate (in basis points)	19	19
Pricing spread (1)		
Range	3.6% - 4.1%	3.8% - 4.3%
Weighted average	3.9%	4.1%
Annual total prepayment speed (2)		
Range	8.0% - 52.4%	8.4% - 41.4%
Weighted average	9.9%	10.8%
Life (in years)		
Range	1.1 - 7.8	1.4 - 7.7
Weighted average	6.8	6.5

(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.

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 loan 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 fair value, but also 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 income.

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

Key inputs	March	
	31, 2018	December 31, 2017
Pull-through rate		
Range	57.5% - 100%	58.0% - 100%
Weighted average	88.0%	90.3%
MSR value expressed as Servicing fee multiple		
Range	2.6 - 5.9	2.1 - 5.8
Weighted average	4.7	4.9
Percentage of UPB		
Range	0.0% - 2.6%	0.0% - 2.4%
Weighted average	1.2%	1.3%

CRT Agreements

The fair value of CRT Agreements is established based on whether the aggregation period has been completed and the CRT Agreements have been securitized. For securitized CRT Agreements, fair value is based on indications of fair value provided to the Company by nonaffiliated brokers for the certificates representing the beneficial deposits securing the CRT Agreements, the Recourse Obligation and the IO ownership interest in these items. Fair value of the CRT derivative is derived by deducting the balance of the Deposits securing CRT Agreements from the indication of fair value provided by the nonaffiliated brokers. For CRT Agreements that have not been securitized, fair value is estimated using a discounted cash flow analysis. The Company classifies these derivatives as “Level 3” fair value assets. The significant unobservable inputs into the valuation of these derivatives are the discount rate and voluntary and involuntary prepayment rates of the underlying mortgage loans. Changes in fair value of CRT Agreements are included in Net gain (loss) on investments.

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

Key inputs	March	
	31, 2018	December 31, 2017
Discount rate		
Range	5.6% – 6.6%	5.1% – 6.2%
Weighted average	6.1%	5.6%
Voluntary Prepayment speed (1)		
Range	8.6% – 10.4%	12.1% – 15.0%
Weighted average	9.1%	13.0%
Involuntary prepayment speed (2)		
Range	0.3% – 0.3%	0.3% – 0.3%
Weighted average	0.3%	0.3%

- (1) Voluntary prepayment speed is measured using Life Voluntary CPR.
- (2) Involuntary prepayment speed is measured using Life Involuntary CPR.

Repurchase Agreement Derivatives

The Company has a master repurchase agreement that includes incentives for financing mortgage loans approved for satisfying certain consumer relief characteristics. These incentives are classified as embedded derivatives for financial reporting purposes and are accounted for separate from the related repurchase agreements. The Company classifies these derivatives as “Level 3” fair value assets. The significant unobservable input into the valuation of these derivative assets is the Company’s ratio of derivative value to outstanding receivable due to the time value of money and the expected approval rate of the mortgage loans financed under the master repurchase agreement. The ratio included in the Company’s fair value estimate was 97% at both March 31, 2018, and December 31, 2017.

Hedging Derivatives

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 rates, volatilities and prices 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 income.

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. The Manager’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 income.

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. Recognized changes in the fair value of MSRs are included in Net mortgage loan servicing fees in the consolidated statements of income.

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. Through December 31, 2017, the Company accounted for certain of its MSRs using the amortization method. Beginning January 1, 2018, the Company accounts for all MSRs at fair value prospectively.

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

	Quarter ended March 31,		
	2018	2017	
	Fair	Amortized	Fair
	value	cost	value
	(MSR recognized and UPB of underlying mortgage loan amounts in thousands)		
MSR recognized	\$ 66,546	\$ 51,210	\$ 7,478
Key inputs			
UPB of underlying mortgage loans	\$ 5,114,741	\$ 4,092,267	\$ 660,586
Weighted-average annual servicing fee rate			
(in basis points)	26	25	25
Pricing spread (1)			
Range	7.4% – 12.6%	7.6% – 12.6%	7.6% – 7.6%
Weighted average	7.5%	7.6%	7.6%
Annual total prepayment speed (2)			
Range	3.2% – 22.8%	3.2% – 28.7%	7.9% – 20.7%
Weighted average	8.1%	7.5%	10.9%
Life (in years)			
Range	3.5 - 11.9	2.7 – 11.9	4.0 – 8.5
Weighted average	8.4	8.3	7.2
Annual per-loan cost of servicing			
Range	\$79 - \$79	\$79 – \$79	\$79 – \$79
Weighted average	\$79	\$79	\$79

(1) The Company applies a pricing spread to the United States Dollar LIBOR curve for purposes of discounting cash flows relating to MSRs.

(2) Prepayment speed is measured using Life Total CPR.

32

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

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:

	March 31, 2018 Fair value (Carrying value, UPB of underlying mortgage loans and effect on fair value)	December 31, 2017 Amortized cost value (Carrying value, UPB of underlying mortgage loans and effect on fair value)	December 31, 2017 Fair value (Carrying value, UPB of underlying mortgage loans and effect on fair value)
	amounts in thousands)		
Carrying value	\$ 957,013	\$ 753,322	\$ 91,459
Key inputs:			
UPB of underlying mortgage loans	\$ 75,261,574	\$ 63,853,606	\$ 8,273,696
Weighted-average annual servicing fee rate			
(in basis points)	25	25	25
Weighted-average note interest rate	4.0%	3.9%	4.7%
Pricing spread (1)			
Range	7.4% – 13.1%	7.6% – 13.1%	7.6% – 12.6%
Weighted average	7.4%	7.6%	7.6%
Effect on fair value of (2):			
5% adverse change	\$(14,450)	\$(11,848)	\$(1,347)
10% adverse change	\$(28,487)	\$(23,352)	\$(2,655)
20% adverse change	\$(55,385)	\$(45,379)	\$(5,162)
Prepayment speed (3)			
Range	6.5% – 27.2%	7.1% – 27.1%	7.3% – 20.9%
Weighted average	8.0%	8.4%	11.1%
Life (in years)			
Range	2.9 - 8.3	2.9 - 8.0	3.1 - 6.8
Weighted average	7.9	7.6	6.8
Effect on fair value of (2):			
5% adverse change	\$(13,939)	\$(12,267)	\$(1,954)
10% adverse change	\$(27,417)	\$(24,120)	\$(3,827)
20% adverse change	\$(53,083)	\$(46,668)	\$(7,352)
Annual per-loan cost of servicing			
Range	\$77 - \$79	\$78 – \$79	\$77 – \$79
Weighted average	\$79	\$79	\$79
Effect on fair value of (2):			
5% adverse change	\$(6,962)	\$(5,721)	\$(744)
10% adverse change	\$(13,925)	\$(11,441)	\$(1,488)
20% adverse change	\$(27,849)	\$(22,883)	\$(2,976)

(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 MSR's carried at fair value, an adverse change in one of the above-mentioned key inputs is expected to result in a recognized reduction in fair value which will be recorded in income. For MSR's carried at lower of amortized cost or fair value, an adverse change in one of the above-mentioned key inputs may have resulted in recognition of MSR impairment. The extent of the recognized MSR impairment depended on the relationship of fair value to the carrying value of such MSR's.

(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.

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

Note 7—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	March 31, 2018	December 31, 2017
	(in thousands)	
Conventional:		
Agency-eligible	\$837,994	\$ 971,910
Held for sale to PLS — Government insured or guaranteed	259,673	279,571
Commercial real estate	10,177	9,898
Repurchased pursuant to representations and warranties	7,690	8,136
	\$1,115,534	\$ 1,269,515
Mortgage loans pledged to secure:		
Assets sold under agreements to repurchase	\$1,097,266	\$ 1,201,992
Mortgage loan participation purchase and sale agreements	—	47,285
	\$1,097,266	\$ 1,249,277

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 sellers 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 8—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 the Manager's 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:

Loan type	March 31, 2018		December 31, 2017	
	Fair value	Unpaid principal balance	Fair value	Unpaid principal balance
	(in thousands)			
Distressed mortgage loans:				

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

Nonperforming mortgage loans	\$205,124	\$312,036	\$353,648	\$524,949
Performing mortgage loans:				
Interest rate step-up	137,451	181,412	189,724	242,335
Fixed interest rate	102,605	128,737	186,929	236,840
Adjustable-rate/hybrid	23,207	24,036	38,132	39,834
	263,263	334,185	414,785	519,009
	468,387	646,221	768,433	1,043,958
Fixed interest rate jumbo mortgage loans held in a VIE	311,102	312,730	321,040	316,684
	\$779,489	\$958,951	\$1,089,473	\$1,360,642
Mortgage loans at fair value pledged to secure:				
Assets sold under agreements to repurchase	\$459,809		\$760,853	
Asset-backed financing of a VIE at fair value	311,102		321,040	
	\$770,911		\$1,081,893	

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

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

Concentration	March 31, 2018	December 31, 2017
	(percentages are of fair value)	
Portion of mortgage loans originated between 2005 and 2007	73%	73%
Mortgage loans with unpaid-principal balance-to-current		
-property-value in excess of 100%	38%	38%
States contributing 5% or more of mortgage loans	New York	New York
	California	California
	New Jersey	New Jersey
	Florida	Florida
	Massachusetts	Massachusetts

Note 9—Derivative Activities

The Company holds and issues derivative financial instruments in connection with its operating activities. Derivative financial instruments are created as a result of certain of the Company's operations and the Company also enters into derivative transactions as part of its interest rate risk management activities.

Derivative financial instruments created as a result of the Company's operations include:

- IRLCs that are created when the Company commits to purchase mortgage loans acquired for sale;
- CRT Agreements whereby the Company retains a Recourse Obligation relating to certain mortgage loans it sells into Fannie Mae guaranteed securitizations and an IO ownership interest in such mortgage loans; and
- Derivatives that are embedded in a master repurchase agreement that provides for the Company to receive interest expense offsets if it finances mortgage loans approved as satisfying certain consumer credit relief characteristics under the master repurchase agreement.

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. 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 MSRMs if market mortgage interest rates decrease, because market interest rate decreases generally encourage mortgage refinancing activity, which reduces the expected life of the mortgage loans underlying the MSRMs, causing the fair value of MSRMs to decrease.

To manage the price risk resulting from interest rate risk, the Company uses derivative financial instruments 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, IRLCs and MSRs.

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

35

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

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:

Instrument	March 31, 2018			December 31, 2017		
	Notional amount (in thousands)	Fair value Derivative assets	Derivative liabilities	Notional amount	Fair value Derivative assets	Derivative liabilities
Derivatives not designated as hedging instruments:						
Not subject to master netting arrangements:						
Interest rate lock commitments	1,067,009	\$3,220	\$ 511	1,250,803	\$4,859	\$ 227
CRT Agreements	29,726,369	103,995	—	26,845,392	98,640	—
Repurchase agreement derivatives		5,892	—		3,748	—
Subject to master netting agreements used for hedging purposes:						
Forward purchase contracts	2,510,700	11,400	1	1,996,235	4,343	248
Forward sale contracts	2,297,802	6	8,345	2,565,271	387	2,830
MBS put options	1,750,000	4,086	—	2,375,000	3,170	—
Call options on interest rate futures	150,000	492	—	—	—	—
Put options on interest rate futures	275,000	367	—	550,000	656	—
Swap futures	—	—	—	275,000	—	—
Bond futures	450,000	—	—	—	—	—
Eurodollar future contracts	847,664	—	—	937,000	—	—
Total derivative instruments before netting		129,458	8,857		115,803	3,305
Netting		(6,940)	(5,221)		(1,922)	(1,999)
		\$122,518	\$ 3,636		\$113,881	\$ 1,306
Margin deposits (received from) placed with derivatives counterparties included in Other assets (Accounts payable and accrued liabilities)						
					\$76	
Derivative assets pledged to secure assets sold						
under agreements to repurchase		\$24,423			\$26,058	

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.

Instrument	Quarter ended March 31, 2018			Amount, end of quarter
	Amount, beginning of quarter (in thousands)	Additions	Dispositions/ expirations	
Forward purchase contracts	1,996,235	19,833,104	(19,318,639)	2,510,700
Forward sales contracts	2,565,271	24,410,334	(24,677,803)	2,297,802
MBS put options	2,375,000	4,125,000	(4,750,000)	1,750,000
Call options on interest rate futures	—	150,000	—	150,000
Put options on interest rate futures	550,000	3,325,000	(3,600,000)	275,000
Swap futures	275,000	—	(275,000)	—
Bond futures	—	450,000	—	450,000
Eurodollar future sale contracts	937,000	114,597	(203,933)	847,664

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

Instrument	Quarter ended March 31, 2017			
	Amount, beginning of quarter (in thousands)	Additions	Dispositions/ expirations	Amount, end of quarter
Forward purchase contracts	4,840,707	18,906,029	(19,631,577)	4,115,159
Forward sales contracts	6,148,242	24,225,103	(24,699,931)	5,673,414
MBS put options	925,000	1,400,000	(1,375,000)	950,000
MBS call options	750,000	—	(750,000)	—
Call options on interest rate futures	200,000	62,500	—	262,500
Put options on interest rate futures	550,000	1,750,000	(1,800,000)	500,000
Swap futures	150,000	300,000	(300,000)	150,000
Eurodollar future sale contracts	1,351,000	101,000	(212,000)	1,240,000
Treasury future buy contracts	—	49,300	(49,300)	—
Treasury future sale contracts	—	49,300	(49,300)	—

Netting of Financial Instruments

The Company has elected to net derivative asset and liability positions, and cash collateral placed with or received from 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, CRT Agreement derivatives and repurchase agreement derivatives. As of March 31, 2018 and December 31, 2017, 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:

March 31, 2018		Net	December 31, 2017		Net
Gross	Gross		Gross	Gross	
amounts	amounts	amounts	amounts	amounts	amounts
of	offset	of assets	of	offset	of assets
recognized in the		presented	recognized in the		presented
assets	consolidated	in the	assets	consolidated	in the
	balance	consolidated		balance	consolidated

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

	sheet		balance		sheet		balance	
			sheet				sheet	
	(in thousands)							
Derivative assets:								
Not subject to master netting arrangements:								
Interest rate lock commitments	\$3,220	\$ —	\$ 3,220	\$4,859	\$ —	\$ 4,859		
CRT Agreement derivatives	103,995	—	103,995	98,640	—	98,640		
Repurchase agreement derivatives	5,892	—	5,892	3,748	—	3,748		
	113,107	—	113,107	107,247	—	107,247		
Subject to master netting arrangements:								
Forward purchase contracts	11,400	—	11,400	4,343	—	4,343		
Forward sale contracts	6	—	6	387	—	387		
MBS put options	4,086	—	4,086	3,170	—	3,170		
Call options on interest rate futures	492	—	492	—	—	—		
Put options on interest rate futures	367	—	367	656	—	656		
Netting	—	(6,940)	(6,940)	—	(1,922)	(1,922)		
	16,351	(6,940)	9,411	8,556	(1,922)	6,634		
	\$129,458	\$ (6,940)	\$ 122,518	\$115,803	\$ (1,922)	\$ 113,881		

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

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:

	March 31, 2018			December 31, 2017			
	Net amount	Gross amounts		Net amount	Gross amounts		
	of assets	not offset in the		of assets	not offset in the		
	presented	consolidated		presented	consolidated		
	in the consolidated	balance sheet		in the consolidated	balance sheet		
	balance sheet	Cash		balance sheet	Cash		
	sheet	Financial instruments received	collateral Net amount	sheet	Financial instruments received	collateral Net amount	
	(in thousands)						
CRT Agreements	\$103,995	\$ —	\$ —	\$103,995	\$98,640	\$ —	\$ —
Interest rate lock commitments	3,220	—	—	3,220	4,859	—	—
J.P. Morgan Securities LLC	6,294	—	—	6,294	2,020	—	—
Deutsche Bank Securities LLC	5,892	—	—	5,892	3,748	—	—
Federal National Mortgage Association	1,073	—	—	1,073	1,606	—	—
RJ O'Brien & Associates, LLC	859	—	—	859	656	—	—
Barclays Capital Inc.	324	—	—	324	—	—	—
Credit Suisse Securities (USA) LLC	227	—	—	227	809	—	—
Mitsubishi UFJ Sec	155	—	—	155	193	—	—
RBC Capital Markets, L.P.	151	—	—	151	—	—	—
KGS Alpha Capital Markets LP	131	—	—	131	—	—	—
PNC Capital Markets LLC	100	—	—	100	—	—	—
Wells Fargo Securities, LLC	90	—	—	90	146	—	—
Morgan Stanley & Co. LLC	—	—	—	—	457	—	—
Citigroup Global Markets Inc.	—	—	—	—	429	—	—
Jefferies & Company, Inc.	—	—	—	—	160	—	—
Other	7	—	—	7	158	—	—
	\$122,518	\$ —	\$ —	\$122,518	\$113,881	\$ —	\$ —

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

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.

	March 31, 2018		Net	December 31, 2017		Net
	Gross	offset	amounts	Gross	offset	amounts
	amounts	in the	of liabilities	amounts	in the	of liabilities
	of	consolidated	presented	of	consolidated	presented
	recognized	balance	in the	recognized	balance	in the
	liabilities	sheet	consolidated	liabilities	sheet	consolidated
	(in thousands)		balance			balance
Derivative liabilities:						
Not subject to master netting arrangements:						
Interest rate lock commitments	\$511	\$ —	\$511	\$227	\$ —	\$227
	511	—	511	227	—	227
Subject to master netting arrangements:						
Forward purchase contracts	1	—	1	248	—	248
Forward sales contracts	8,345	—	8,345	2,830	—	2,830
Netting	—	(5,221)	(5,221)	—	(1,999)	(1,999)
	8,346	(5,221)	3,125	3,078	(1,999)	1,079
	8,857	(5,221)	3,636	3,305	(1,999)	1,306
Assets sold under agreements to repurchase:						
UPB	3,409,440	—	3,409,440	3,182,504	—	3,182,504
Unamortized debt issuance costs	(1,157)	—	(1,157)	(1,618)	—	(1,618)
	3,408,283	—	3,408,283	3,180,886	—	3,180,886
	\$3,417,140	\$ (5,221)	\$3,411,919	\$3,184,191	\$ (1,999)	\$3,182,192

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

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.

	March 31, 2018			December 31, 2017		
	Net amount of liabilities presented in the consolidated balance sheet (in thousands)	Gross amounts not offset in the consolidated balance sheet instruments	Cash collateral pledged	Net amount of liabilities presented in the consolidated balance sheet	Gross amounts not offset in the consolidated balance sheet instruments	Cash collateral pledged
Interest rate lock commitments	\$511	\$—	\$ —	\$511	\$227	\$—
Bank of America, N.A.	1,110,861	(1,109,449)	—	1,412	839,057	(838,771)
Credit Suisse Securities (USA) LLC	917,667	(917,667)	—	—	845,567	(845,567)
J.P. Morgan Securities LLC	274,748	(274,748)	—	—	373,186	(373,186)
Deutsche Bank Securities LLC	266,238	(266,238)	—	—	374,526	(374,526)
Daiwa Capital Markets	264,386	(264,077)	—	309	153,833	(153,730)
Morgan Stanley & Co. LLC	231,591	(231,227)	—	364	164,530	(164,530)
Citigroup Global Markets Inc.	159,593	(159,593)	—	—	235,541	(235,319)
RBC Capital Markets, L.P.	93,872	(93,872)	—	—	92,014	(91,805)
Wells Fargo Securities, LLC	49,216	(49,216)	—	—	50,360	(50,360)
BNP Paribas	43,612	(43,353)	—	259	45,411	(45,411)
Goldman Sachs	549	—	—	549	164	—
Barclays Capital Inc.	—	—	—	—	9,374	(9,299)
Other	232	—	—	232	20	—
Unamortized debt issuance costs	(1,157)	1,157	—	—	(1,618)	1,618
	\$3,411,919	\$(3,408,283)	\$ —	\$3,636	\$3,182,192	\$(3,180,886)
						\$ —

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

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

Derivative activity	Income statement line	Quarter ended	
		March 31, 2018	2017
		(in thousands)	
Interest rate lock commitments	Net gain on mortgage loans		
	acquired for sale	\$(14,858)	\$28,933
Hedged item:			
Interest rate lock commitments and	Net gain on mortgage loans		
mortgage loans acquired for sale	acquired for sale	\$32,810	\$(3,592)
Mortgage servicing rights	Net mortgage loan servicing fees	\$(20,848)	\$(8,698)
Fixed-rate assets and LIBOR- indexed			
repurchase agreements	Net gain (loss) on investments	\$1,460	\$(4,144)
CRT agreements	Net gain (loss) on investments	\$24,684	\$20,307
Repurchase agreement derivatives	Interest expense	\$(12)	\$—

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

Note 10—Real Estate Acquired in Settlement of Loans

Following is a summary of financial information relating to REO:

	Quarter ended March 31,	
	2018	2017
	(in thousands)	
Balance at beginning of quarter	\$162,865	\$ 274,069
Transfers from mortgage loans at fair value and advances	16,363	24,876
Transfer of real estate acquired in settlement of		
mortgage loans to real estate held for investment	(2,059)	(6,644)
Results of REO:		
Valuation adjustments, net	(5,359)	(8,175)
Gain on sale, net	2,133	3,929
	(3,226)	(4,246)
Proceeds from sales	(32,437)	(63,224)
Balance at end of quarter	\$141,506	\$ 224,831
	March	December 31,
	31, 2018	2017
	(in thousands)	
REO pledged to secure assets sold under agreements to repurchase	\$67,720	\$ 76,037
REO held in a consolidated subsidiary whose stock		
is pledged to secure financings of such properties	37,764	48,495
	\$105,484	\$ 124,532

Note 11—Mortgage Servicing Rights

Carried at Fair Value:

Following is a summary of MSRMs carried at fair value:

	Quarter ended March 31,	
	2018	2017
	(in thousands)	
Balance at beginning of quarter	\$91,459	\$ 64,136
Transfer of mortgage servicing rights from mortgage servicing		
rights carried at lower of amortized cost or fair value pursuant		
to a change in accounting principle	773,035	—
Balance after reclassification	864,494	64,136

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

Purchases	—	62
MSRs resulting from mortgage loan sales	66,546	7,478
Changes in fair value:		
Due to changes in valuation inputs used in valuation model (1)	52,611	32
Other changes in fair value (2)	(26,638)	(2,025)
	25,973	(1,993)
Balance at end of quarter	\$957,013	\$ 69,683
	March	December 31,
	31, 2018	2017
	(in thousands)	
MSRs carried at fair value pledged to secure:		
Assets sold under agreements to repurchase	\$745,965	\$ 66,813
Notes payable	195,721	23,471
	\$941,686	\$ 90,284

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

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

41

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

Carried at Lower of Amortized Cost or Fair Value:

Following is a summary of MSR's carried at lower of amortized cost or fair value:

	Quarter ended March 31,	
	2018	2017
	(in thousands)	
Amortized Cost:		
Balance at beginning of quarter	\$772,870	\$ 606,103
Transfer of mortgage servicing right to mortgage servicing rights		
carried at fair value pursuant to a change in accounting principle	(772,870)	—
Balance after reclassification	—	606,103
MSR's resulting from mortgage loan sales	—	51,210
Amortization	—	(17,858)
Balance at end of quarter	—	639,455
Valuation Allowance:		
Balance at beginning of quarter	(19,548)	(13,672)
Reduction resulting from change in accounting principle	19,548	—
Balance after reclassification	—	(13,672)
Reversal of impairment valuation allowance	—	1,504
Balance at end of quarter	—	(12,168)
MSR's, net	\$—	\$ 627,287
Fair value at beginning of quarter		\$ 626,334
Fair value at end of quarter		\$ 662,584
		December 31,
		2017
		(in
		thousands)
MSR's carried at lower of cost or fair value pledged to secure:		
Assets sold under agreements to repurchase		\$ 584,762
Notes payable		156,846
		\$ 741,608

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

	Quarter ended	
	March 31,	2017
	2018	2017
	(in thousands)	
Contractually-specified servicing fees	\$48,732	\$37,281
Ancillary and other fees:		
Late charges	214	187
Other	1,489	1,037

	\$50,435	\$38,505
--	----------	----------

Note 12—Assets Sold Under Agreements to Repurchase

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

	Quarter ended March 31,	
	2018	2017
	(dollars in thousands)	
Weighted-average interest rate (1)	3.20	% 2.57
Average balance	\$3,077,914	\$3,267,864
Total interest expense	\$24,507	\$22,182
Maximum daily amount outstanding	\$3,655,250	\$4,330,825

(1) Excludes the effect of amortization of net issuance premiums of \$169,000 for the quarter ended March 31, 2018 and net debt issuance costs of \$2.3 million for the quarter ended March 31, 2017.

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

	March 31, 2018	December 31, 2017
	(dollars in thousands)	
Carrying value:		
Unpaid principal balance	\$3,409,440	\$ 3,182,504
Unamortized debt issuance costs and premiums, net	(1,157)	(1,618)
	\$3,408,283	\$ 3,180,886
Weighted-average interest rate	2.80 %	2.77 %
Available borrowing capacity:		
Committed	\$767,553	\$ 749,650
Uncommitted	1,673,718	2,030,607
	\$2,441,271	\$ 2,780,257
Margin deposits placed with counterparties included in Other assets	\$40,114	\$ 28,154
Assets securing agreements to repurchase:		
Mortgage-backed securities	\$1,436,456	\$ 989,461
Mortgage loans acquired for sale at fair value	\$1,097,266	\$ 1,201,992
Mortgage loans at fair value	\$459,809	\$ 760,853
CRT Agreements:		
Deposits securing CRT agreements	\$392,453	\$ 400,778
Derivative assets	\$24,423	\$ 26,058
Real estate acquired in settlement of loans	\$105,484	\$ 124,532
Real estate held for investment	\$31,899	\$ 31,128
MSRs	\$745,965	\$ 651,575

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

Remaining maturity at March 31, 2018	Contractual balance (in thousands)
Within 30 days	\$1,373,877
Over 30 to 90 days	1,177,854
Over 90 days to 180 days	231,227
Over 180 days to 1 year	441,442
Over one year to two years	185,040
	\$3,409,440
Weighted average maturity (in months)	3.8

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

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

agreements to repurchase is summarized by pledged asset and counterparty below as of March 31, 2018:

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

Counterparty	Amount at risk (in thousands)	Weighted-average maturity	Facility maturity
Credit Suisse First Boston Mortgage Capital LLC	\$ 468,728	June 18, 2018	April 27, 2018
Bank of America, N.A.	\$ 10,624	April 14, 2018	May 25, 2018
Citibank, N.A.	\$ 60,502	April 22, 2018	May 1, 2018
JPMorgan Chase & Co.	\$ 36,428	March 14, 2019	March 14, 2019
JPMorgan Chase & Co.	\$ 3,420	May 18, 2018	October 12, 2018
Morgan Stanley	\$ 11,132	June 17, 2018	August 24, 2018
Deutsche Bank	\$ 13,282	June 20, 2018	September 30, 2018

Securities sold under agreements to repurchase

Counterparty	Amount at risk (in thousands)	Weighted average maturity
Bank of America, N.A.	\$ 46,492	May 2, 2018
JPMorgan Chase & Co.	\$ 8,745	April 8, 2018
Daiwa Capital Markets America Inc.	\$ 18,151	April 20, 2018
Royal Bank of Canada	\$ 7,640	April 16, 2018
Wells Fargo, N.A.	\$ 2,670	April 12, 2018

CRT Agreements sold under agreements to repurchase

Counterparty	Amount at risk (in thousands)	Weighted average maturity
Credit Suisse First Boston Mortgage Capital LLC	\$ 51,226	April 16, 2018
Bank of America, N.A.	\$ 27,592	April 16, 2018
BNP Paribas Corporate & Institutional Banking	\$ 18,160	April 9, 2018

Note 13—Mortgage Loan Participation Purchase and Sale Agreements

Certain borrowing facilities secured by mortgage loans acquired for sale are in the form of mortgage loan participation purchase 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. The 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 purchase and sale agreements are summarized below:

Quarter ended
March 31,

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

	2018	2017
	(dollars in thousands)	
Weighted-average interest rate (1)	2.49 %	2.08 %
Average balance	\$45,561	\$64,498
Total interest expense	\$314	\$366
Maximum daily amount outstanding	\$77,407	\$97,404

(1) Excludes the effect of amortization of debt issuance costs of \$31,000 for the quarter ended March 31, 2017. There was no amortization of debt issuance costs during the quarter ended March 31, 2018.

	March 31, 2018	December 31, 2017
	(dollars in thousands)	
Carrying value:		
Amount outstanding	\$ —	\$ 44,550
Unamortized debt issuance costs	—	(62)
	\$ —	\$ 44,488
Weighted-average interest rate	—	2.82 %
Mortgage loans acquired for sale pledged to secure		
mortgage loan participation purchase and sale agreements	\$ —	\$ 47,285

Note 14—Notes Payable

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 MSR (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 was redeemed and terminated in December 2017.

On March 24, 2017, the Company, through 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 may be 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, all of which is committed. The note matured and was repaid on February 1, 2018.

On February 1, 2018, the Company, through PMC and PMH, entered into a Loan and Security Agreement with Credit Suisse First Boston Mortgage Capital LLC (“Credit Suisse”), pursuant to which PMC and PMH may finance certain mortgage servicing rights (inclusive of any related excess servicing spread arising therefrom and that may be 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 \$175 million, all of which is committed. The note matures on February 1, 2020.

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

	Quarter ended March 31, 2018 2017		
	(dollars in thousands)		
Weighted-average interest rate (1)	—	5.13	%
Average balance	\$ —	\$ 260,384	
Total interest expense	\$ —	\$ 4,305	
Maximum daily amount outstanding	\$ —	\$ 275,106	

(1) Excludes the effect of amortization of debt issuance costs of \$998,000 for the quarter ended March 31, 2018.

	March 31, 2018	December 31, 2017
	(dollars in thousands)	
Carrying value:		
Amount outstanding	\$ —	\$ —
Unamortized debt issuance costs	—	—
	\$ —	\$ —
Weighted-average interest rate	—	—
MSRs pledged to secure notes payable	\$ 195,721	\$ 180,317

Note 15—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 ended March 31, 2018		2017	
	(dollars in thousands)			
Weighted-average fair value	\$297,682		\$347,854	
Total interest expense	\$2,296		\$3,409	
Weighted-average effective interest rate	3.54	%	3.48	%

	March 31, 2018		December 31, 2017	
	(dollars in thousands)			
Fair value	\$296,982		\$307,419	
UPB	\$312,730		\$316,684	
Weighted-average interest rate	3.51	%	3.51	%

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 16—Exchangeable Senior Notes

PMC issued in a private offering \$250 million aggregate principal amount of exchangeable senior notes (“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 March 31, 2018, 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 March 31, 2018 2017 (in thousands)	
Weighted-average UPB	\$250,000	\$250,000
Total interest expense	\$3,644	\$3,627

	March 31, 2018	December 31, 2017 (in thousands)
Carrying value:		
UPB	\$250,000	\$250,000
Unamortized debt issuance costs	(2,529)	(2,814)
	\$247,471	\$247,186

Note 17—Liability for Losses Under Representations and Warranties

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

	Quarter ended March 31, 2018 2017 (in thousands)	
Balance, beginning of quarter	\$8,678	\$15,350
Provision for losses:		
Pursuant to mortgage loan sales	572	673
Reduction in liability due to change in estimate	(1,042)	(4,576)
Recoveries, net	41	—

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

Balance, end of quarter	\$8,249	\$11,447
UPB of mortgage loans subject to representations and warranties at end of quarter	\$74,554,838	\$58,797,849

Note 18—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 March 31, 2018, the Company was not involved in any such proceedings, claims or legal actions that in the Manager’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:

	March 31, 2018 (in thousands)
Commitments to purchase mortgage loans acquired for sale	\$1,067,009
Commitments to fund Deposits securing CRT agreements (1)	\$552,957

(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 19—Shareholders' Equity

Preferred Shares of Beneficial Interest

Preferred shares of beneficial interest are summarized below:

Series	Description (1)	Number of shares (in thousands)	Liquidation preference	Issuance discount	Carrying value
A	8.125% fixed-to-floating rate cumulative redeemable preferred, issued March 2017	4,600	\$ 115,000	\$ 3,828	\$ 111,172
B	8.00% fixed-to-floating rate cumulative redeemable preferred, issued July 2017	7,800	195,000	6,465	188,535
		12,400	\$ 310,000	\$ 10,293	\$ 299,707

(1) Par value is \$0.01 per share for both series.

During March 2017, the Company issued 4.6 million of its 8.125% Series A Fixed-to-Floating Rate Cumulative Redeemable Preferred Shares of Beneficial Interest, \$0.01 par value per share (the "Series A Preferred Shares"). From, and including, the date of original issuance to, but not including, March 15, 2024, the Company pays 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. The Company paid dividends of \$0.51 per Series A Preferred Share during the quarter ended March 31, 2018.

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.

During July 2017, the Company issued 7.8 million of its 8.00% Series B Fixed-to-Floating Rate Cumulative Redeemable Preferred Shares of Beneficial Interest, \$0.01 par value per share (the “Series B Preferred Shares” and, together with the Series A Preferred Shares, the “Preferred Shares”). From, and including, the date of original issuance to, but not including, June 15, 2024, the Company pays cumulative dividends on the Series B Preferred Shares at a fixed rate of 8.00% per annum based on the \$25.00 per share liquidation preference. From, and including, June 15, 2024 and thereafter, the Company will pay cumulative dividends on the Series B Preferred Shares at a floating rate equal to three-month LIBOR as calculated on each applicable dividend determination date plus a spread of 5.99% per annum based on the \$25.00 per share liquidation preference. The Company paid dividends of \$0.50 per Series B Preferred Share for the quarter ended March 31, 2018.

The Series B Preferred Shares will not be redeemable before June 15, 2024, except in connection with the Company’s qualification as a REIT for U.S. federal income tax purposes and except as described below upon the occurrence of a change of control. On or after June 15, 2024, or 120 days after the first date on which such change of control occurred, the Company may, at its option, redeem any or all of the Series B Preferred Shares at \$25.00 per share plus any accumulated and unpaid dividends thereon to, but not including, the redemption date.

The Company pays quarterly cumulative dividends on its Preferred Shares on the 15th day of each March, June, September and December, provided that if any dividend payment date is not a business day, then the dividend that would otherwise be payable on that dividend payment date may be paid on the following business day. The 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 in connection with a change of control by the holders of the Preferred Shares.

Common Share Repurchases

During August 2015, the Company’s board of trustees authorized a common share repurchase program. Under the program, as amended, the Company may repurchase up to \$300 million of its outstanding common shares.

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

	Quarter ended March 31,		Cumulative total (1)
	2018	2017	
	(in thousands)		
Common shares repurchased	671	139	14,731
Cost of common shares repurchased	\$10,719	\$2,307	\$216,625

(1) Amounts represent the share repurchase program total from its inception in August 2015 through March 31, 2018. 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 4—Transactions with Related Parties, on February 1, 2013, the Company entered into a Reimbursement Agreement, by and among the Company, the Operating Partnership and the Manager. The Reimbursement Agreement provides that, to the extent the Company is required to pay the Manager performance incentive fees under the management agreement, the Company will reimburse the Manager 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 reimbursements were made during the quarters ended March 31, 2018, and March 31, 2017.

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 the Manager 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 ended March 31, 2018, and March 31, 2017. The Reimbursement Agreement expires on February 1, 2019.

Note 20—Net Gain on Mortgage Loans Acquired for Sale

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

Quarter ended
March 31,

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

	2018	2017
	(in thousands)	
From non-affiliates:		
Cash loss:		
Mortgage loans	\$(95,767)	\$(55,907)
Hedging activities	33,746	16,258
	(62,021)	(39,649)
Non cash gain:		
Receipt of MSR in mortgage loan sale transactions	66,546	58,688
Provision for losses relating to representations and warranties provided in mortgage loan sales:		
Pursuant to mortgage loans sales	(572)	(673)
Reduction in liability due to change in estimate	1,042	4,576
Change in fair value of financial instruments held at end of quarter:		
IRLCs	(1,924)	4,945
Mortgage loans	2,851	8,587
Hedging derivatives	(936)	(19,850)
	(9)	(6,318)
Total from non-affiliates	4,986	16,624
From PFSI—cash gain	2,641	2,401
	\$7,627	\$19,025

Note 21—Net Gain (Loss) on Investments

Net gain (loss) on investments is summarized below:

	Quarter ended March 31,	
	2018	2017
	(in thousands)	
From non-affiliates:		
Mortgage-backed securities	\$(22,397)	\$140
Distressed mortgage loans at fair value	(9,951)	3,216
Mortgage loans held in a VIE at fair value	(5,579)	316
CRT Agreements	22,551	18,587
Asset-backed financing of a VIE at fair value	6,183	(24)
Hedging derivatives	1,460	(4,144)
	(7,733)	18,091
From PFSI—ESS	7,751	(1,370)
	\$18	\$16,721

Note 22—Net Mortgage Loan Servicing Fees

Net mortgage loan servicing fees are summarized below:

	Quarter ended March 31,	
	2018	2017
	(in thousands)	
From non-affiliates:		
Servicing fees (1)	\$48,732	\$37,281
Ancillary and other fees	1,703	1,224
Effect of MSR:		
Carried at fair value—change in fair value	25,973	(1,993)
Carried at lower of amortized cost or fair value:		
Amortization	—	(17,858)
Additions to impairment valuation allowance	—	1,504
Losses on hedging derivatives, net	(20,848)	(8,698)
	5,125	(27,045)
	55,560	11,460
From PFSI—MSR recapture income	595	292
Net mortgage loan servicing fees	\$56,155	\$11,752
Average servicing portfolio	\$73,694,438	\$57,927,056

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

Note 23—Net Interest Income

Net interest income is summarized below:

	Quarter ended March 31, 2018 2017 (in thousands)	
Interest income:		
From nonaffiliates:		
Short-term investments	\$73	\$281
Mortgage-backed securities	8,791	6,772
Mortgage loans acquired for sale at fair value	11,332	11,502
Mortgage loans at fair value:		
Distressed	7,899	19,651
Held in a VIE	2,603	3,729
Placement fees relating to custodial funds	4,215	1,071
Deposits securing CRT Agreements	2,031	408
Other	102	39
	37,046	43,453
From PFSI—ESS	3,934	4,647
	40,980	48,100
Interest expense:		
To nonaffiliates:		
Assets sold under agreements to repurchase (1)	24,507	22,182
Mortgage loan participation purchase and sale agreements	314	366
Notes payable	—	4,305
Asset-backed financings of VIEs at fair value	2,296	3,409
Exchangeable Notes	3,644	3,627
Interest shortfall on repayments of mortgage loans serviced for		
Agency securitizations	1,594	1,062
Interest on mortgage loan impound deposits	485	423
	32,840	35,374
To PFSI—Assets sold under agreement to repurchase	1,976	1,805
	34,816	37,179
Net interest income	\$6,164	\$10,921

(1) In 2017, the Company entered into a master repurchase agreement that provides the Company with incentives to finance mortgage loans approved for satisfying certain consumer relief characteristics as provided in the agreement. During the quarter ended March 31, 2018, the Company included \$2.4 million of such incentives as a reduction of Interest expense. The master repurchase agreement has an initial term of six months, renewable for three additional six-month terms at the option of the lender and was renewed for six months on April 18, 2018. There can be no assurance whether the lender will further renew this agreement upon its maturity.

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

Note 24—Share-Based Compensation Plans

As of March 31, 2018 and December 31, 2017, the Company had one share-based compensation plan. The following table summarizes the Company's share-based compensation activity:

	Quarter ended March 31, 2018 2017 (in thousands)	
Grants:		
Restricted share units	129	134
Performance share units	116	126
Total share units granted	245	260
Grant date fair value:		
Restricted share units granted	\$2,300	\$2,281
Performance share units granted	1,542	1,722
Total fair value of share units granted	\$3,842	\$4,003
Vestings:		
Restricted share units	192	153
Performance share units	28	—
Total share units vested	220	153
Forfeitures:		
Restricted share units	—	—
Performance share units	—	—
Total share units forfeited	—	—
Compensation expense relating to share-based grants	\$899	\$1,527

Note 25—Other Expenses

Other expenses are summarized below:

	Quarter ended March 31, 2018 2017 (in thousands)	
Common overhead allocation from PFSI	\$1,001	\$1,434
Technology	378	318
Insurance	305	338
Other	966	1,413
	\$2,650	\$3,503

Note 26—Income Taxes

The Company's effective tax rate was 25.5% and (27.1)% for the quarters ended March 31, 2018 and 2017, respectively. The Company's taxable REIT subsidiary ("TRS") recognized a tax expense of \$9.4 million on income of \$34.6 million while the Company's reported consolidated pretax income was \$37.8 million for the quarter ended March 31, 2018. For the same periods in 2017, the Company's TRS recognized tax benefit of \$6.6 million on a loss of \$14.8 million while the Company's reported consolidated pretax income was \$22.6 million. The relative values between the tax benefit or expense at the TRS 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 the shareholders for income tax purposes. Some portion of the dividends may be characterized as capital gain distributions or a return of capital. For tax years beginning after December 31, 2017, the 2017 Tax Cuts and Jobs Act (the "Tax Act") (subject to certain limitations) provides a 20% deduction from taxable income for ordinary REIT dividends.

Note 27—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 available to common shareholders, 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 Notes, by the weighted-average common shares outstanding, assuming all dilutive securities were issued.

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

	Quarter ended March 31,	
	2018	2017
	(in thousands except per share amounts)	
Net income	\$28,186	\$28,737
Dividends on preferred shares	(6,234)	(571)
Effect of participating securities—share-based compensation awards	(202)	(298)
Net income attributable to common shareholders	\$21,750	\$27,868
Net income attributable to common shareholders	\$21,750	\$27,868
Interest on Exchangeable Notes, net of income taxes	2,655	2,186
Diluted net income attributable to common shareholders	\$24,405	\$30,054
Weighted-average basic shares outstanding	60,761	66,719
Dilutive securities:		
Shares issuable under share-based compensation plan	647	—
Shares issuable pursuant to exchange of the Exchangeable Notes	8,467	8,467
Diluted weighted-average number of shares outstanding	69,875	75,186
Basic earnings per share	\$0.36	\$0.42
Diluted earnings per share	\$0.35	\$0.40

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, as inclusion of such shares would have been antidilutive:

Quarter
ended
March 31,
2018
(in
thousands)

Shares issuable under share-based compensation plan — 661

Note 28—Segments

The correspondent production segment includes 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. The Credit sensitive investment strategies segment includes investments in distressed mortgage loans, REO, CRT Agreements, non-Agency subordinated bonds and small balance commercial real estate mortgage loans. The Interest rate sensitive strategies segment includes 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.

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

Financial highlights by operating segment are summarized below:

Quarter ended March 31, 2018	Credit		Interest	Corporate	Total
	Correspondent	sensitive	rate		
	production	strategies	sensitive		
	(in thousands)				
Net investment income:					
Net gain on mortgage loans acquired for sale	\$7,599	\$28	\$—	\$—	\$7,627
Net gain (loss) on investments	—	12,414	(12,396)	—	18
Net mortgage loan servicing fees	—	7	56,148	—	56,155
Net interest income:					
Interest income	11,169	10,208	19,428	175	40,980
Interest expense	(6,798)	(10,664)	(17,354)	—	(34,816)
	4,371	(456)	2,074	175	6,164
Other income (loss)	7,073	(1,389)	—	25	5,709
	19,043	10,604	45,826	200	75,673
Expenses:					
Mortgage loan fulfillment and servicing fees					
payable to PFSI	11,944	3,085	7,934	—	22,963
Management fees	—	—	—	5,696	5,696
Other	469	3,913	108	4,686	9,176
	12,413	6,998	8,042	10,382	37,835
Pre-tax income (loss)	\$6,630	\$3,606	\$37,784	\$(10,182)	\$37,838
Total assets at end of quarter	\$1,141,457	\$1,485,492	\$2,989,692	\$173,845	\$5,790,486

Quarter ended March 31, 2017	Credit		Interest	Corporate	Total
	Correspondent	sensitive	rate		
	production	strategies	sensitive		
	(in thousands)				
Net investment income:					
Net gain on mortgage loans acquired for sale	\$19,011	\$14	\$—	\$—	\$19,025
Net gain (loss) on investments	—	21,994	(5,273)	—	16,721
Net mortgage loan servicing fees	—	14	11,738	—	11,752
Net interest income:					
Interest income	11,357	20,321	16,102	320	48,100
Interest expense	(7,901)	(14,272)	(15,006)	—	(37,179)
	3,456	6,049	1,096	320	10,921
Other income (loss)	8,317	(2,268)	—	6	6,055
	30,784	25,803	7,561	326	64,474
Expenses:					
Mortgage loan fulfillment and servicing fees	16,575	4,348	6,133	—	27,056

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

payable to PFSI					
Management fees	—	—	—	5,008	5,008
Other	1,737	2,028	684	5,353	9,802
	18,312	6,376	6,817	10,361	41,866
Pre-tax income (loss)	\$12,472	\$19,427	\$744	\$(10,035)	\$22,608
Total assets at end of quarter	\$1,292,513	\$2,137,531	\$2,432,419	\$140,483	\$6,002,946

Note 29—Supplemental Cash Flow Information

	Quarter ended	
	March 31,	
	2018	2017
	(in thousands)	
Income tax payments, net of refunds	\$—	\$31
Interest payments	\$32,112	\$35,838
Cumulative effect on accumulated deficit of conversion to fair value		
accounting	\$19,713	\$—
Non-cash investing activities:		
Capitalization of servicing advances pursuant to mortgage loan		
modifications	\$1,677	\$6,349
Receipt of excess servicing spread pursuant to recapture agreement		
with PennyMac Financial Services, Inc.	\$904	\$1,573
Transfer of mortgage loans and advances to real estate		
acquired in settlement of loans	\$16,363	\$24,876
Transfer of real estate acquired in settlement of mortgage		
loans to real estate held for investment	\$2,059	\$6,644
Receipt of mortgage servicing rights as proceeds from sales of		
mortgage loans	\$66,546	\$58,688
Non-cash financing activities:		
Recognition of financing premium arising from repurchase		
agreement derivatives	\$2,164	\$—
Dividends declared, not paid	\$28,818	\$31,652

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 \$2.5 million plus 25 basis points of UPB for all 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.

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

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

Fannie Mae and Freddie Mac	March 31, 2018		Tangible Net Worth /			
	Net Worth (1)		Total Assets Ratio (1)		Liquidity (1)	
	Actual	Required	Actual	Required	Actual	Required
March 31, 2018	\$527,072	\$190,654	14%	6	% \$72,381	\$26,342
December 31, 2017	\$487,535	\$182,818	12%	6	% \$73,252	\$25,245

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

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—Subsequent Events

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

On April 17, 2018, the Company, through PMC and POP (collectively, the “Sellers”), entered into a master repurchase agreement, by and among Royal Bank of Canada (“RBC”), on the one hand, and the Sellers, on the other hand (the “RBC Repurchase Agreement”), pursuant to which Sellers may sell to, and later repurchase from, RBC newly originated mortgage loans in an aggregate principal amount of up to \$100 million.

On April 17, 2018, the Company, through PMC, also entered into an amendment (the “Amendment”) to that certain master repurchase agreement, dated as of August 18, 2017, by and among Deutsche Bank AG, Cayman Islands Branch (“Deutsche Bank”), on the one hand, and PMC, on the other hand (the “DB Repurchase Agreement”), pursuant to which PMC may sell to, and later repurchase from, Deutsche Bank certain residential mortgage loans. The primary purpose of the Amendment was to increase the maximum aggregate principal amount provided for under the DB Repurchase Agreement from \$500 million to \$750 million.

On April 25, 2018, the Company, through its indirect subsidiary, PMT ISSUER TRUST—FMSR (“FMSR Issuer Trust”), issued an aggregate principal amount of \$450 million in secured term notes (the “2018-FT1 Notes”) to qualified institutional buyers under Rule 144A of the Securities Act of 1933, as amended. The 2018-FT1 Notes bear interest at a rate equal to one-month LIBOR plus 2.35% per annum, payable each month beginning in May 2018, on the 25th day of such month or, if such 25th day is not a business day, the next business day. The 2018-FT1 Notes will mature on April 25, 2023 or, if extended pursuant to the terms of the related term note indenture supplement, April 25, 2025 (unless earlier redeemed in accordance with their terms). The 2018-FT1 Notes have been assigned an investment grade rating of BBB- by Kroll Bond Rating Agency and will rank pari passu with the Series 2017-VF1 Notes dated December 20, 2017 (the “FMSR VFN”) issued by FMSR Issuer Trust to PMC and, in turn, pledged by PMC to Credit Suisse under an agreement to repurchase. The 2018-FT1 Notes and the FMSR VFN are secured by certain participation certificates relating to Fannie Mae MSR and excess servicing spread relating to such MSR.

All agreements to repurchase assets that matured between March 31, 2018 and the date of this Report were extended or renewed.

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. Our investment focus is on mortgage-related assets that we create through our correspondent production activities, including mortgage servicing rights (“MSRs”) and credit risk transfer agreements (“CRT Agreements”). We have pursued this objective largely by acquiring, pooling and selling newly originated prime credit quality residential mortgage loans (“correspondent production”) and retaining the MSRs relating to such mortgage loans and investing in CRT Agreements relating to mortgage loan sales. We also invest in mortgage-backed securities (“MBS”), 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 have also historically invested in distressed mortgage assets (mortgage loans and real estate acquired in settlement of mortgage loans), which are no longer our primary focus for new investments.

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

Correspondent Production

Our correspondent production activities serve as the source of our investments in MSRs and CRT Agreements, and are summarized below:

	Quarter ended March 31,	
	2018	2017
	(in thousands)	
Sales of mortgage loans acquired for sale:		
To nonaffiliates	\$5,200,584	\$4,858,845
To PennyMac Financial Services, Inc.	9,212,188	10,016,788

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

	\$14,412,772	\$14,875,633
Net gain on mortgage loans acquired for sale	\$7,627	\$19,025
Sourcing fees received from PLS included in Net gain on		
mortgage loans acquired for sale	\$2,641	\$2,871
Investment activities driven by correspondent production:		
Receipt of MSR as proceeds from sales of mortgage loans	\$66,546	\$58,688
Deposits of cash securing CRT Agreements	\$41,789	\$15,793
Increase in commitments to fund Deposits securing CRT		
Agreements resulting from sale of mortgage loans under		
CRT Agreements	\$70,486	\$48,150

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 aggregators 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 that we sell to PLS.

To the extent that we transfer correspondent production loans into private label securitizations, we retain 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.

Credit Sensitive Investments

CRT Agreements

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 credit risk of the government-sponsored entities. We believe there is significant potential for investment in front-end credit risk transfer and MSR that result from our correspondent production activities as we redeploy capital from the liquidation of distressed mortgage loans. During the quarter ended March 31, 2018, we made investments in CRT Agreements totaling \$41.8 million, and held CRT-related investments (composed of deposits securing CRT Agreements and derivative assets) totaling \$726.3 million at March 31, 2018.

Distressed Mortgage Assets

We have invested in distressed mortgage loans through direct acquisitions of mortgage loan portfolios from institutions such as banks and mortgage companies. We seek to maximize the fair value of the distressed mortgage loans that we acquire 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.

We may elect to hold certain real estate acquired in settlement of loans (“REO”) as income-producing properties for extended periods as a means of maximizing our returns on such properties. In addition to individual loan and property resolutions, we consider bulk sale opportunities from our existing distressed portfolio investments. During the quarter ended March 31, 2018, we did not acquire distressed mortgage loans. During the quarter ended March 31, 2018, we received proceeds from liquidation, payoffs, paydowns and sales from our portfolio of distressed mortgage loans and REO totaling \$305.0 million, including bulk sales totaling \$258.2 million in fair value of distressed mortgage loans.

Commercial-Real Estate Mortgage Loans

During the quarter ended March 31, 2018, we acquired \$7.3 million at fair value of multifamily mortgage loans. At March 31, 2018, we held \$10.2 million at fair value of such mortgage loans and other commercial real estate loans.

Interest Rate Sensitive Investments

Our interest rate sensitive investments include:

• Mortgage servicing rights. During the quarter ended March 31, 2018, we received \$66.5 million of MSRs as proceeds from sales of mortgage loans acquired for sale. We held \$957.0 million of MSRs at fair value at March 31,

2018.

REIT-eligible mortgage-backed or mortgage-related securities. During the quarter ended March 31, 2018, we purchased MBS at fair value totaling \$500.6 million. We held MBS with fair values totaling \$1.4 billion at March 31, 2018.

- ESS relating to MSRs held by PFSI. During the quarter ended March 31, 2018, we did not purchase any ESS from PFSI. However, pursuant to a recapture agreement with PLS, we received ESS with fair value totaling \$904,000. We held ESS with a fair value totaling \$236.0 million at March 31, 2018.

57

Capital Structure

Our board of trustees has authorized a repurchase program under which we may repurchase up to \$300 million of our outstanding common shares. During the quarter ended March 31, 2018, we repurchased approximately 671,000 common shares at a cost of \$10.7 million. We have repurchased a cumulative total of 14.7 million common shares at a cost of \$216.6 million under the program. 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 REIT and as such will not be subject to federal income tax on that portion of our income that is distributed to shareholders as long as we meet applicable REIT 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 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.

Non-Cash Income

Net investment income includes non-cash items, including fair value adjustments, recognition of 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 and ESS), our MSR, our derivatives, our asset-backed financing and interest-only security payable at fair value, 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.

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

	Quarter ended March 31,	
	2018	2017
	(dollars in thousands)	
Net gain on mortgage loans acquired for sale:		
Receipt of MSRs in mortgage loan sale transactions	\$66,546	\$58,688
Provision for losses relating to representations and warranties		
provided in mortgage loan sales:		
Pursuant to mortgage loans sales	(572)	(673)
Reduction in liability due to change in estimate	1,042	4,576
Change in fair value during the quarter of financial instruments		
held at quarter end:		
IRLCs	(1,924)	4,945
Mortgage loans acquired for sale	2,851	8,587
Hedging derivatives	(936)	(19,850)
	67,007	56,273
Net gain (loss) on investments:		

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

Mortgage-backed securities	(22,397)	140
Mortgage loans:		
at fair value	(9,271)	3,216
at fair value held in a variable interest entity	(5,579)	316
ESS	6,921	(1,370)
CRT Agreements	5,355	10,019
Interest-only security payable at fair value	(2,133)	(487)
Asset-backed financing of a VIE	6,183	(24)
	(20,921)	11,810
Net mortgage loan servicing fees—MSR valuation adjustments	52,611	1,536
Net interest income—Capitalization of interest pursuant to mortgage loan modifications	2,180	9,903
	\$100,877	\$79,522
Net investment income	\$75,673	\$64,474
Non-cash items as a percentage of net investment income	133	% 123 %

Cash is generated when mortgage loan investments are paid down, paid off or sold, when payments of principal and interest occur on such mortgage loans or when 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 MSR's 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 MSR's 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 or settle loss claims 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. Cash is generated with respect to CRT Agreements through a portion of both the interest payments collected on mortgage loans in the CRT Agreements' reference pools and the deposits securing the agreements that are released as principal on such mortgage loans is repaid.

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

	Quarter ended March 31, 2018			2017		
	Accumulated	Net gain on		Accumulated	Net gain on	
	Proceeds	gains (losses) (1)	liquidation (2)	Proceeds	gains (losses) (1)	liquidation (2)
	(in thousands)					
Mortgage loans	\$ 14,508	\$ 1,586	\$ 300	\$ 25,376	\$ 2,980	\$ 387
REO	32,437	(3,821)	1,772	63,201	(4,175)	4,979
	46,945	(2,235)	2,072	88,577	(1,195)	5,366
Distressed mortgage loan sales	258,206	14,531	(980)	73,536	9,573	45
	\$ 305,151	\$ 12,296	\$ 1,092	\$ 162,113	\$ 8,378	\$ 5,411

(1) Represents valuation gains and losses recognized during the period we held the respective asset, including expected gains or losses upon sale of assets subject to contract of sale, 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.

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.

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 \$13.3 million and \$6.4 million for assets liquidated during the quarters ended March 31, 2018 and 2017, respectively.

Results of Operations

The following is a summary of our key performance measures:

	Quarter ended March 31,	
	2018	2017
	(in thousands, except per share amounts)	
Net investment income	\$75,673	\$64,474
Expenses	37,835	41,866
Provision for (benefit from) income taxes	9,652	(6,129)
Net income	28,186	28,737
Dividends on preferred shares	6,234	571
Net income attributable to common shareholders	\$21,952	\$28,166
Pre-tax income (loss) by segment:		
Correspondent production	\$6,630	\$12,472
Credit sensitive strategies	3,606	19,427
Interest rate sensitive strategies	37,784	744
Corporate	(10,182)	(10,035)
	\$37,838	\$22,608
Annualized return on average common shareholders' equity	7.0	% 8.3
Earnings per common share:		
Basic	\$0.36	\$0.42
Diluted	\$0.35	\$0.40
Dividends per common share declared & paid	\$0.47	\$0.47
Per common share closing prices:		
During the quarter:		
High	\$18.03	\$17.75
Low	\$15.57	\$16.37
At quarter end	\$18.03	\$17.75

	March 31,	December 31,
	2018	2017
Total assets (in thousands)	\$5,790,486	\$ 5,604,933
Book value per common share	\$20.24	\$ 20.13

During the quarter ended March 31, 2018, we recorded net income of \$28.2 million, or \$0.35 per diluted share. Our net income for the quarter ended March 31, 2018 reflects net mortgage loan servicing fees of \$56.2 million, supplemented by net gain on mortgage loans acquired for sale of \$7.6 million, mortgage loan origination fees of \$7.0 million, net interest income of \$6.2 million and net gain on investments of \$18,000.

During the quarter ended March 31, 2017, we recorded net income of \$28.7 million, or \$0.40 per diluted share. Our net income for the quarter ended March 31, 2017 reflects net gain on mortgage loans acquired for sale of \$19.0 million, supplemented by net gain on investments of \$16.7 million and net interest income of \$10.9 million.

Our net income during the quarter ended March 31, 2018, was comparable to the same period in 2017, however the effect of increasing interest rates shifted the sources of our earnings towards our investment in MSR's and away from correspondent production. Rising interest rates also reflected negatively on our investment in MBS, and the fair value of our portfolio of distressed mortgage loans was negatively affected by recent observations of market activities for comparable assets.

Net Investment Income

During the quarter ended March 31, 2018, we recorded net investment income of \$75.7 million, comprised primarily of \$56.2 million of net loan servicing fees, \$7.6 million of net gain on mortgage loans acquired for sale, \$7.0 million of mortgage loan origination fees and \$6.2 million of net interest income, partially offset by \$3.2 million of losses from results of REO.

During the quarter ended March 31, 2017, we recorded net investment income of \$64.5 million, comprised primarily of \$19.0 million of net gain on mortgage loans acquired for sale, \$16.7 million net gain on investments, \$11.8 million of net loan servicing fees, \$10.9 million of net interest income, and \$8.3 million of mortgage loan origination fees, partially offset by \$4.2 million of losses from results of REO.

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

Net Gain on Mortgage Loans Acquired for Sale

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

	Quarter ended March 31,	
	2018	2017
	(in thousands)	
From non-affiliates:		
Cash loss:		
Mortgage loans	\$(95,767)	\$(55,907)
Hedging activities	33,746	16,258
	(62,021)	(39,649)
Non-cash gain:		
Receipt of MSR in mortgage loan sale transactions	66,546	58,688
Provision for losses relating to representations and warranties provided in mortgage loan sales:		
Pursuant to mortgage loan sales	(572)	(673)
Reduction in liability due to change in estimate	1,042	4,576
Change in fair value during the quarter of financial instruments held at quarter end:		
IRLCs	(1,924)	4,945
Mortgage loans	2,851	8,587
Hedging derivatives	(936)	(19,850)
	(9)	(6,318)
Total from non-affiliates	4,986	16,624
From PFSI cash gain	2,641	2,401
	\$7,627	\$19,025
Interest rate lock commitments issued:		
Loans acquired for sale to nonaffiliates	\$4,404,895	\$5,184,350
Loans acquired for sale to PFSI	9,162,260	9,291,920
	\$13,567,155	\$14,476,270
Purchases of mortgage loans acquired for sale to nonaffiliates:		
At fair value	\$5,106,242	\$4,758,654
UPB	\$4,985,348	\$4,631,906
	March 31,	December 31,
	2018	2017
	(in thousands)	
Fair value of mortgage loans acquired for sale held at quarter end:		
Conventional mortgage loans	\$837,994	\$971,910
Government-insured or guaranteed mortgage loans acquired for sale to PFSI	259,673	279,571
Commercial mortgage loans	10,177	9,898
Mortgage loans repurchased pursuant to representations and warranties	7,690	8,136
	\$1,115,534	\$1,269,515

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 ended March 31, 2018, as compared to the same period in 2017, reflects the generally rising interest rates in the mortgage market, which has a negative influence on demand for mortgage lending. Reduced demand negatively influences profit margins by causing increased price competition in the mortgage marketplace.

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. 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 insurer 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.

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

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 sellers 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 seller.

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 ended March 31,	
	2018	2017
	(UPB-in thousands)	
Indemnification activity:		
Mortgage loans indemnified by PMT at beginning of quarter	\$5,926	\$4,856
New indemnifications	—	2,069
Less:		
Indemnified mortgage loans repaid or refinanced	555	—
Mortgage loans indemnified by PMT at end of quarter	\$5,371	\$6,925
Mortgage loans with deposits received from correspondent sellers		
collateralizing prospective indemnification losses at end of quarter	\$1,145	\$645
Repurchase activity:		
Mortgage loans repurchased by PMT	\$2,830	\$4,102
Less:		
Mortgage loans repurchased by correspondent sellers	3,167	2,486
Mortgage loans repaid by borrowers	256	1,178
Net mortgage loans repurchased by PMT with losses		
chargeable to liability for representations and warranties	\$(593)) \$438
Net recovery credited to liability for representations and warranties	\$(41)) \$—
At end of quarter:		
Mortgage loans subject to representations and warranties	\$74,554,838	\$58,797,849
Liability for representations and warranties	\$8,249	\$11,447

During the quarter ended March 31, 2018, we repurchased mortgage loans with UPBs totaling \$2.8 million and recognized a net recovery to the liability for representations and warranties totaling \$41,000, as compared to repurchases of \$4.1 million and no net losses or recovery recorded during the same period in 2017. 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 that 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 correspondent seller 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.

We record adjustments to our recorded liability for losses on representations and warranties as economic fundamentals change, 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. Such adjustments may be material to our financial position and income in future periods. Adjustments to our liability for representations and warranties are included as a component of our Net gains on mortgage loans acquired for sale at fair value. We recorded a \$1.0 million reduction in liability for representations and warranties during the quarter ended March 31, 2018 due to the effects of certain mortgage loans reaching specified performance histories identified by the Agencies as sufficient to limit repurchase claims relating to such mortgage loans.

Mortgage Loan Origination Fees

Mortgage loan origination fees represent fees we charge correspondent sellers relating to our purchase of mortgage loans from those sellers. The decrease in fees during the quarter ended March 31, 2018, as compared to the same period in 2017, is due to our funding of fewer mortgage loans during the quarter ended March 31, 2018, as compared to the same period in 2017.

Net Gain (Loss) on Investments

Net gain (loss) on investments is summarized below:

	Quarter ended March 31, 2018 2017 (in thousands)	
From non-affiliates:		
Mortgage-backed securities	\$(22,397)	\$140
Mortgage loans at fair value:		
Distressed	(9,951)	3,216
Held in a VIE	(5,579)	316
CRT Agreements	22,551	18,587
Asset-backed financings of a VIE at fair value	6,183	(24)
Hedging derivatives	1,460	(4,144)
	(7,733)	18,091
From PFSI—ESS	7,751	(1,370)
	\$18	\$16,721

The decrease in net gain (loss) on investments during the quarter ended March 31, 2018, as compared to 2017, was caused primarily by valuation losses in our portfolios of MBS and mortgage loans at fair value.

Mortgage-Backed Securities

During the quarter ended March 31, 2018, we recognized net valuation losses on MBS of \$22.4 million, as compared to net valuation gains of \$140,000 for the quarter ended March 31, 2017. The losses we recorded for the quarter ended March 31, 2018 reflect the influence of rising interest rates during 2018, as compared to the same period in 2017.

Mortgage Loans at Fair Value – Distressed

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

	Quarter ended March 31, 2018 2017 (in thousands)	
Valuation changes:		
Performing loans	\$(4,169)	\$5,970

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

Nonperforming loans	(5,102)	(3,169)
	(9,271)	2,801
Gain on payoffs	235	415
Gain (loss) on sale	(915)	—
	\$(9,951)	\$3,216
Average portfolio balance	\$738,333	\$1,327,421
Interest and fees capitalized	\$2,180	\$9,903
Number of mortgage loans relating to gain recognized on payoffs	46	81
UPB of mortgage loans relating to gain recognized on payoffs	\$15,075	\$24,746
Number of mortgage loans relating to gain/(loss) recognized on sales	1,144	373
UPB of mortgage loans relating to gain/(loss) recognized on sales	\$351,630	\$103,767

63

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

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 losses of \$9.3 million in the quarter ended March 31, 2018, as compared to gains of \$2.8 million for the same period in 2017. We recognize estimated gain (loss) relating to mortgage loans subject to pending sales contracts in the valuation changes. Gains and losses on sales represent settlement adjustments realized at the date of sale.

We recognized valuation losses on performing mortgage loans during the quarter ended March 31, 2018 compared to valuation gains during the quarter ended March 31, 2017, due to the negative impact of observed market activity for comparable assets during 2018 as compared to the same period in 2017. Valuation losses on the nonperforming mortgage loans increased as these loans were also negatively impacted by observed market activity for comparable assets in 2018 as compared to the same period in 2017.

During the quarters ended March 31, 2018, and 2017, we continued to reduce our investment in distressed mortgage assets. During these periods we received proceeds from liquidation, payoffs, paydowns and sales from our portfolio of mortgage loans and REO as shown below:

	Quarter ended March 31,	
	2018	2017
	(in thousands)	
Mortgage loans at fair value	\$272,714	\$98,912
Real estate acquired in settlement	32,437	63,201
	\$305,151	\$162,113

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. Loan modifications typically include capitalization of delinquent interest on such mortgage loans.

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. 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 ended March 31, 2018, we capitalized interest totaling \$2.2 million, as compared to \$9.9 million for the quarter ended March 31, 2017.

Following is a summary of interest capitalized in mortgage loan modifications:

	Quarter ended March 31,	
	2018	2017
	(in thousands)	
Amount capitalized	\$2,180	\$9,903
UPB of mortgage loans before interest capitalization	\$41,074	\$79,870

Our disposition strategy includes identification of the most financially beneficial resolutions. Such resolutions may include modification or sale of the mortgage loan or acquisition of the property securing the distressed mortgage loan. Absent sale of 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.

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

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

Modification type (1)	Quarter ended March 31,		2017	
	2018	Balance	2017	Balance
	Number	of	Number	of
	of	loans	of	loans
	loans (1)	(1)	loans (1)	(1)
	(dollars in thousands)			
Rate reduction	99	\$29,572	175	\$49,930
Term extension	98	\$32,662	244	\$74,670
Capitalization of interest and fees	138	\$41,074	265	\$79,870
Principal forbearance	109	\$32,989	115	\$39,457
Principal reduction	46	\$14,778	91	\$28,489
Total (2)	138	\$41,074	265	\$79,870
Defaults of mortgage loans modified in the prior year period		\$4,406		\$5,242
As a percentage of relevant balance of loans				
before modification	9	%	7	%
Defaults during the period of mortgage loans modified since				
acquisitions (3)		\$48,226		\$47,860
As a percentage of relevant balance of loans				
before modification	9	%	10	%
Repayments and sales of mortgage loans modified in the				
prior year period		\$49,685		\$15,339
As a percentage of relevant balance of loans				
before modification	63	%	16	%

(1) Before modification.

(2) 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.

(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 ended March 31,			
2018		2017	
Before	After	Before	After

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

Category	modification	modification	modification	modification
	(dollars in thousands)			
Loan balance	\$298	\$ 321	\$301	\$ 333
Remaining term (months)	406	456	353	468
Interest rate	3.60%	2.68	% 4.29%	3.04 %
Forbeared principal	\$38	\$ 49	\$24	\$ 31

CRT Agreements

The activity in and balances relating to our CRT Agreements is summarized below:

	Quarter ended March 31,	
	2018	2017
	(in thousands)	
UPB of mortgage loans sold under CRT Agreements	\$3,210,478	\$1,834,295
Deposits of cash securing CRT Agreements	\$41,789	\$15,793
Increase in unfunded commitments to fund Deposits		
securing credit risk transfer agreements resulting		
from sale of mortgage loans	\$70,486	\$48,150
Interest earned on Deposits securing CRT Agreements	\$2,031	\$408
Gains recognized on CRT Agreements included in:		
Net gain (loss) on investment:		
Realized	\$19,329	\$10,288
Resulting from valuation changes	5,355	10,019
	24,684	20,307
Change in fair value of interest-only security payable at fair value	(2,133)	(1,720)
	\$22,551	\$18,587
Payments made to settle losses	\$828	\$149
	March 31,	December 31,
	2018	2017
	(in thousands)	
UPB of mortgage loans subject to Recourse Obligations	\$29,726,369	\$26,845,392
Carrying value of investments in CRT Agreements (1)	\$726,325	\$687,507
Commitments to fund Deposits securing CRT agreements	\$552,957	\$482,471

(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 2018 as compared to the same period in 2017 and the effect of growth in our portfolio of mortgage loans subject to CRT Agreements on the cash income we receive, partially offset by observed credit spread increases during 2018 as compared to credit spread decreases during the same period in 2017. Credit spread changes influence the discount rate applied to our cash flow estimates. Therefore, credit spread increases increase the discount rate we apply to cash flows and have a downward influence on the CRT derivative's fair value.

ESS Purchased from PFSI

We recognized fair value gains relating to our investment in ESS totaling \$7.8 million for the quarter ended March 31, 2018, as compared to fair value losses of \$1.4 million for the quarter ended March 31, 2017. The gain was driven by the positive influence on expected future cash flows of the generally rising interest rates during 2018 compared to the same period in 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 the mortgage loan; holding and remitting 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 March 31,	
	2018	2017
	(in thousands)	
From non-affiliates:		
Servicing fees (1)	\$48,732	\$37,281
Ancillary and other fees	1,703	1,224
Effect of MSR:		
Carried at fair value—change in fair value	25,973	(1,993)
Carried at lower of amortized cost or fair value:		
Amortization	—	(17,858)
Reduction of impairment valuation allowance	—	1,504
Losses on hedging derivatives, net	(20,848)	(8,698)
	5,125	(27,045)
	55,560	11,460
From PFSI—MSR recapture income	595	292
Net mortgage loan servicing fees	\$56,155	\$11,752
Average servicing portfolio	\$73,694,438	\$57,927,056

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

Net mortgage loan servicing fees increased during the quarter ended March 31, 2018, as compared to the comparable period in 2017 by \$44.4 million. The increase in net mortgage loan servicing fees during the quarter ended March 31, 2018, as compared to the quarter ended March 31, 2017, was attributable to both recognized increases in the fair value of our investment in MSRs and increased servicing fees arising from growth in our portfolio of mortgage loans serviced for others. The increase in fair value of our MSR portfolio – excluding the change recognized pursuant to the change in accounting principle by which we now carry all MSRs at fair value – was primarily due to the positive effect of the generally increasing interest rate environment on future estimated cash flows relating to the MSRs.

We have entered into an MSR recapture agreement that requires PLS to transfer to us cash in an amount equal to 30% of the fair market value of the MSRs related to all the loans so originated. We recognized MSR recapture income during the quarter ended March 31, 2018 of \$595,000, as compared to \$292,000 for the quarter ended March 31, 2017.

Before January 1, 2018, we 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 was based on the class of MSRs. Originated MSRs backed by mortgage loans with initial interest rates of less than or equal to 4.5% were accounted for using the amortization method. Originated MSRs backed by mortgage loans with initial interest rates of more than 4.5% were accounted for at fair value with changes in fair value recorded in current period income. Effective January 1, 2018, we carry all currently identified classes of MSRs at fair value.

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

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

	March 31, 2018	December 31, 2017		
	(dollars in thousands)			
MSR's carried at fair value	\$957,013	\$91,459		
UPB of mortgage loans underlying MSR's carried at fair value	\$75,261,574	\$8,273,696		
MSR carried at lower of amortized cost or fair value:				
Amortized cost		\$772,870		
Valuation allowance		(19,548)		
Carrying value		\$753,322		
Fair value		\$772,940		
UPB of mortgage loans underlying MSR's carried at lower of amortized cost or fair value:		\$63,853,606		
Total MSR:				
Carrying value		\$844,781		
Fair value		\$864,399		
UPB of mortgage loans underlying MSR's	\$75,261,574	\$72,127,302		
Average servicing fee rate (in basis points)				
MSR's carried at fair value	25	25		
MSR's carried at lower of amortized cost or fair value		25		
Average note interest rate:				
MSR's carried at fair value	4.0	%	4.7	%
MSR's carried at lower of amortized cost or fair value			3.9	%

Net Interest Income

Net interest income is summarized below:

	Quarter ended March 31, 2018			Average balance	Annualized interest yield/cost %	
	Interest income/expense		Total			
	Discount/ Coupon	fees (1)				
(dollars in thousands)						
Assets:						
Short-term investments	\$73	\$—	\$73	\$24,653	1.18	%
Mortgage-backed securities	9,231	(440)	8,791	1,069,971	3.29	%
Mortgage loans acquired for sale at fair value	11,332	—	11,332	1,046,289	4.33	%
Mortgage loans:						
Distressed	5,763	2,136	7,899	738,333	4.28	%
Held by variable interest entity	3,009	(406)	2,603	314,717	3.31	%
	8,772	1,730	10,502	1,053,050	3.99	%
ESS from PFSI	3,934	—	3,934	239,923	6.56	%
Deposits securing CRT Agreements	2,031	—	2,031	601,980	1.35	%
Placement fees relating to custodial funds	4,215	—	4,215			
Other	102	—	102			
	39,690	1,290	40,980	4,035,866	4.06	%
Liabilities:						
Assets sold under agreements to repurchase (2)	19,703	4,804	24,507	3,077,914	3.18	%
Mortgage loan participation purchase and sale						
agreements	283	31	314	45,561	2.76	%
Asset-backed financings of a VIE at fair value	2,635	(339)	2,296	297,682	3.09	%
Exchangeable Notes	3,359	285	3,644	250,000	5.83	%
Assets sold to PFSI under agreement to repurchase	1,976	—	1,976	142,151	5.56	%
	27,956	4,781	32,737	3,813,308	3.43	%
Interest shortfall on repayments of mortgage loans						
serviced for Agency securitizations	1,594	—	1,594	—		
Interest on mortgage loan impound deposits	485	—	485	—		
	30,035	4,781	34,816	3,813,308	3.65	%
Net interest income	\$9,655	\$ (3,491)	\$6,164			
Net interest margin					0.61	%
Net interest spread					0.41	%

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

(2) In 2017, the Company entered into a master repurchase agreement that provides the Company with incentives to finance mortgage loans approved for satisfying certain consumer relief characteristics as provided in the agreement. During the quarter ended March 31, 2018, the Company included \$2.4 million of such incentives as reductions to Interest expense. The master repurchase agreement had an initial term of six months, renewable for three additional six-month terms at the option of the lender. On April 18, 2018, the lender excised its first renewal

option. There can be no assurance whether the lender will continue to renew this agreement upon its maturity.

69

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

	Quarter ended March 31, 2017			Average balance	Annualized interest yield/cost %	
	Interest income/expense		Total			
	Discount/ Coupon	fees (1)				
(dollars in thousands)						
Assets:						
Short-term investments	\$281	\$—	\$281	\$78,357	1.43	%
Mortgage-backed securities	8,090	(1,318)	6,772	957,596	2.83	%
Mortgage loans acquired for sale at fair value	11,502	—	11,502	1,099,406	4.18	%
Mortgage loans:						
Distressed	9,748	9,903	19,651	1,327,421	5.92	%
Held by variable interest entity	3,430	299	3,729	361,110	4.13	%
	13,178	10,202	23,380	1,688,531	5.54	%
ESS from PFSI	4,647	—	4,647	285,386	6.51	%
Deposits securing CRT Agreements	408	—	408	454,466	0.36	%
Placement fees relating to custodial funds	1,071	—	1,071			
Other	39	—	39			
	39,216	8,884	48,100	4,563,742	4.22	%
Liabilities:						
Assets sold under agreements to repurchase	19,883	2,299	22,182	3,267,864	2.72	%
Mortgage loan participation purchase and sale						
agreements	335	31	366	64,498	2.27	%
Notes payable	3,341	964	4,305	260,384	6.61	%
Asset-backed financings of a VIE at fair value	3,022	387	3,409	347,854	3.92	%
Exchangeable Notes	3,359	268	3,627	250,000	5.80	%
Assets sold to PFSI under agreement to repurchase	1,851	(46)	1,805	150,000	4.81	%
	31,791	3,903	35,694	4,340,600	3.29	%
Interest shortfall on repayments of mortgage loans						
serviced for Agency securitizations	1,062	—	1,062			
Interest on mortgage loan impound deposits	423	—	423			
	33,276	3,903	37,179	4,340,600	3.43	%
Net interest income	\$5,940	\$4,981	\$10,921			
Net interest margin					0.96	%
Net interest spread					0.79	%

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

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

The effects of changes in the yields and costs and composition of our investments on our interest income are summarized below:

	Quarter ended March 31, 2018		
	vs.		
	Quarter ended March 31, 2017		
	Increase (decrease)		
	due to changes in		
	Rate	Volume	Total
	(in thousands)		
Assets:			
Short-term investments	\$(42)	\$(166)	\$(208)
Mortgage-backed securities	1,170	849	2,019
Mortgage loans acquired for sale at fair value	397	(567)	(170)
Mortgage loans at fair value:			
Distressed	(4,520)	(7,232)	(11,752)
Held by variable interest entity	(684)	(442)	(1,126)
Total mortgage loans	(5,204)	(7,674)	(12,878)
ESS from PFSI	32	(745)	(713)
Interest earned on Deposits securing CRT Agreements	1,452	171	1,623
Placement fees relating to custodial funds	—	3,144	3,144
Other	—	63	63
	(2,195)	(4,925)	(7,120)
Liabilities:			
Assets sold under agreements to repurchase	3,670	(1,345)	2,325
Mortgage loan participation purchase and sale agreement	69	(121)	(52)
Asset backed secured financing of VIEs at fair value	(664)	(449)	(1,113)
Exchangeable Notes	17	—	17
Notes payable	—	(4,305)	(4,305)
Assets sold to PFSI under agreement to repurchase	269	(98)	171
	3,361	(6,318)	(2,957)
Interest shortfall on repayments of mortgage loans			
served for Agency securitizations	—	532	532
Interest on mortgage loan impound deposits	—	62	62
	3,361	(5,724)	(2,363)
Net interest income	\$(5,556)	\$799	\$(4,757)

During the quarter ended March 31, 2018, we earned net interest income of \$6.2 million, as compared to \$10.9 million for the quarter ended March 31, 2017. The decrease in net interest income between quarters was due primarily to a decrease in average investment in distressed mortgage loans, which are our highest yielding assets, and a reduction in the yield of those assets due to declining modification activity.

During the quarter ended March 31, 2018, we recognized interest income on distressed mortgage loans and mortgage loans held by VIEs totaling \$10.5 million, including \$2.2 million of interest capitalized pursuant to loan modifications, which compares to \$23.4 million, including \$9.9 million of interest capitalized pursuant to loan modifications, in the quarter ended March 31, 2017. The decrease in interest income was due to continuing sales and liquidations of our distressed mortgage loans and a reduction in yield on our portfolio caused by reduced capitalization of delinquent interest pursuant to mortgage loan modifications. This reduction was partially offset by the positive effect of rising interest rates and growth in the size of our MSR portfolio on the placement fees we receive relating to the custodial funds we manage relating to our MSR portfolio and to the increase in our CRT deposits and interest we earn relating to our CRT deposits.

At March 31, 2018, approximately 44% of the fair value of our distressed mortgage loan portfolio was nonperforming, as compared to 46% at December 31, 2017. We do not accrue interest on nonperforming mortgage loans and generally do not recognize revenues during the period we hold REO. We calculate the yield on our mortgage loan portfolio based on the portfolio's average fair value, which most closely reflects our investment in the mortgage loans. Accordingly, the yield we realize is substantially higher than would be recorded based on the mortgage loans' UPBs as the fair values of our distressed mortgage loans are generally at substantial discounts to their UPB.

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

Nonperforming mortgage loans and REO generally take longer than performing mortgage loans to generate cash flow due to the time required to work with borrowers to resolve payment issues through our modification programs, and to acquire and liquidate the property securing the mortgage loans. The value and returns we realize from these assets are determined by our ability to assist borrowers in curing defaults, or when curing of borrower defaults is not a viable solution, by our ability to effectively manage the liquidation process. At March 31, 2018, we held \$205.1 million in fair value of nonperforming mortgage loans and \$141.5 million in carrying value of REO, as compared to \$353.6 million in fair value of nonperforming mortgage loans and \$162.9 million in carrying value of REO at December 31, 2017.

During the quarter ended March 31, 2018, we incurred interest expense totaling \$34.8 million, as compared to \$37.2 million during the quarter ended March 31, 2017. Our interest cost on interest bearing liabilities was 3.43% for the quarter ended March 31, 2018 and 3.29% for the quarter ended March 31, 2017. The decrease in interest expense reflects the decrease in size of our average balance sheet during 2018 as compared to the same period in 2017, compounded by \$2.4 million in incentives that we received during 2018 relating to our financing of mortgage loans that satisfy certain consumer relief characteristics.

Results of Real Estate Acquired in Settlement of Loans

Results of REO includes the gains or losses we record upon sale of the properties as well as valuation adjustments we record during the period we hold those properties. During the quarter ended March 31, 2018, we recorded net losses of \$3.2 million, as compared to \$4.2 million for the same period in 2017, in Results of real estate acquired in settlement of loans.

Results of REO are summarized below:

	Quarter ended March 31,	
	2018	2017
	(dollars in thousands)	
Proceeds from sales of REO	\$32,437	\$63,224
Results of real estate acquired in settlement of loans:		
Valuation adjustments, net	(5,359)	(8,175)
Gain on sale, net	2,133	3,929
	\$(3,226)	\$(4,246)
Number of properties sold	224	294
Average carrying value of REO	\$153,653	\$252,996
At quarter end:		
Carrying value	\$141,506	\$224,831
Number of properties	487	911

Losses from REOs during the quarter ended March 31, 2018, decreased from the same period in 2017. The decrease in losses from REOs during the quarter ended March 31, 2018, as compared to the same period in 2017, was due primarily to the smaller overall REO portfolio during 2018 as compared to the same period in 2017.

Expenses

Our expenses are summarized below:

	Quarter ended March 31, 2018 2017 (in thousands)	
Earned by PennyMac Financial Services, Inc.:		
Mortgage loan fulfillment fees	\$ 11,944	\$ 16,570
Mortgage loan servicing fees	11,019	10,486
Management fees	5,696	5,008
Mortgage loan collection and liquidation	2,229	354
Real estate held for investment	1,438	1,088
Professional services	1,319	1,453
Compensation	1,268	1,892
Mortgage loan origination	272	1,512
Other	2,650	3,503
	\$37,835	\$41,866

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

Expenses decreased \$4.0 million, or 10%, during the quarter ended March 31, 2018, as compared to the same period in 2017, primarily due to decreased fulfillment fees during the quarter ended March 31, 2018, as compared to the quarter ended March 31, 2017, reflecting a lower average fulfillment fee rate charged to us by PFSI.

Mortgage Loan Fulfillment Fees

Mortgage loan fulfillment fees represent fees we pay to PLS for the services it performs on our behalf in connection with our acquisition, packaging and sale of mortgage loans. The fee is calculated as a percentage of the UPB of the mortgage loans purchased. Mortgage loan fulfillment fees and related fulfillment volume are summarized below:

	Quarter ended March 31,	
	2018	2017
	(dollars in thousands)	
Fulfillment fee expense	\$11,944	\$16,570
UPB of mortgage loans fulfilled by PLS	\$4,225,631	\$4,631,906
Average fulfillment fee rate (in basis points)	28	36

The decrease in loan fulfillment fees of \$4.6 million during the quarter ended March 31, 2018, as compared to the quarter ended March 31, 2017, is primarily due to a decrease in the average fulfillment fee rate charged by PFSI due to reductions in the fulfillment fee following an amendment of the mortgage banking services agreement with PFSI in September 2016.

Mortgage Loan Servicing Fees

Mortgage loan servicing fees payable to PLS are summarized below:

	Quarter ended March 31,	
	2018	2017
	(in thousands)	
Mortgage loan servicing fees		
Mortgage loans acquired for sale at fair value:		
Base	\$56	\$65
Activity-based	122	143
	178	208
Mortgage loans at fair value:		
Distressed mortgage loans:		
Base	1,005	1,958
Activity-based	2,080	2,390
	3,085	4,348
Mortgage loans held in VIE:		
Base	34	31
Activity-based	—	—
	34	31
MSRs:		
Base	7,615	5,806

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

Activity-based	107	93
	7,722	5,899
	\$11,019	\$10,486
Average investment in:		
Mortgage loans acquired for sale at fair value	\$1,046,289	\$1,099,406
Mortgage loans at fair value:		
Distressed mortgage loans	\$738,333	\$1,327,421
Mortgage loans held in a VIE	\$314,717	\$361,110
Average mortgage loan servicing portfolio	\$73,694,438	\$57,927,056

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

Mortgage loan servicing fees increased by \$533,000 during the quarter ended March 31, 2018, as compared to the same period in 2017. The increase in mortgage loan servicing fees was primarily due to the increase in servicing fees resulting from the ongoing growth of our MSR portfolio. This increase was partially offset by the decrease in mortgage loan servicing fees due to reductions in the distressed mortgage loan portfolio resulting from continuing loan sales and liquidations through the first quarter of 2018. Servicing fee rates relating to distressed mortgage loans are significantly higher than those relating to MSRs due to the higher cost of servicing such loans. Therefore, reductions in the balance of distressed mortgage loans have a much more significant effect on mortgage loan servicing fees than the additions of new MSRs.

Management Fees

The components of our management fee payable to PCM are summarized below:

	Quarter ended March	
	31, 2018	2017
	(in thousands)	
Base	\$5,696	\$5,008
Performance incentive	—	—
	\$5,696	\$5,008
Average shareholders' equity amounts used to calculate management fee expense	\$1,539,900	\$1,353,898

Management fees increased by \$0.7 million during the quarter ended March 31, 2018, as compared to the same period in 2017, primarily due to increases in our shareholders' equity arising from our issuances of preferred shares of beneficial interest during 2017. We did not incur a performance incentive fee, which is based on our profitability in relation to our common shareholders' equity, during the quarter ended March 31, 2018, or the same period in 2017.

Compensation

Compensation expense decreased \$624,000 during the quarter ended March 31, 2018, as compared to the same period in 2017. The reduction reflects reduced performance expectations relating to the performance-based restricted share unit awards outstanding during the quarter ended March 31, 2018.

Real estate held for investment

Expenses of real estate held for investment increased by \$350,000 in the quarter ended March 31, 2018, as compared to the quarter ended March 31, 2017, due to growth in our portfolio of investment properties.

Mortgage loan collection and liquidation

Mortgage loan collection and liquidation expenses increased \$1.9 million during the quarter ended March 31, 2018, as compared to the same period in 2017, due to increased collection costs relating to our remaining portfolio of distressed mortgage loans.

Other Expenses

Other expenses are summarized below:

	Quarter ended	
	March 31,	
	2018	2017
	(in thousands)	
Common overhead allocation from PFSI	\$ 1,001	\$ 1,434
Insurance	305	338
Technology	378	318
Other	966	1,413
	\$2,650	\$3,503

Other expenses decreased during the quarter ended March 31, 2018, as compared to the same period in 2017, by \$853,000 primarily due to the reduction in common overhead allocation from PFSI.

Income Taxes

We have elected to treat PMC as a taxable REIT subsidiary (“TRS”). Income from a TRS is only included as a component of REIT taxable income to the extent that the TRS makes dividend distributions of income to us. A TRS is subject to corporate federal and state income tax. Accordingly, a provision for income taxes for PMC is included in the accompanying consolidated statements of operations.

Our effective tax rate was 25.5% and (27.1)% for the quarters ended March 31, 2018 and 2017, respectively. Our TRS recognized a tax expense of \$9.4 million on income of \$34.6 million while our reported consolidated pretax income was \$37.8 million for the quarter ended March 31, 2018. For the same periods in 2017, the TRS recognized tax benefit of \$6.6 million on a loss of \$14.8 million while our reported consolidated pretax income was \$22.6 million. The relative values between the tax benefit or expense at the TRS and our consolidated pretax income drive the fluctuation in the effective tax rate. The primary difference between our 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 the shareholders for income tax purposes. Some portion of the dividends may be characterized as capital gain distributions or a return of capital. For tax years beginning after December 31, 2017, the 2017 Tax Cuts and Jobs Act (the “Tax Act”) (subject to certain limitations) provides a 20% deduction from taxable income for ordinary REIT dividends.

Balance Sheet Analysis

Following is a summary of key balance sheet items as of the dates presented:

	March 31, 2018	December 31, 2017
	(in thousands)	
Assets		
Cash	\$102,167	\$77,647
Investments:		
Short-term investments	71,044	18,398
Mortgage-backed securities	1,436,456	989,461
Mortgage loans acquired for sale at fair value	1,115,534	1,269,515
Mortgage loans at fair value	779,489	1,089,473
ESS	236,002	236,534
Derivative assets	122,518	113,881
Real estate acquired in settlement of loans	141,506	162,865
Real estate held for investment	45,790	44,224
MSRs	957,013	844,781
Deposits securing CRT Agreements	622,330	588,867
	5,527,682	5,357,999
Other	160,637	169,287
Total assets	\$5,790,486	\$5,604,933
Liabilities		
Borrowings:		
Assets sold under agreements to repurchase and	\$3,408,283	\$3,225,374

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

mortgage loan participation purchase and sale agreements		
Asset-backed financing of a VIE at fair value	296,982	307,419
Exchangeable Notes	247,471	247,186
Assets sold to PennyMac Financial Services, Inc. under		
agreement to repurchase	142,938	144,128
Interest-only security payable at fair value	7,796	7,070
	4,103,470	3,931,177
Other	144,758	129,171
Total liabilities	4,248,228	4,060,348
Shareholders' equity	1,542,258	1,544,585
Total liabilities and shareholders' equity	\$5,790,486	\$5,604,933

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

Total assets increased by approximately \$185.6 million, or 3%, during the period from December 31, 2017 through March 31, 2018, primarily due to a \$447.0 million increase in MBS, a \$112.2 million increase in MSR and a \$33.5 million increase in deposits securing CRT Agreements. These increases were partially offset by a \$310.0 million decrease in mortgage loans at fair value, a \$154.0 million decrease in mortgage loans acquired for sale at fair value, a \$77.2 million decrease in cash and short-term investments and a \$21.4 million reduction in REO.

Asset Acquisitions

Our asset acquisitions are summarized below.

Correspondent Production

Following is a summary of our correspondent production acquisitions at fair value:

	Quarter ended March 31,	
	2018	2017
	(in thousands)	
Correspondent mortgage loan purchases:		
Government-insured or guaranteed	\$9,189,632	\$9,716,000
Agency-eligible	5,106,242	4,758,654
Commercial mortgage loans	7,263	21,105
	\$14,303,137	\$14,495,759

During the quarter ended March 31, 2018, we purchased for sale \$14.3 billion in fair value of correspondent production loans as compared to \$14.5 billion in fair value of correspondent production loans during the quarter ended March 31, 2017. Our ability to maintain the level of correspondent production in an increasing interest rate environment reflects the continuing expansion of our correspondent seller network along with the efforts aimed at maximizing the share of our correspondent sellers' production that is sold to us.

Our ability to continue the expansion of our correspondent production business is subject to, among other factors, our ability to source additional mortgage loan volume, our ability to obtain additional inventory financing and our ability to fund the portion of the mortgage loans not financed, either through cash flows from business activities or the raising of additional equity capital. There can be no assurance that we will be successful in increasing our borrowing capacity or in obtaining the additional equity capital necessary or that we will be able to identify additional sources of mortgage loans.

Other Investment Activities

Following is a summary of our acquisitions of mortgage-related investments held in our interest rate sensitive strategies and credit-sensitive strategies segments:

	Quarter ended	
	March 31,	2017
	2018	2017
	(in thousands)	
Interest rate sensitive assets:		
MBS	\$500,573	\$251,872
ESS received pursuant to a recapture agreement	904	1,573

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

MSRs received in mortgage loan sales and purchases of MSRs	66,546	58,688
Credit sensitive assets:		
Deposits relating to CRT Agreements	41,789	15,793
Additional commitments to fund deposits securing CRT Agreements	70,486	48,150
	\$680,298	\$376,076

Our acquisitions during the quarters ended March 31, 2018, and 2017, were financed through the use of a combination of proceeds from liquidations of existing investments, proceeds from equity issuances and borrowings. We continue to identify additional means of increasing our investment portfolio through cash flow from our business activities, existing investments, borrowings, and transactions that minimize current cash outlays. However, we expect that, over time, our ability to continue our investment portfolio growth will depend on our ability to raise additional equity capital.

Investment Portfolio Composition

Mortgage-Backed Securities

Following is a summary of our MBS holdings:

	March 31, 2018				December 31, 2017					
	Fair value (dollars in thousands)	Principal	Average Life (in years)	Coupon (%)	Market yield (%)	Fair value	Principal	Average Life (in years)	Coupon (%)	Market yield (%)
Agency:										
Fannie Mae	\$1,049,722	\$1,044,176	8.5	3.5 %	3.4 %	\$796,853	\$774,473	7.0	3.5 %	3.0 %
Freddie Mac	386,734	382,068	8.4	3.7 %	3.5 %	192,608	187,127	7.7	3.5 %	3.0 %
	\$1,436,456	\$1,426,244				\$989,461	\$961,600			

Mortgage Loans at Fair Value – Distressed

The relationship of the fair value of our distressed mortgage loans at fair value to the fair value of the underlying real estate collateral is summarized below:

	March 31, 2018		December 31, 2017	
	Loan	Collateral	Loan	Collateral
Fair values:				
Performing loans	\$263,263	\$414,578	\$414,785	\$617,050
Nonperforming loans	205,124	358,099	353,648	597,227
	\$468,387	\$772,677	\$768,433	\$1,214,277

The collateral values presented above do not represent our assessment of the amount of future cash flows to be realized from the mortgage loans and/or underlying collateral. Future cash flows will be influenced by, among other considerations, our asset disposition strategies with respect to individual loans and the timing of such dispositions, the costs and expenses we incur in the disposition process, changes in borrower performance and the underlying collateral values. Ultimate realization in a disposition of these assets will be net of any servicing advances carried on the balance sheet in relation to these investments.

The collateral values summarized above are estimated and may change over time due to various factors including our level of access to the properties securing the mortgage loans, changes in the real estate market or the condition of individual properties. The collateral values presented do not include any costs that would typically be incurred in obtaining the property in settlement of the mortgage loan, readying the property for sale, holding the property while it is being marketed or in the sale of a property.

We believe that our current fair value estimates are representative of fair value at the reporting date. However, the market for distressed mortgage assets is illiquid with a limited number of participants. Furthermore, our business strategy is to enhance fair value during the period in which the loans are held. Therefore, any resulting appreciation or

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

depreciation in the fair value of the loans is recorded during such holding period and ultimately realized at the end of the holding period.

Following is a summary of the distribution of our portfolio of distressed mortgage loans at fair value:

Loan type	March 31, 2018						December 31, 2017					
	Performing loans			Nonperforming loans			Performing loans			Nonperforming loans		
	Fair value	% total	Average note rate	Fair value	% total	Average note rate	Fair value	% total	Average note rate	Fair value	% total	Average note rate
(dollars in thousands)												
Fixed	\$102,605	39 %	3.78 %	\$78,237	38 %	5.01 %	\$186,929	45 %	3.61 %	\$130,860	37 %	4.96 %
Interest rate												
step-up	137,451	52 %	2.27 %	32,235	16 %	2.07 %	189,724	46 %	2.32 %	51,112	14 %	2.19 %
ARM/Hybrid	23,207	9 %	4.21 %	94,652	46 %	5.27 %	38,132	9 %	4.05 %	171,676	49 %	5.26 %
	\$263,263	100 %	2.99 %	\$205,124	100 %	4.54 %	\$414,785	100 %	3.04 %	\$353,648	100 %	4.62 %

77

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

Lien position	March 31, 2018						December 31, 2017					
	Performing loans			Nonperforming loans			Performing loans			Nonperforming loans		
	Fair	%	Average note	Fair	%	Average note	Fair	%	Average note	Fair	%	Average note
	value	total	rate	value	total	rate	value	total	rate	value	total	rate
(dollars in thousands)												
1st lien	\$262,541	100%	2.99%	\$204,971	100%	4.54%	\$413,928	100%	3.04%	\$353,431	100%	4.62%
2nd lien	722	0%	3.85%	153	0%	7.36%	857	0%	3.90%	217	0%	7.49%
	\$263,263	100%	2.99%	\$205,124	100%	4.54%	\$414,785	100%	3.04%	\$353,648	100%	4.62%

Occupancy	March 31, 2018						December 31, 2017					
	Performing loans			Nonperforming loans			Performing loans			Nonperforming loans		
	Fair	%	Average note	Fair	%	Average note	Fair	%	Average note	Fair	%	Average note
	value	total	rate	value	total	rate	value	total	rate	value	total	rate
(dollars in thousands)												
Owner occupied	\$187,855	72%	3.09%	\$112,296	55%	4.46%	\$298,468	72%	3.14%	\$190,815	54%	4.50%
Investment property	74,663	28%	2.76%	92,828	45%	4.65%	115,163	28%	2.80%	162,697	46%	4.76%
Other	745	0%	3.96%	—	0%	—	1,154	0%	3.33%	136	0%	3.00%
	\$263,263	100%	2.99%	\$205,124	100%	4.54%	\$414,785	100%	3.04%	\$353,648	100%	4.62%

Loan age	March 31, 2018						December 31, 2017					
	Performing loans			Nonperforming loans			Performing loans			Nonperforming loans		
	Fair	%	Average note	Fair	%	Average note	Fair	%	Average note	Fair	%	Average note
	value	total	rate	value	total	rate	value	total	rate	value	total	rate
(dollars in thousands)												
12 - 35 months	\$41	0%	2.48%	\$—	0%	—	\$138	0%	2.71%	\$—	0%	—
36 - 59 months	424	0%	4.61%	91	0%	1.92%	528	0%	4.70%	118	0%	2.02%
60 months or more	262,798	100%	2.99%	205,033	100%	4.54%	414,119	100%	3.04%	353,530	100%	4.62%
	\$263,263	100%	2.99%	\$205,124	100%	4.54%	\$414,785	100%	3.04%	\$353,648	100%	4.62%

	March 31, 2018			December 31, 2017		
	Performing loans			Nonperforming loans		
	Performing loans			Nonperforming loans		

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

Origination FICO score	Fair value	% total	Average note rate	Fair value	% total	Average note rate	Fair value	% total	Average note rate	Fair value	% total	Average note rate
(dollars in thousands)												
Less than 600	\$72,585	27 %	3.26%	\$39,105	19 %	4.10%	\$108,762	26 %	3.29%	\$70,228	20 %	4.20%
600-649	62,257	24 %	2.93%	40,388	20 %	4.18%	99,428	24 %	3.00%	63,524	18 %	4.13%
650-699	67,778	26 %	2.90%	66,956	32 %	4.66%	106,196	26 %	2.93%	114,280	32 %	4.69%
700-749	46,977	18 %	2.81%	42,887	21 %	5.14%	77,324	19 %	2.85%	80,411	23 %	5.24%
750 or greater	13,666	5 %	2.98%	15,788	8 %	4.59%	23,075	5 %	3.14%	25,205	7 %	4.93%
	\$263,263	100%	2.99%	\$205,124	100%	4.54%	\$414,785	100%	3.04%	\$353,648	100%	4.62%

78

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

Current loan-to -value (1)	March 31, 2018						December 31, 2017					
	Performing loans			Nonperforming loans			Performing loans			Nonperforming loans		
	Fair	%	Average	Fair	%	Average	Fair	%	Average	Fair	%	Average
value	total	note	value	total	note	value	total	note	value	total	note	rate
(dollars in thousands)												
Less than 80%	\$92,781	35 %	3.81%	\$78,694	38 %	5.03%	\$139,408	33 %	3.80%	\$136,994	39 %	5.08%
80% - 99.99%	66,747	26 %	2.97%	52,772	26 %	4.76%	107,121	26 %	3.12%	94,538	27 %	4.90%
100% - 119.99%	47,919	18 %	2.69%	37,202	18 %	4.66%	74,182	18 %	2.86%	58,330	16 %	4.45%
120% or greater	55,816	21 %	2.36%	36,456	18 %	3.78%	94,074	23 %	2.35%	63,786	18 %	4.01%
	\$263,263	100%	2.99%	\$205,124	100%	4.54%	\$414,785	100%	3.04%	\$353,648	100%	4.62%

(1) Current loan-to-value is calculated based on the unpaid principal balance of the mortgage loan and our estimate of the value of the mortgaged property.

Geographic distribution	March 31, 2018						December 31, 2017					
	Performing loans			Nonperforming loans			Performing loans			Nonperforming loans		
	Fair	%	Average	Fair	%	Average	Fair	%	Average	Fair	%	Average
value	total	note	value	total	note	value	total	note	value	total	note	rate
(dollars in thousands)												
New York	\$40,460	15 %	2.69%	\$65,093	32 %	5.21%	\$69,401	17 %	2.61%	\$104,667	30 %	5.25%
California	55,026	21 %	2.99%	28,684	14 %	4.04%	92,435	22 %	3.06%	44,856	13 %	3.91%
New Jersey	24,242	9 %	2.44%	17,271	8 %	4.00%	38,689	9 %	2.55%	33,857	10 %	4.36%
Florida	15,360	6 %	2.74%	21,195	10 %	4.53%	20,273	5 %	2.71%	40,518	11 %	4.76%
Massachusetts	13,151	5 %	2.48%	11,523	6 %	4.60%	19,355	5 %	2.75%	23,039	6 %	4.20%
Maryland	12,816	5 %	2.70%	7,171	3 %	4.20%	21,424	5 %	2.99%	10,159	3 %	4.06%
Other	102,208	39 %	3.61%	54,187	27 %	4.05%	153,208	37 %	3.61%	96,552	27 %	4.19%
	\$263,263	100%	2.99%	\$205,124	100%	4.54%	\$414,785	100%	3.04%	\$353,648	100%	4.62%

Payment status	March 31, 2018						December 31, 2017					
	Performing loans			Nonperforming loans			Performing loans			Nonperforming loans		
	Fair	%	Average	Fair	%	Average	Fair	%	Average	Fair	%	Average
value	total	note	value	total	note	value	total	note	value	total	note	rate
(dollars in thousands)												
Current	\$184,799	70 %	2.97%	\$—	0 %	—	\$267,507	65 %	2.99%	\$—	0 %	—

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

30 days												
delinquent	58,891	22 %	3.06%	—	0 %	—	105,101	25 %	3.22%	—	0 %	—
60 days												
delinquent	19,573	8 %	3.03%	—	0 %	—	42,177	10 %	2.91%	—	0 %	—
90 days or more												
delinquent	—	0 %	—	97,971	48 %	3.93%	—	0 %	—	166,749	47 %	3.97%
In foreclosure	—	0 %	—	107,153	52 %	5.15%	—	0 %	—	186,899	53 %	5.24%
	\$263,263	100 %	2.99%	\$205,124	100 %	4.54%	\$414,785	100 %	3.04%	\$353,648	100 %	4.62%

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

Following is a comparison of the key inputs we use in the valuation of our mortgage loans at fair value using “Level 3” fair value inputs:

Key inputs	March 31, 2018	December 31, 2017
Discount rate		
Range	3.2% – 15.0%	2.9% – 15.0%
Weighted average	6.7%	6.9%
Twelve-month projected housing price index change		
Range	2.2% – 3.3%	3.6% – 4.6%
Weighted average	3.1%	4.4%
Prepayment speed (1)		
Range	3.1% – 6.6%	3.2% – 11.0%
Weighted average	4.2%	4.2%
Total prepayment speed (2)		
Range	10.6% – 10.8% – 22.8%	23.8%
Weighted average	16.2%	16.5%

(1) Prepayment speed is measured using Life Voluntary Conditional Prepayment Rates (“CPR”).

(2) Total prepayment speed is measured using Life Total CPR.

We monitor and value our investments in pools of distressed mortgage loans by payment status of the loans. Most of the measures we use to value and monitor the loan portfolio, such as projected prepayment and default speeds and discount rates, are applied or output at the pool level. The characteristics of the individual loans, such as loan size, loan-to-value ratio and current delinquency status, can vary widely within a pool.

The weighted average discount rate used in the valuation of mortgage loans at fair value decreased slightly from 6.9% at December 31, 2017 to 6.7% at March 31, 2018 due to shifting characteristics of the portfolio given liquidations and loan sales in the period and increased projections of costs relating to liquidation and loan-related foreclosure litigation on the remaining population of non-performing loans.

The weighted average twelve-month projected housing price index change used in the valuation of our portfolio of mortgage loans at fair value decreased from 4.4% at December 31, 2017 to 3.1% at March 31, 2018, due to lower near-term forecasts for real estate price appreciation in the geographic areas in which our portfolio of mortgage loans is concentrated.

The weighted average total prepayment speed used in the valuation of our portfolio of mortgage loans at fair value decreased slightly from 16.5% at December 31, 2017 to 16.2% at March 31, 2018 due to our projections of longer liquidation periods for certain of our mortgage loans.

Credit Risk Transfer Agreements

Following is a summary of our CRT Agreements:

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

	March 31, 2018	December 31, 2017
	(in thousands)	
Carrying value of CRT Agreements:		
Derivative assets	\$ 103,995	\$ 98,640
Deposits securing CRT agreements	622,330	588,867
Interest-only security payable at fair value	(7,796)	(7,070)
	\$ 718,529	\$ 680,437
UPB of mortgage loans subject to credit guarantee		
obligations	\$ 29,726,369	\$ 26,845,392
Delinquency status (in UPB):		
Current	\$ 29,456,524	\$ 26,540,953
30—89 days delinquent	\$ 130,583	\$ 179,144
90—180 days delinquent	\$ 90,418	\$ 101,114
180 or more days delinquent	\$ 26,343	\$ 5,146
Foreclosure	\$ 8,335	\$ 5,463
Bankruptcy	\$ 14,166	\$ 13,572

80

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

Approximately \$101 million in UPB of mortgage loans delinquent 90 or more days at December 31, 2017, are secured by properties in areas affected by hurricanes that adversely impacted the Gulf Coast states during 2017.

Real Estate Acquired in Settlement of Loans

Following is a summary of our REO by property type:

Property type	March 31, 2018			December 31, 2017		
	Carrying value	Count	%	Carrying value	Count	%
	(dollars in thousands)					
1 - 4 dwelling units	\$115,312	81	%	\$131,576	81	%
Condominium/Townhome/Co-op	13,180	9	%	16,771	10	%
Planned unit development	12,806	9	%	14,311	9	%
5+ dwelling units	208	0	%	207	0	%
	\$141,506	100	%	\$162,865	100	%

Geographic distribution	March 31, 2018			December 31, 2017		
	Carrying value	Count	%	Carrying value	Count	%
	(dollars in thousands)					
New Jersey	\$36,184	25	%	\$42,795	26	%
New York	29,494	21	%	34,107	21	%
California	15,376	11	%	17,777	11	%
Florida	12,512	9	%	15,740	10	%
Massachusetts	8,095	6	%	6,838	4	%
Illinois	7,259	5	%	8,539	5	%
Other	32,586	23	%	37,069	23	%
	\$141,506	100	%	\$162,865	100	%

Following is a summary of the status of our portfolio of acquisitions by quarter acquired for the periods in which we made acquisitions:

	Acquisitions for the quarter ended							
	March 31, 2015		December 31, 2014		June 30, 2014		March 31, 2014	
	At purchase	March 31, 2018	At purchase	March 31, 2018	At purchase	March 31, 2018	At purchase	March 31, 2018
	(dollars in millions)							
UPB	\$310.2	\$90.2	\$330.8	\$81.7	\$37.9	\$10.1	\$439.0	\$119.7
Pool factor (1)	1.00	0.29	1.00	0.25	1.00	0.27	1.00	0.27
Collection status:								
Delinquency								
Current	1.8 %	26.7 %	1.6 %	24.9 %	0.7 %	36.9 %	6.2 %	13.1 %

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

30 days	0.3 %	7.2 %	1.6 %	10.5 %	0.6 %	7.3 %	0.7 %	4.9 %
60 days	0.1 %	2.6 %	7.1 %	5.5 %	1.4 %	9.9 %	0.7 %	1.6 %
over 90 days	66.7 %	17.8 %	52.7 %	13.4 %	59.0%	21.8 %	37.5 %	22.4 %
In foreclosure	31.1 %	19.0 %	36.9 %	17.7 %	38.2%	9.2 %	53.8 %	22.4 %
REO	—	26.6 %	—	28.0 %	—	14.8 %	1.1 %	35.5 %

(1)Ratio of UPB remaining to UPB at acquisition.

81

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

	Acquisitions for the quarter ended							
	December 31, 2013		September 30, 2013		June 30, 2013		March 31, 2013	
	At purchase	March 31, 2018	At purchase	March 31, 2018	At purchase	March 31, 2018	At purchase	March 31, 2018
	(dollars in millions)							
UPB	\$507.3	\$126.3	\$929.5	\$159.3	\$397.3	\$70.2	\$366.2	\$41.9
Pool factor (1)	1.00	0.25	1.00	0.17	1.00	0.18	1.00	0.11
Collection status:								
Delinquency								
Current	1.4 %	21.2 %	0.8 %	21.8 %	4.8 %	35.3 %	1.6 %	37.8 %
30 days	0.2 %	5.1 %	0.3 %	5.8 %	7.4 %	10.4 %	1.5 %	13.6 %
60 days	—	2.1 %	0.7 %	2.8 %	7.6 %	4.7 %	3.5 %	6.4 %
over 90 days	38.3 %	17.7 %	58.6 %	18.5 %	45.3 %	13.7 %	82.2 %	18.1 %
In foreclosure	60.0 %	24.0 %	39.6 %	18.8 %	34.9 %	11.4 %	11.2 %	5.6 %
REO	—	29.8 %	—	32.3 %	—	24.5 %	—	18.6 %

(1)Ratio of UPB remaining to UPB at acquisition.

	Acquisitions for the quarter ended							
	December 31, 2012		September 30, 2012		June 30, 2012		December 31, 2011	
	At purchase	March 31, 2018	At purchase	March 31, 2018	At purchase	March 31, 2018	At purchase	March 31, 2018
	(dollars in millions)							
UPB	\$290.3	\$36.6	\$357.2	\$25.5	\$402.5	\$28.9	\$49.0	\$6.2
Pool factor (1)	1.00	0.13	1.00	0.07	1.00	0.07	1.00	0.13
Collection status:								
Delinquency								
Current	3.1 %	35.8 %	—	18.2 %	45.0 %	44.0 %	0.2 %	38.6 %
30 days	1.3 %	11.7 %	—	7.1 %	4.0 %	13.6 %	0.1 %	16.9 %
60 days	5.4 %	7.2 %	0.1 %	0.3 %	4.3 %	4.8 %	0.2 %	3.4 %
over 90 days	57.8 %	16.6 %	49.1 %	16.9 %	31.3 %	13.2 %	70.4 %	5.3 %
In foreclosure	32.4 %	10.0 %	50.8 %	18.1 %	15.3 %	8.3 %	29.0 %	—
REO	—	18.8 %	—	39.3 %	0.1 %	16.1 %	—	35.8 %

(1)Ratio of UPB remaining to UPB at acquisition.

	Acquisitions for the quarter ended							
	September 30, 2011		June 30, 2011		March 31, 2011		December 31, 2010	
	At	March 31,	At	March 31,	At	March 31,	At	March 31,

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

	purchase 2018		purchase 2018		purchase 2018		purchase 2018	
	(dollars in millions)							
UPB	\$542.6	\$23.3	\$259.8	\$16.5	\$515.1	\$28.2	\$277.8	\$10.1
Pool factor (1)	1.00	0.04	1.00	0.06	1.00	0.05	1.00	0.04
Collection status:								
Delinquency								
Current	0.6	% 34.9 %	11.5	% 29.8 %	2.0	% 23.0 %	5.0	% 33.2 %
30 days	1.3	% 11.0 %	6.5	% 11.1 %	1.9	% 12.1 %	4.0	% 7.4 %
60 days	2.0	% 1.0 %	5.2	% 8.2 %	3.9	% 2.8 %	5.1	% 3.9 %
over 90 days	22.6	% 11.9 %	31.2	% 18.4 %	25.9	% 13.0 %	26.8	% 29.8 %
In foreclosure	73.0	% 15.6 %	43.9	% 17.8 %	66.3	% 21.3 %	59.1	% 7.2 %
REO	0.4	% 25.5 %	1.7	% 14.7 %	—	27.7 %	—	18.4 %

(1) Ratio of UPB remaining to UPB at acquisition.

82

Acquisitions for the quarter ended September 30, 2010						
	June 30, 2010		March 31, 2010		March 31, 2018	
	At	March	At	March	At	March
	purchase	2018	purchase	2018	purchase	2018
	(dollars in millions)					
UPB	\$146.2	\$4.0	\$195.5	\$9.1	\$182.7	\$8.7
Pool factor (1)	1.00	0.03	1.00	0.05	1.00	0.05
Collection status:						
Delinquency						
Current	1.2 %	30.5 %	5.1 %	39.9 %	6.2 %	32.1 %
30 days	0.4 %	17.0 %	2.0 %	5.0 %	1.6 %	16.5 %
60 days	1.3 %	10.4 %	4.1 %	4.6 %	5.8 %	—
over 90 days	38.2 %	6.6 %	42.8 %	16.7 %	37.8 %	14.2 %
In foreclosure	58.9 %	21.6 %	45.9 %	12.5 %	46.4 %	9.1 %
REO	—	14.0 %	—	21.3 %	2.3 %	28.2 %

(1) Ratio of UPB remaining to UPB at acquisition.

Cash Flows

Our cash flows for the quarters ended March 31, 2018 and 2017 are summarized below:

	Quarter ended March 31,		
	2018	2017	Change
	(in thousands)		
Operating activities	\$122,487	\$395,383	\$(272,896)
Investing activities	(227,569)	42,023	(269,592)
Financing activities	129,602	(351,833)	481,435
Net cash flows	\$24,520	\$85,573	\$(61,053)

Our cash flows resulted in a net increase in cash of \$24.5 million during the quarter ended March 31, 2018, as discussed below.

Operating activities

Cash provided by operating activities totaled \$122.5 million during the quarter ended March 31, 2018, as compared to \$395.4 million during the quarter ended March 31, 2017. Cash flows from operating activities primarily reflect cash flows from mortgage loans acquired for sale as shown below:

Quarter ended
March 31,

	2018	2017
	(in thousands)	
Operating cash flows from:		
Mortgage loans acquired for sale	\$ 104,148	\$ 375,338
Other	18,339	20,045
	\$ 122,487	\$ 395,383

Cash flows from mortgage loans acquired for sale primarily reflect reduction in inventory from the beginning to end of the periods presented.

Investing activities

Net cash used by our investing activities was \$227.6 million for the quarter ended March 31, 2018, as compared to cash provided of \$42.0 million for the quarter ended March 31, 2017. The decrease in cash flows from investing activities reflects the increase in the level of purchases of MBS during 2018 as compared to the same period in 2017.

Our investing activities have included the purchase of long-term assets which are not presently cash flowing or are at risk of interruption of cash flows in the near future. Furthermore, much of the investment income we recognize has been in the form of valuation adjustments we record recognizing our estimates of the net appreciation in value of the assets as we work with borrowers to either modify their loans or acquire the property securing their loans in settlement thereof and MSR's we receive in the sale of mortgage loans. Accordingly, the cash associated with a substantial portion of our revenues is often realized as part of the proceeds of the liquidation of the assets, either through payoff or sale of the mortgage loan or through acquisition and subsequent sale of the property securing the mortgage loans and through the servicing of mortgage loans underlying our investments in MSR's, many months or years after we record the revenues.

Financing activities

Net cash provided by financing activities was \$129.6 million for the quarter ended March 31, 2018, as compared to net cash used in financing activities of \$351.8 million for the quarter ended March 31, 2017. This change reflects the financing obtained to finance growth in our balance sheet during the quarter ended March 31, 2018, as compared to cash used to repay borrowings due to decreasing balance sheet size during the quarter ended March 31, 2017.

As discussed below in Liquidity and Capital Resources, our Manager continues to evaluate and pursue additional sources of financing to provide us with future investing capacity. We do not raise equity or enter into borrowings for the purpose of financing the payment of dividends. We believe that our cash flows from the liquidation of our investments, which include accumulated gains recorded during the periods we hold those investments, along with our cash earnings, are adequate to fund our operating expenses and dividend payment requirements. However, we manage our liquidity in the aggregate and are reinvesting our cash flows in new investments as well as using such cash to fund our dividend requirements.

Liquidity and Capital Resources

Our liquidity reflects our ability to meet our current obligations (including the purchase of loans from correspondent sellers, our operating expenses and, when applicable, retirement of, and margin calls relating to, our debt and derivatives positions), make investments as our Manager identifies them, pursue our share repurchase program and make distributions to our shareholders. We generally need to distribute at least 90% of our taxable income each year (subject to certain adjustments) to our shareholders to qualify as a REIT under the Internal Revenue Code. This distribution requirement limits our ability to retain earnings and thereby replenish or increase capital to support our activities.

We expect our primary sources of liquidity to be proceeds from liquidations from our investment portfolio, including distressed assets, cash earnings on our investments, cash flows from business activities, and proceeds from borrowings and/or additional equity offerings. When we finance a particular asset, the amount borrowed is less than the asset's fair value and we must provide the cash in the amount of such difference. Our ability to continue making investments is dependent on our ability to invest the cash representing such difference. Further, certain of our CRT Agreements may allow us, at the time we sell a mortgage loan, to deposit less than the full amount of cash we would otherwise be required to deposit with respect to such loan until the end of the aggregation period relating to the applicable CRT Agreement. At the end of such aggregation period, we will be required to deposit all remaining cash necessary to fully secure the related CRT Agreement, and our ability to fully invest in such CRT Agreement is dependent on our ability to deposit the required cash. We believe that our liquidity is sufficient to meet our current liquidity needs.

We do not expect repayments from contractual cash flows from our investments in distressed mortgage loans to be a primary source of liquidity as a substantial portion of such investments are distressed assets that are nonperforming. Our portfolio of distressed mortgage loans was acquired with the expectation that the majority of the cash flows associated with these investments would result from liquidation of the mortgage loan or the property securing the loan, rather than from scheduled principal and interest payments. Our mortgage loans acquired for sale are generally held for fifteen days or less and, therefore, are not expected to generate significant cash flows from principal repayments.

Our current leverage strategy is to finance our assets where we believe such borrowing is prudent, appropriate and available. We have made collateralized borrowings in the form of sales of assets under agreements to repurchase, mortgage loan participation purchase and sale agreements and notes payable. To the extent available to us, we expect in the future to obtain long-term financing for assets with estimated future lives of more than one year; this may include term financing and securitization of MSRs, performing, nonperforming and/or reperforming mortgage loans.

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

We will continue to finance most of our assets on a short-term basis until long-term financing becomes more available. Our short-term financings will be primarily in the form of agreements to repurchase and other secured lending and structured finance facilities, pending the ultimate disposition of the assets, whether through sale, securitization or liquidation. Because a significant portion of our current debt facilities consists of short-term borrowings, we expect to renew these facilities in advance of maturity in order to ensure our ongoing liquidity and access to capital or otherwise allow ourselves sufficient time to replace any necessary financing.

As of March 31, 2018 and December 31, 2017, we financed our investments in MBS, mortgage loans acquired for sale at fair value, mortgage loans at fair value, mortgage loans at fair value held by a VIE, MSRs, ESS, REO and CRT Agreement assets with sales under agreements to repurchase, mortgage loan participation purchase and sale agreements, notes payable, asset sold to PFSI under agreement to repurchase and asset-backed financing. Our leverage ratio, defined as all borrowings divided by shareholders' equity at date presented, was 2.66 and 2.55 at March 31, 2018 and December 31, 2017, respectively.

Our repurchase agreements represent the sales of assets together with agreements for us to buy back the assets at a later date. Following is a summary of the activities in our repurchase agreements financing:

	Quarter ended March 31,	
	2018	2017
	(in thousands)	
Assets sold under agreements to repurchase		
Average balance outstanding	\$3,077,914	\$3,267,864
Maximum daily balance outstanding	\$3,655,250	\$4,330,825
Ending balance	\$3,409,440	\$3,500,190

The difference between the maximum and average daily amounts outstanding is primarily due to timing of loan purchases and sales in our correspondent acquisition business. The total facility size of our assets sold under agreements to repurchase was approximately \$5.7 billion at March 31, 2018.

As discussed above, all of our repurchase agreements, notes payable, and mortgage loan participation purchase and sale agreements have short-term maturities:

- The transactions relating to mortgage loans and REO under agreements to repurchase generally provide for terms of approximately one year.
- The transactions relating to mortgage loans under mortgage loan participation purchase and sale agreements provide for terms of approximately one year.
- The transactions relating to assets under notes payable provide for terms of approximately two year.

Our debt financing agreements require us and certain of our subsidiaries to comply with various financial covenants. As of the filing of this Report, these financial covenants include the following:

- profitability at the Company for at least one (1) of the previous two consecutive fiscal quarters, and at the Company and our Operating Partnership over the prior three (3) calendar quarters;
- a minimum of \$40 million in unrestricted cash and cash equivalents among the Company and/or our subsidiaries; a minimum of \$40 million in unrestricted cash and cash equivalents among our Operating Partnership and its consolidated subsidiaries; a minimum of \$25 million in unrestricted cash and cash equivalents between PMC and PMH; and a minimum of \$10 million in unrestricted cash and cash equivalents at each of PMC and PMH;
- a minimum tangible net worth for the Company of \$860 million; a minimum tangible net worth for our Operating Partnership of \$700 million; a minimum tangible net worth for PMH of \$250 million; and a minimum tangible net

worth for PMC of \$150 million;

• a maximum ratio of total liabilities to tangible net worth of less than 10:1 for PMC and PMH and 5:1 for the Company and our Operating Partnership; and

• at least two warehouse or repurchase facilities that finance amounts and assets similar to those being financed under our existing debt financing agreements.

Although these financial covenants limit the amount of indebtedness we may incur and impact our liquidity through minimum cash reserve requirements, we believe that these covenants currently provide us with sufficient flexibility to successfully operate our business and obtain the financing necessary to achieve that purpose.

PLS is also subject to various financial covenants, both as a borrower under its own financing arrangements and as our servicer under certain of our debt financing agreements. The most significant of these financial covenants currently include the following:

- positive net income for at least one (1) of the previous two consecutive fiscal quarters, measured quarterly and as of the end of each fiscal quarter;
- a minimum in unrestricted cash and cash equivalents of \$40 million;
- a minimum tangible net worth of \$500 million; and
- a maximum ratio of total liabilities to tangible net worth of 10:1.

In addition to the financial covenants imposed upon us and PLS under our debt financing agreements, we and/or PLS, as applicable, are also subject to liquidity and net worth requirements established by FHFA for Agency sellers/servicers and Ginnie Mae for single-family issuers. FHFA and Ginnie Mae have established minimum liquidity and net worth requirements for approved non-depository single-family sellers/servicers in the case of FHFA, and for approved single-family issuers in the case of Ginnie Mae, as summarized below:

- 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%.
- 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, Fannie Mae and Ginnie Mae (“Agency Mortgage Servicing”) plus 200 basis points multiplied by the sum of nonperforming (90 or more days delinquent) Agency Mortgage Servicing that exceed 6% of Agency Mortgage Servicing.
- In the case of PLS, liquidity equal to the greater of \$1.0 million or 0.10% (10 basis points) of its outstanding Ginnie Mae single-family securities, which must be met with cash and cash equivalents.
- In the case of PLS, net worth equal to \$2.5 million plus 0.35% (35 basis points) of its outstanding Ginnie Mae single-family obligations.

We and/or PLS, as applicable, are obligated to maintain these financial covenants pursuant to our MSR financing agreements.

Our debt financing agreements also contain margin call provisions that, upon notice from the applicable lender at its option, require us to transfer cash or, in some instances, additional assets in an amount sufficient to eliminate any margin deficit. A margin deficit will generally result from any decline in the market value (as determined by the applicable lender) of the assets subject to the related financing agreement, although in some instances we may agree with the lender upon certain thresholds (in dollar amounts or percentages based on the market value of the assets) that must be exceeded before a margin deficit will arise. Upon notice from the applicable lender, we will generally be required to satisfy the margin call on the day of such notice or within one business day thereafter, depending on the timing of the notice.

Our Manager continues to explore a variety of additional means of financing our growth, including debt financing through bank warehouse lines of credit, repurchase agreements, term financing, securitization transactions and additional equity offerings. However, there can be no assurance as to how much additional financing capacity such efforts will produce, what form the financing will take or that such efforts will be successful.

Off-Balance Sheet Arrangements and Aggregate Contractual Obligations

Off-Balance Sheet Arrangements

As of March 31, 2018, we have not entered into any off-balance sheet arrangements.

Contractual Obligations

As of March 31, 2018, we had contractual obligations aggregating to \$5.9 billion comprised of borrowings, interest expense on long term debt from our Exchangeable Notes and asset-backed financing of a VIE, and commitments to purchase mortgage loans from correspondent sellers. Payment obligations under these agreements, including expected interest payments on long-term debt, are summarized below:

	Payments due by period				More than 5 years
	Total (in thousands)	Less than 1 year	1 - 3 years	3 - 5 years	
Contractual obligations					
Commitments to purchase mortgage loans from correspondent sellers	\$1,067,009	\$1,067,009	\$—	\$—	\$—
Commitments to fund Deposits securing credit risk transfer agreements	552,957	552,957	—	—	—
Assets sold under agreements to repurchase	3,552,378	3,367,338	185,040	—	—
Long term debt	570,526	—	250,000	—	320,526
Interest expense on long term debt (1)	191,039	24,120	40,717	19,416	106,786
Total	\$5,933,909	\$5,011,424	\$475,757	\$19,416	\$427,312

(1) Interest expense on long term debt includes interest for the Asset-backed financing of a VIE and the Exchangeable Notes.

All debt financing arrangements that matured between March 31, 2018 and the date of this Report have been renewed, extended or replaced.

The amount at risk (the fair value of the assets pledged plus the related margin deposit, less the amount advanced by the counterparty and accrued interest) relating to our assets sold under agreements to repurchase is summarized by counterparty below as of March 31, 2018:

Counterparty	Amount at risk (in thousands)
Credit Suisse First Boston Mortgage Capital LLC	\$ 519,954
Bank of America, N.A.	84,708
Citibank, N.A.	60,502
JPMorgan Chase & Co.	48,593
BNP Paribas Corporate & Institutional Banking	18,160
Daiwa Capital Markets America Inc.	18,151

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

Morgan Stanley Bank, N.A.	11,132
Deutsche Bank	13,282
Royal Bank of Canada	7,640
Wells Fargo, N.A.	2,670
	\$ 784,792

87

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Market risk is the exposure to loss resulting from changes in interest rates, foreign currency exchange rates, commodity prices, equity prices, real estate values and other market-based risks. The primary market risks that we are exposed to are real estate risk, credit risk, interest rate risk, prepayment risk, inflation risk and market value risk. Our primary trading asset is our inventory of mortgage loans acquired for sale. We believe that such assets' fair values respond primarily to changes in the market interest rates for comparable recently-originated mortgage loans. Our other market-risk assets are a substantial portion of our investments and are primarily comprised of distressed mortgage loans, MSRs, CRT Agreements and MBS. We believe that the fair values of MSRs also respond primarily to changes in the market interest rates for comparable mortgage loans. We believe that the fair values of our investment in distressed mortgage loans respond primarily to changes in the fair value of the real estate securing such loans.

The following sensitivity analyses are limited in that they were performed at a particular point in time; only contemplate the movements in the indicated variables; do not incorporate changes to other variables; are subject to the accuracy of various models and assumptions used; and do not incorporate other factors that would affect our overall financial performance in such scenarios, including operational adjustments made by management to account for changing circumstances. For these reasons, the following estimates should not be viewed as earnings forecasts.

Mortgage-backed securities at fair value

The following table summarizes the estimated change in fair value of our mortgage-backed securities as of March 31, 2018, given several hypothetical (instantaneous) changes in interest rates and parallel shifts in the yield curve:

Interest rate shift in basis points	-200	-75	-50	50	75	200
	(dollar in thousands)					
Fair value	\$1,512,101	\$1,488,118	\$1,473,380	\$1,394,473	\$1,372,371	\$1,259,334
Change in fair value:						
\$	\$75,645	\$51,662	\$36,924	\$(41,983)	\$(64,085)	\$(177,122)
%	5.3	% 3.6	% 2.6	% (2.9)%	(4.5)%	(12.3)%

Mortgage Loans at Fair Value

The following table summarizes the estimated change in fair value of our portfolio of distressed mortgage loans (comprised of mortgage loans at fair value, excluding mortgage loans at fair value held by VIE) as of March 31, 2018, given several hypothetical (instantaneous) changes in home values from those used in estimating fair value:

Property value shift in %	-15%	-10%	-5%	+5%	+10%	+15%
	(dollars in thousands)					
Fair value	\$427,234	\$442,445	\$456,104	\$479,426	\$489,293	\$498,177
Change in fair value:						
\$	\$(41,154)	\$(25,942)	\$(12,283)	\$11,039	\$20,906	\$29,790
%	(8.8)%	(5.5)%	(2.6)%	2.4 %	4.5 %	6.4 %

The following table summarizes the estimated change in fair value of our mortgage loans at fair value held by VIE as of March 31, 2018, net of the effect of changes in fair value of the related asset-backed financing of the VIE at fair value, given several hypothetical (instantaneous) changes in interest rates and parallel shifts in the yield curve:

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

Interest rate shift in basis points	-200	-75	-50	50	75	200
	(dollar in thousands)					
Fair value	\$311,568	\$311,471	\$311,407	\$310,752	\$310,569	\$309,646
Change in fair value:						
\$	\$467	\$370	\$306	\$(349)	\$(532)	\$(1,455)
%	0.2	% 0.1	% 0.1	% (0.1)%	(0.2)%	(0.5)%

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

Mortgage Servicing Rights

The following tables summarize the estimated change in fair value of MSR as of March 31, 2018, given several shifts in pricing spreads, prepayment speed and annual per-loan cost of servicing:

Pricing spread shift in %	-20%	-10%	-5%	+5%	+10%	+20%
	(dollars in thousands)					
Fair value	\$1,019,297	\$987,222	\$971,894	\$942,563	\$928,526	\$901,628
Change in fair value:						
\$	\$62,284	\$30,208	\$14,880	\$(14,450)	\$(28,487)	\$(55,385)
%	6.5	% 3.2	% 1.6	% (1.5)	% (3.0)	% (5.8)

Prepayment speed shift in %	-20%	-10%	-5%	+5%	+10%	+20%
	(dollars in thousands)					
Fair value	\$1,017,925	\$986,379	\$971,439	\$943,074	\$929,597	\$903,931
Change in fair value:						
\$	\$60,912	\$29,366	\$14,426	\$(13,939)	\$(27,417)	\$(53,083)
%	6.4	% 3.1	% 1.5	% (1.5)	% (2.9)	% (5.6)

Per-loan servicing cost shift in %	-20%	-10%	-5%	+5%	+10%	+20%
	(dollars in thousands)					
Fair value	\$984,863	\$970,938	\$963,976	\$950,051	\$943,089	\$929,164
Change in fair value:						
\$	\$27,849	\$13,925	\$6,962	\$(6,962)	\$(13,925)	\$(27,849)
%	2.9	% 1.5	% 0.7	% (0.7)	% (1.5)	% (2.9)

Excess servicing spread

The following tables summarize the estimated change in fair value of our ESS as of March 31, 2018, given several shifts in pricing spreads and prepayment speed:

Pricing spread shift in %	-20%	-10%	-5%	+5%	+10%	+20%
	(dollars in thousands)					
Fair value	\$243,968	\$239,922	\$237,946	\$234,088	\$232,204	\$228,523
Change in fair value:						
\$	\$7,967	\$3,920	\$1,944	\$(1,914)	\$(3,798)	\$(7,479)
%	3.4	% 1.7	% 0.8	% (0.8)	% (1.6)	% (3.2)

Prepayment speed shift in %	-20%	-10%	-5%	+5%	+10%	+20%
	(dollars in thousands)					
Fair value	\$257,841	\$246,468	\$241,128	\$231,077	\$226,343	\$217,403
Change in fair value:						
\$	\$21,839	\$10,466	\$5,126	\$(4,925)	\$(9,659)	\$(18,599)
%	9.3	% 4.4	% 2.2	% (2.1)	% (4.1)	% (7.9)

CRT Agreements

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

Following is a summary of the effect on fair value of various changes to the pricing spread input used to estimate the fair value of our CRT Agreements given several shifts:

Shift in input (in basis points)	Effect on fair value (in thousands)
25	\$ (15,186)
50	\$ (30,099)
100	\$ (59,131)
(25)	\$ 15,464
(50)	\$ 31,212
(100)	\$ 63,583

Item 4. Controls and Procedures

Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our reports filed under the Securities Exchange Act of 1934 (the “Exchange Act”) is recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosures. However, no matter how well a control system is designed and operated, it can provide only reasonable, not absolute, assurance that it will detect or uncover failures within the Company to disclose material information otherwise required to be set forth in our periodic reports.

Our management has conducted an evaluation, with the participation of our Chief Executive Officer and Chief Financial Officer, of the effectiveness of our disclosure controls and procedures as of the end of the period covered by this Report as required by paragraph (b) of Rules 13a-15 and 15d-15 under the Exchange Act. Based on our evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures were effective, as of the end of the period covered by this Report, to provide reasonable assurance that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the applicable rules and forms, and that it is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

Internal Control over Financial Reporting

There has been no change in our internal control over financial reporting during the quarter ended March 31, 2018 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

From time to time, we may be involved in various legal actions, claims and proceedings arising in the ordinary course of business. As of March 31, 2018, we were not involved in any material legal actions, claims or proceedings.

Item 1A. Risk Factors

There are no material changes from the risk factors set forth under Item 1A. "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2017, filed with the SEC on March 1, 2018.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

There were no sales of unregistered equity securities during the quarter ended March 31, 2018.

The following table provides information about our common share repurchases during the quarter ended March 31, 2018:

Period	Total number of shares purchased	Average price paid per Share	Total number of shares purchased as part of publicly announced plans or programs (a)	Amount
				available for future share repurchases under the plans or programs (a) (in thousands)
January 1, 2018– January 31, 2018	671,484	\$ 15.96	671,484	\$ 83,375
February 1, 2018 – February 28, 2018	—	\$ —	—	\$ 83,375
March 1, 2018 – March 31, 2018	—	\$ —	—	\$ 83,375
	671,484	\$ 15.96	671,484	\$ 83,375

(a) During 2015, our board of trustees authorized a share repurchase program. Under the repurchase program, as amended, we may repurchase up to \$300 million of our outstanding common shares. Under the repurchase program, we have discretion to determine the dollar amount of common shares to be repurchased and the timing of any repurchases in compliance with applicable law and regulation. The repurchase program does not have an expiration date. Amounts presented reflect balances as of the end of the applicable period.

Item 3. Defaults Upon Senior Securities

None

Item 4. Mine Safety Disclosures

Not applicable

Item 5. Other Information

None

91

Item 6. Exhibits

Exhibit No.	Exhibit Description	Form	Filing Date	Incorporated by Reference from the Below-Listed Form (Each Filed under SEC File Number 14-64423)
3.1	<u>Declaration of Trust of PennyMac Mortgage Investment Trust, as amended and restated.</u>	10-Q	November 6, 2009	
3.2	<u>Second Amended and Restated Bylaws of PennyMac Mortgage Investment Trust</u>	8-K	March 16, 2018	
3.3	<u>Articles Supplementary classifying and designating the 8.125% Series A Fixed-to-Floating Rate Cumulative Redeemable Preferred Shares of Beneficial Interest.</u>	8-A	March 7, 2017	
3.4	<u>Articles Supplementary classifying and designating the 8.00% Series B Fixed-to-Floating Rate Cumulative Redeemable Preferred Shares of Beneficial Interest.</u>	8-A	June 30, 2017	
10.1	<u>Loan and Security Agreement, dated as of February 1, 2018, by and among Credit Suisse AG, Cayman Islands Branch, PennyMac Corp., PennyMac Holdings, LLC, and PennyMac Mortgage Investment Trust.</u>	8-K	February 7, 2018	
10.2	<u>Amendment No. 3 to Second Amended and Restated Master Repurchase Agreement, dated as of February 1, 2018, by and among Credit Suisse First Boston Mortgage Capital LLC, Credit Suisse AG, Alpine Securitization LTD, PennyMac Holdings, LLC, PennyMac Corp., PennyMac Operating Partnership, L.P., PMC REO Financing Trust, LLC, and PennyMac Mortgage Investment Trust.</u>	8-K	February 7, 2018	
10.3	<u>Amendment No. 1 to Amended and Restated Master Repurchase Agreement, dated as of March 14, 2018, by and among JPMorgan Chase Bank, National Association, PennyMac Corp., PennyMac Operating Partnership, L.P., PennyMac Holdings, LLC, PMC REO Trust 2015-1 and PennyMac Mortgage Investment Trust.</u>	8-K	March 16, 2018	
10.4	<u>Amendment No. 1 to Third Amended and Restated Flow Servicing Agreement, dated as of March 1, 2018, by and among PennyMac Operating Partnership, L.P. and PennyMac Loan Services, LLC.</u>	*		

- 10.5 Amendment Number One to Amended and Restated Master Repurchase Agreement, dated as of March 2, 2018, by and among Citibank, N.A., PennyMac Corp., PennyMac Holdings, LLC and PennyMac Loan Services, LLC. *
- 10.6 Amendment Number One to Amended and Restated Master Repurchase Agreement, dated as of March 2, 2018, by and among Citibank, N.A., PennyMac Corp., and PennyMac Loan Services, LLC. *
- 10.7 Amendment Number One to Second Amended and Restated Loan and Security Agreement, dated as of March 2, 2018, by and among PennyMac Corp., PennyMac Holdings, LLC and Citibank, N.A. *
- 10.8 Amendment Number Eleven to the Master Repurchase Agreement, dated as of March 20, 2018, by and among PennyMac Corp., PennyMac Operating Partnership, L.P., Morgan Stanley Bank N.A. and Morgan Stanley Mortgage Capital Holdings LLC. *

92

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

- | | | | |
|-------|---|-----|----------------------|
| 10.9 | <u>Master Repurchase Agreement, dated as of April 17, 2018, by and among Royal Bank of Canada, PennyMac Operating Partnership, L.P., PennyMac Corp. and PennyMac Mortgage Investment Trust.</u> | 8-K | April
23,
2018 |
| 10.10 | <u>Guaranty, dated as of April 17, 2018, by PennyMac Mortgage Investment Trust, in favor of Royal Bank of Canada.</u> | 8-K | April
23,
2018 |
| 10.11 | <u>Amendment No. 1 to the Master Repurchase Agreement, dated as of April 17, 2018, by and among Deutsche Bank AG, Cayman Islands Branch and PennyMac Corp.</u> | 8-K | April
23,
2018 |
| 10.12 | <u>Amendment No. 4 to Master Repurchase Agreement, dated as of April 20, 2018, by and among Bank of America, N.A., PennyMac Operating Partnership, L.P. and PennyMac Mortgage Investment Trust.</u> | * | |
| 10.13 | <u>Amendment No. 14 to Mortgage Loan Participation Purchase and Sale Agreement, dated as of April 20, 2018, by and among Bank of America, N.A., PennyMac Corp., PennyMac Mortgage Investment Trust and PennyMac Operating Partnership, L.P.</u> | * | |
| 31.1 | <u>Certification of David A. Spector pursuant to Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u> | * | |
| 31.2 | <u>Certification of Andrew S. Chang pursuant to Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u> | * | |
| 32.1 | <u>Certification of David A. Spector pursuant to Rule 13a-14(b) and 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u> | ** | |
| 32.2 | <u>Certification of Andrew S. Chang pursuant to Rule 13a-14(b) and 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u> | ** | |
| 101 | Interactive data files pursuant to Rule 405 of Regulation S-T: (i) the Consolidated Balance Sheets as of March 31, 2018 and December 31, 2017 (ii) the Consolidated Statements of Income for the quarters ended March 31, 2018 and 2017, (iii) the Consolidated Statements of Changes in Stockholders' Equity for the quarters ended March 31, 2018 and 2017, (iv) the Consolidated Statements of Cash Flows for the quarters ended March 31, 2018 and 2017 and (v) the Notes to the Consolidated Financial Statements. | | |

* Filed herewith.

** The certifications attached hereto as Exhibits 32.1 and 32.2 are furnished to the SEC pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and shall not be deemed filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, except as shall be expressly set forth by specific reference in such filing.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Pennymac Mortgage Investment Trust

(Registrant)

Dated: May 7, 2018 By: /s/ David A. Spector
David A. Spector
President and Chief Executive Officer

(Principal Executive Officer)

Dated: May 7, 2018 By: /s/ Andrew S. Chang
Andrew S. Chang
Chief Financial Officer

(Principal Financial Officer)