
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, DC 20549

Form 10-Q

(Mark One)

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

For the quarterly period ended June 30, 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: 001-35916

PennyMac Financial Services, Inc.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

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

80-0882793

(IRS Employer
Identification No.)

91361
(Zip Code)

(818) 224-7442

(Registrant's telephone number, including area code)

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

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

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

Large accelerated filer

Accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company)

Smaller reporting company

Emerging growth company

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

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

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

Class	Outstanding at July 31, 2018
Class A Common Stock, \$0.0001 par value	25,101,553
Class B Common Stock, \$0.0001 par value	45

PENNYMAC FINANCIAL SERVICES, INC.

FORM 10-Q
June 30, 2018

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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,” “could,” “project,” “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 9, 2018.

Factors that could cause actual results to differ materially from historical results or those anticipated include, but are not limited to:

- the continually changing federal, state and local laws and regulations applicable to the highly regulated industry in which we operate;
- lawsuits or governmental actions if we do not comply with the laws and regulations applicable to our businesses;
- the mortgage lending and servicing-related regulations promulgated by the Consumer Financial Protection Bureau (“CFPB”) and its enforcement of these regulations;
- our dependence on U.S. government-sponsored entities and changes in their current roles or their guarantees or guidelines;
- changes to government mortgage modification programs;
- certain banking regulations that may limit our business activities;
- foreclosure delays and changes in foreclosure practices;
- the licensing and operational requirements of states and other jurisdictions applicable to our businesses, to which our bank competitors are not subject;
- changes in macroeconomic and U.S. real estate market conditions;
- difficulties inherent in growing loan production volume;
- difficulties inherent in adjusting the size of our operations to reflect changes in business levels;

- any required additional capital and liquidity to support business growth that may not be available on acceptable terms, if at all;
- changes in prevailing interest rates;
- increases in loan delinquencies and defaults;
- our dependence on the success of the multifamily market for future originations of commercial mortgage loans and other commercial real estate-related loans;
- our reliance on PennyMac Mortgage Investment Trust (“PMT”) as a significant source of financing for, and revenue related to, our mortgage banking business;
- our obligation to indemnify third-party purchasers or repurchase loans if loans that we originate, acquire, service or assist in the fulfillment of, fail to meet certain criteria or characteristics or under other circumstances;
- our ability to realize the anticipated benefit of potential future acquisitions of mortgage servicing rights (“MSRs”);
- our obligation to indemnify PMT and the Investment Funds if our services fail to meet certain criteria or characteristics or under other circumstances;
- decreases in the returns on the assets that we select and manage for our clients, and our resulting management and incentive fees;
- the extensive amount of regulation applicable to our investment management segment;
- conflicts of interest in allocating our services and investment opportunities among ourselves and our Advised Entities;
- the effect of public opinion on our reputation;
- our recent growth;
- our ability to effectively identify, manage, monitor and mitigate financial risks;
- our initiation of new business activities or expansion of existing business activities;
- our ability to detect misconduct and fraud;
- our ability to mitigate cybersecurity risks and cyber incidents;
- our exposure to risks of loss resulting from adverse weather conditions and man-made or natural disasters; 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 FINANCIAL SERVICES, INC.
CONSOLIDATED BALANCE SHEETS (UNAUDITED)**

	June 30, 2018	December 31, 2017
	(in thousands, except share amounts)	
ASSETS		
Cash (includes \$152,382 and \$20,765 pledged to creditors)	\$ 189,663	\$ 37,725
Short-term investments at fair value	98,571	170,080
Mortgage loans held for sale at fair value (includes \$2,498,583 and \$3,081,987 pledged to creditors)	2,527,231	3,099,103
Derivative assets	92,471	78,179
Servicing advances, net (includes valuation allowance of \$61,825 and \$59,958; \$94,715 and \$114,643 pledged to creditors)	258,900	318,066
Carried Interest due from Investment Funds pledged to creditors	370	8,552
Investment in PennyMac Mortgage Investment Trust at fair value	1,424	1,205
Mortgage servicing rights (includes \$2,486,157 and \$638,010 at fair value; \$2,333,750 and \$2,098,067 pledged to creditors)	2,486,157	2,119,588
Real estate acquired in settlement of loans	2,300	2,447
Furniture, fixtures, equipment and building improvements, net (includes \$20,656 and \$23,915 pledged to creditors)	29,607	29,453
Capitalized software, net (includes \$1,347 and \$1,568 pledged to creditors)	31,913	25,729
Assets purchased from PennyMac Mortgage Investment Trust under agreements to resell pledged to creditors	138,582	144,128
Receivable from PennyMac Mortgage Investment Trust	19,661	27,119
Receivable from Investment Funds	12	417
Mortgage loans eligible for repurchase	879,621	1,208,195
Other	85,223	98,107
Total assets	<u>\$ 6,841,706</u>	<u>\$ 7,368,093</u>
LIABILITIES		
Assets sold under agreements to repurchase	\$ 1,825,813	\$ 2,381,538
Mortgage loan participation purchase and sale agreements	528,368	527,395
Notes payable	1,140,546	891,505
Obligations under capital lease	13,032	20,971
Excess servicing spread financing payable to PennyMac Mortgage Investment Trust at fair value	229,470	236,534
Derivative liabilities	4,094	5,796
Accounts payable and accrued expenses	114,005	106,716
Mortgage servicing liabilities at fair value	10,253	14,120
Payable to Investment Funds	404	2,427
Payable to PennyMac Mortgage Investment Trust	99,309	136,998
Payable to exchanged Private National Mortgage Acceptance Company, LLC unitholders under tax receivable agreement	46,903	44,011
Income taxes payable	67,357	52,160
Liability for mortgage loans eligible for repurchase	879,621	1,208,195
Liability for losses under representations and warranties	20,587	20,053
Total liabilities	<u>4,979,762</u>	<u>5,648,419</u>
Commitments and contingencies – Note 14		
STOCKHOLDERS' EQUITY		
Class A common stock—authorized 200,000,000 shares of \$0.0001 par value; issued and outstanding, 25,008,655 and 23,529,970 shares, respectively	3	2
Class B common stock—authorized 1,000 shares of \$0.0001 par value; issued and outstanding, 45 and 46 shares, respectively	—	—
Additional paid-in capital	229,941	204,103
Retained earnings	299,951	265,306
Total stockholders' equity attributable to PennyMac Financial Services, Inc. common stockholders	529,895	469,411
Noncontrolling interest in Private National Mortgage Acceptance Company, LLC	1,332,049	1,250,263
Total stockholders' equity	<u>1,861,944</u>	<u>1,719,674</u>
Total liabilities and stockholders' equity	<u>\$ 6,841,706</u>	<u>\$ 7,368,093</u>

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

PENNYMAC FINANCIAL SERVICES, INC.
CONSOLIDATED STATEMENTS OF INCOME (UNAUDITED)

	<u>Quarter ended June 30,</u>		<u>Six months ended June 30,</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
(in thousands, except earnings per share)				
Revenues				
Net gains on mortgage loans held for sale at fair value:				
From non-affiliates	\$ 46,019	\$ 99,597	\$ 105,047	\$ 188,248
From PennyMac Mortgage Investment Trust	14,927	(1,506)	27,313	(3,201)
	<u>60,946</u>	<u>98,091</u>	<u>132,360</u>	<u>185,047</u>
Mortgage loan origination fees:				
From non-affiliates	22,886	28,303	46,241	52,498
From PennyMac Mortgage Investment Trust	1,542	1,890	2,750	3,269
	<u>24,428</u>	<u>30,193</u>	<u>48,991</u>	<u>55,767</u>
Fulfillment fees from PennyMac Mortgage Investment Trust	14,559	21,107	26,503	37,677
Net mortgage loan servicing fees:				
Mortgage loan servicing fees:				
From non-affiliates	138,871	112,348	274,354	218,815
From PennyMac Mortgage Investment Trust	9,431	10,099	20,450	20,585
From Investment Funds	3	543	3	1,039
Ancillary and other fees	13,637	11,202	27,808	23,068
	<u>161,942</u>	<u>134,192</u>	<u>322,615</u>	<u>263,507</u>
Amortization, impairment and change in fair value of mortgage servicing rights and mortgage servicing liabilities	(47,257)	(94,435)	(84,220)	(152,360)
Change in fair value of excess servicing spread payable to PennyMac Mortgage Investment Trust	(996)	7,156	(7,917)	9,929
	<u>(48,253)</u>	<u>(87,279)</u>	<u>(92,137)</u>	<u>(142,431)</u>
Net mortgage loan servicing fees	<u>113,689</u>	<u>46,913</u>	<u>230,478</u>	<u>121,076</u>
Management fees, net:				
From PennyMac Mortgage Investment Trust	5,728	5,638	11,424	10,646
From Investment Funds	(64)	369	15	735
	<u>5,664</u>	<u>6,007</u>	<u>11,439</u>	<u>11,381</u>
Carried Interest from Investment Funds	(168)	241	(348)	113
Net interest income (expense):				
Interest income:				
From non-affiliates	53,206	32,948	93,845	55,002
From PennyMac Mortgage Investment Trust	1,898	2,025	3,874	3,830
	<u>55,104</u>	<u>34,973</u>	<u>97,719</u>	<u>58,832</u>
Interest expense:				
To non-affiliates	28,706	32,511	61,517	57,338
To PennyMac Mortgage Investment Trust	3,910	4,366	7,844	9,013
	<u>32,616</u>	<u>36,877</u>	<u>69,361</u>	<u>66,351</u>
Net interest income (expense)	<u>22,488</u>	<u>(1,904)</u>	<u>28,358</u>	<u>(7,519)</u>
Change in fair value of investment in and dividends received from PennyMac Mortgage Investment Trust	108	76	290	215
Results of real estate acquired in settlement of loans	13	(119)	(15)	(144)
Other	2,571	1,116	4,443	2,581
Total net revenues	<u>244,298</u>	<u>201,721</u>	<u>482,499</u>	<u>406,194</u>
Expenses				
Compensation	98,540	82,967	200,553	168,207
Servicing	28,490	24,702	54,789	51,545
Technology	15,154	11,581	29,774	22,937
Occupancy and equipment	6,507	5,965	12,884	11,007
Professional services	5,587	4,523	11,325	8,341
Loan origination	5,144	5,116	7,259	9,249
Marketing	2,218	2,483	4,379	4,219
Other	7,960	6,424	13,842	10,697
Total expenses	<u>169,600</u>	<u>143,761</u>	<u>334,805</u>	<u>286,202</u>
Income before provision for income taxes	74,698	57,960	147,694	119,992
Provision for income taxes	6,293	7,214	12,363	14,860
Net income	<u>68,405</u>	<u>50,746</u>	<u>135,331</u>	<u>105,132</u>
Less: Net income attributable to noncontrolling interest	50,568	40,267	100,875	83,774
Net income attributable to PennyMac Financial Services, Inc. common stockholders	<u>\$ 17,837</u>	<u>\$ 10,479</u>	<u>\$ 34,456</u>	<u>\$ 21,358</u>
Earnings per share				
Basic	\$ 0.71	\$ 0.45	\$ 1.41	\$ 0.93
Diluted	\$ 0.70	\$ 0.44	\$ 1.38	\$ 0.91
Weighted average shares outstanding				
Basic	24,959	23,388	24,399	23,006
Diluted	78,825	77,650	78,947	77,641

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

PENNYMAC FINANCIAL SERVICES, INC.
CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY (UNAUDITED)

	Class A Common Stock				Noncontrolling interest in Private National Mortgage Acceptance Company, LLC	Total stockholders' equity
	Number of shares	Par value	Additional paid-in capital	Retained earnings (in thousands)		
Balance at December 31, 2016	22,427	\$ 2	\$ 182,772	\$ 164,549	\$ 1,052,033	\$ 1,399,356
Net income	—	—	—	21,358	83,774	105,132
Stock and unit-based compensation	—	—	3,450	—	7,256	10,706
Issuance of Class A common stock in settlement of directors' fees	—	—	108	—	61	169
Exchange of Class A units of Private National Mortgage Acceptance Company, LLC to Class A common stock of PennyMac Financial Services, Inc.	1,046	—	16,927	—	(16,927)	—
Tax effect of exchange of Class A units of Private National Mortgage Acceptance Company, LLC to Class A common stock of PennyMac Financial Services, Inc.	—	—	(4,111)	—	—	(4,111)
Balance at June 30, 2017	<u>23,473</u>	<u>\$ 2</u>	<u>\$ 199,146</u>	<u>\$ 185,907</u>	<u>\$ 1,126,197</u>	<u>\$ 1,511,252</u>
Balance at December 31, 2017	23,530	\$ 2	\$ 204,103	\$ 265,306	\$ 1,250,263	\$ 1,719,674
Cumulative effect of change in accounting principle – accounting for all existing classes of mortgage servicing rights at fair value	—	—	—	189	587	776
Balance at January 1, 2018	23,530	2	204,103	265,495	1,250,850	1,720,450
Net income	—	—	—	34,456	100,875	135,331
Stock and unit-based compensation	230	—	7,728	—	8,340	16,068
Issuance of Class A common stock in settlement of directors' fees	—	—	51	—	109	160
Repurchase of Class A common stock	(236)	—	(4,826)	—	—	(4,826)
Exchange of Class A units of Private National Mortgage Acceptance Company, LLC to Class A common stock of PennyMac Financial Services, Inc. by noncontrolling interest unitholders and issued as equity compensation	1,485	1	28,124	—	(28,125)	—
Tax effect of exchange and repurchases of Class A units of Private National Mortgage Acceptance Company, LLC to Class A common stock of PennyMac Financial Services, Inc., net	—	—	(5,239)	—	—	(5,239)
Balance at June 30, 2018	<u>25,009</u>	<u>\$ 3</u>	<u>\$ 229,941</u>	<u>\$ 299,951</u>	<u>\$ 1,332,049</u>	<u>\$ 1,861,944</u>

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

PENNYMAC FINANCIAL SERVICES, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)

	Six months ended June 30,	
	2018	2017
	(in thousands)	
Cash flow from operating activities		
Net income	\$ 135,331	\$ 105,132
Adjustments to reconcile net income to net cash used in operating activities:		
Net gains on mortgage loans held for sale at fair value	(132,360)	(185,047)
Accrual of servicing rebate payable to Investment Funds	—	100
Amortization, impairment and change in fair value of mortgage servicing rights, mortgage servicing liabilities and excess servicing spread	92,137	142,431
Carried Interest from Investment Funds	348	(113)
Capitalization of interest on mortgage loans held for sale at fair value	(39,390)	(21,615)
Accrual of interest on excess servicing spread financing	7,844	9,013
Amortization of premiums and debt issuance costs	(13,385)	7,122
Change in fair value of investment in common shares of PennyMac Mortgage Investment Trust	(219)	(144)
Results of real estate acquired in settlement in loans	15	144
Stock-based compensation expense	12,235	10,390
Provision for servicing advance losses	12,097	18,030
Loss from disposition of fixed assets and impairment of capitalized software	—	377
Depreciation and amortization	5,647	4,117
Purchase of mortgage loans held for sale from PennyMac Mortgage Investment Trust	(19,267,316)	(21,244,194)
Originations of mortgage loans held for sale	(2,518,992)	(2,353,899)
Purchase of mortgage loans from Ginnie Mae securities and early buyout investors for modification and subsequent sale	(2,002,582)	(1,814,080)
Sale and principal payments of mortgage loans held for sale to non-affiliates	22,832,809	24,497,179
Sale of mortgage loans held for sale to PennyMac Mortgage Investment Trust	1,427,637	40,222
Repurchase of mortgage loans subject to representations and warranties	(12,974)	(11,520)
Settlement of repurchase agreement derivatives	7,478	—
Decrease in servicing advances	47,980	38,821
Collection of Carried Interest	7,834	—
Sale of real estate acquired in settlement of loans	2,130	—
Decrease (increase) in receivable from PennyMac Mortgage Investment Trust	5,873	(1,092)
Decrease (increase) in receivable from Investment Funds	405	(211)
Decrease (increase) in other assets	7,792	(29,492)
Increase (decrease) in accounts payable and accrued expenses	5,349	(30,395)
Decrease in payable to Investment Funds	(2,023)	(5,157)
Decrease in payable to PennyMac Mortgage Investment Trust	(38,580)	(37,650)
Payments to exchanged Private National Mortgage Acceptance Company, LLC unitholders under tax receivable agreement	—	(6,221)
Increase in income taxes payable	12,778	14,824
Net cash provided by (used in) operating activities	595,898	(852,928)
Cash flow from investing activities		
Decrease (increase) in short-term investments	71,509	(59,476)
Net settlement of derivative financial instruments used for hedging	(126,918)	(30,949)
Purchase of mortgage servicing rights	(30,129)	(159,465)
Purchase of furniture, fixtures, equipment and leasehold improvements	(4,321)	(4,668)
Acquisition of capitalized software	(7,664)	(7,719)
Net change in assets purchased from PMT under agreement to resell	5,546	—
Increase in margin deposits	(3,774)	(12,071)
Net cash used in investing activities	(95,751)	(274,348)
Cash flow from financing activities		
Sale of assets under agreements to repurchase	20,763,584	13,332,610
Repurchase of assets sold under agreements to repurchase	(21,319,387)	(12,046,244)
Issuance of mortgage loan participation certificates	12,486,542	10,491,796
Repayment of mortgage loan participation certificates	(12,485,880)	(10,919,650)
Advances on notes payable	650,000	435,000
Repayment of notes payable	(400,000)	(153,073)
Advances of obligations under capital lease	—	10,298
Repayment of obligations under capital lease	(7,939)	(7,081)
Repayment of excess servicing spread financing	(24,309)	(28,910)
Payment of debt issuance costs	(9,788)	(11,059)
Issuance of common stock pursuant to exercise of stock options	3,833	316
Repurchase of common stock	(4,826)	—
Net cash (used in) provided by financing activities	(348,170)	1,104,003
Net increase (decrease) in cash and restricted cash	151,977	(23,273)
Cash and restricted cash at beginning of period	38,173	99,642
Cash and restricted cash at end of period	\$ 190,150	\$ 76,369
Cash and restricted cash at end of period are comprised of the following:		
Cash	\$ 189,663	\$ 75,978
Restricted cash included in <i>Other</i> assets	487	391
	\$ 190,150	\$ 76,369

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

PENNYMAC FINANCIAL SERVICES, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

Note 1—Organization

PennyMac Financial Services, Inc. (“PFSI” or the “Company”) was formed as a Delaware corporation on December 31, 2012. Pursuant to a reorganization, the Company became a holding corporation and its primary asset is an equity interest in Private National Mortgage Acceptance Company, LLC (“PennyMac”). The Company is the managing member of PennyMac and operates and controls all of the businesses and affairs of PennyMac subject to the consent rights of other members under certain circumstances, and consolidates the financial results of PennyMac and its subsidiaries.

PennyMac is a Delaware limited liability company which, through its subsidiaries, engages in mortgage banking and investment management activities. PennyMac’s mortgage banking activities consist of residential mortgage loan production and mortgage loan servicing. PennyMac’s investment management activities and a portion of its mortgage loan servicing activities are conducted on behalf of investment vehicles that invest in residential mortgage loans and related assets. PennyMac’s primary wholly owned subsidiaries are:

- *PNMAC Capital Management, LLC (“PCM”)*—a Delaware limited liability company registered with the Securities and Exchange Commission (“SEC”) as an investment adviser under the Investment Advisers Act of 1940, as amended. PCM enters into investment management agreements with entities that invest in residential mortgage loans and related assets.

Presently, PCM has a management agreement with PennyMac Mortgage Investment Trust (“PMT”), a publicly held real estate investment trust (“REIT”). Previously, PCM had management agreements with PNMAC Mortgage Opportunity Fund, LLC (the “Registered Fund”) and PNMAC Mortgage Opportunity Fund, L.P. (the “Master Fund”), both formerly registered under the Investment Company Act of 1940, as amended, an affiliate of these registered funds, and PNMAC Mortgage Opportunity Fund Investors, LLC (the Private Fund”) (collectively, the “Investment Funds”). Together, the Investment Funds and PMT are referred to as the “Advised Entities.” In 2017 and through the six months ended June 30, 2018, the Investment Funds sold or liquidated all of their remaining investments. The Registered Fund and the Master Fund obtained orders of de-registration on July 25, 2018, and the management agreements with the Registered Fund, the Master Fund and the Private Fund expired or were otherwise terminated on or before August 2, 2018. PCM expects to complete liquidation of the Investment Funds during 2018.

- *PennyMac Loan Services, LLC (“PLS”)* — a Delaware limited liability company that services portfolios of residential mortgage loans on behalf of non-affiliates and PMT, purchases, originates and sells new prime credit quality residential mortgage loans and engages in other mortgage banking activities for its own account and the account of PMT.

PLS is approved as a seller/servicer of mortgage loans by the Federal National Mortgage Association (“Fannie Mae”) and the Federal Home Loan Mortgage Corporation (“Freddie Mac”) and as an issuer of securities guaranteed by the Government National Mortgage Association (“Ginnie Mae”). PLS is a licensed Federal Housing Administration Nonsupervised Title II Lender with the U.S. Department of Housing and Urban Development (“HUD”) and a lender/servicer with the Veterans Administration (“VA”) and U.S. Department of Agriculture (“USDA”) (each an “Agency” and collectively the “Agencies”).

- *PNMAC Opportunity Fund Associates, LLC (“PMOFA”)*—a Delaware limited liability company and the general partner of the Master Fund. PMOFA is entitled to incentive fees representing allocations of profits (“Carried Interest”) from the Master Fund.

Note 2—Basis of Presentation and Accounting Changes

Basis of Presentation

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 SEC’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. This interim consolidated information should be read together with the Company’s Annual Report on Form 10-K for the year ended December 31, 2017.

The accompanying unaudited consolidated financial statements reflect all normal recurring adjustments necessary to present fairly the financial position, income, and cash flows for the interim periods, but are not necessarily indicative of income to be anticipated for the full year ending December 31, 2018. Intercompany accounts and transactions have been eliminated.

Preparation of financial statements in compliance with GAAP requires management to make judgments and estimates 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.

Accounting Changes

During the six months ended June 30, 2018, the Company adopted changes to the accounting principles used in the preparation of its financial statements summarized below.

Mortgage Servicing Rights

Effective January 1, 2018, the Company has elected to change the accounting for the classes of mortgage servicing rights (“MSRs”) it had 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 FASB’s ASC. The Company determined that a single accounting treatment across all MSRs is consistent with lender valuation under its financing arrangements and simplifies the Company’s hedging activities. As the result of this change, the Company recorded an adjustment to increase its investment in MSRs by \$848,000, an increase in its liability for income taxes payable of \$72,000 and in increase in stockholders’ equity of \$776,000.

Revenue Recognition

In May 2014, the FASB issued Accounting Standards Update (“ASU”) 2014-09, *Revenue from Contracts with Customers (Subtopic 606)* (“ASU 2014-09”), which supersedes the guidance in the *Revenue Recognition* topic of the ASC. Effective January 1, 2018, the Company adopted ASU 2014-09 as amended using the modified retrospective method. The adoption of ASU 2014-09 did not require the Company to record a cumulative effect adjustment to its beginning retained earnings.

The Company’s revenues from contracts with customers that are subject to ASU 2014-09 include fulfillment fees, management fees, Carried Interest and certain reimbursed overhead costs. Other revenue and income streams 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 ASC.

Fulfillment Fees

Fulfillment fees represent fees the Company collects for services it performs on behalf of PMT in connection with the acquisition, packaging and sale of mortgage loans. Fulfillment fee amounts are based upon a negotiated fee schedule and the unpaid principal balance of the mortgage loans purchased by PMT. The Company's obligation under the agreement is fulfilled when PMT completes the sale or securitization of a mortgage loan it purchases. Fulfillment fees are generally collected within 30 days of purchase by PMT, although a portion of the fulfillment fees may not be collected until 30 days following sale or securitization to the extent such sale or securitization does not occur in the month of purchase. Fulfillment fee revenue is recognized in the month the fee is earned. Fulfillment fees receivable contract assets are disclosed in Note 4—*Transactions with Affiliates*.

Management fees

Management fees represent compensation to the Company for its management services provided to the Advised Entities. Management fees are earned based on the Investment Funds' net assets and PMT's shareholders' equity amounts and profitability in excess of specified thresholds, and are recognized as services are provided and are paid to the Company on a quarterly basis within 30 days of the end of the quarter. Management fees receivable contract assets are disclosed in Note 4—*Transactions with Affiliates*.

Carried Interest

The Company's Carried Interest arrangements with the Investment Funds represent capital allocations to the Company. As a result, the Company has concluded as part of its assessment of the effect of the adoption of ASU 2014-09 that its Carried Interest represents an equity method investment subject to the *Investments – Equity Method and Joint Ventures* topic of the ASC. Therefore, effective January 1, 2018, the Company recharacterized its Carried Interest as financial instruments under the equity method of accounting. Carried Interest balances are disclosed in Note 9—*Carried Interest Due from Investment Funds*.

Expense reimbursements

Under the Company's management agreement with PMT, PMT is required to pay its pro rata portion of rent, telephone, utilities, office furniture, equipment, machinery and other office, internal and overhead expenses of the Company and its affiliates required for PMT's and its subsidiaries' operations. These expenses are allocated based on the ratio of PMT's proportion of gross assets compared to all remaining gross assets managed by the Company as calculated at each fiscal quarter end. Before the adoption of ASU 2014-09, the Company accounted for such reimbursements as reductions to expenses. With the adoption of ASU 2014-09, the Company is required to include such expense reimbursements in its net revenues. As a result of the adoption of ASU 2014-09, certain overhead reimbursement amounts were reclassified from the following expense line items to *Other* revenue as summarized below:

<u>Income statement line</u>	<u>Quarter ended June 30, 2018</u>	<u>Six months ended June 30, 2018</u>
	(in thousands)	
Occupancy and equipment	\$ 647	\$ 1,236
Technology	302	522
Compensation	120	240
Other	227	419
Total expense reimbursements included in <i>Other</i> revenue	\$ 1,296	\$ 2,417

Cash Flows

During the six months ended June 30, 2018, the Company adopted ASU 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 consolidated statement of cash flows. Accordingly, the Company retrospectively changed the presentation of its consolidated statements of cash flows to conform to the requirements of ASU 2016-18. For the purpose of reporting statement of cash flows, the Company has identified tenant security deposits relating to rental properties owned by PMT and managed by the Company as restricted cash. The tenant security deposits are included in *Other* asset on the Company’s consolidated balance sheets. As the result of adoption of ASU 2016-18, the Company’s consolidated statements of cash flows for the six months ended June 30, 2017 changed as follows:

	<u>As previously reported</u>	<u>Effect of adoption of ASU 2016-18</u>	<u>As reported</u>
		(in thousands)	
Cash flow from operating activities	\$ (853,044)	\$ 116	\$ (852,928)
Cash and restricted cash at quarter end	\$ 75,978	\$ 391	\$ 76,369

Note 3—Concentration of Risk

A substantial portion of the Company’s activities relate to the Advised Entities. Revenues generated from these entities (generally comprised of gains on mortgage loans held for sale, mortgage loan origination fees, fulfillment fees, mortgage loan servicing fees, change in fair value of excess servicing spread financing (“ESS”), management fees, Carried Interest, net interest charged to these entities and change in fair value of investment and dividend received from PMT) totaled 18% and 21% of total net revenue for the quarters ended June 30, 2018 and 2017, respectively, and 16% and 19% for the six months ended June 30, 2018 and 2017, respectively.

Note 4—Transactions with Affiliates

Transactions with PMT

Operating Activities

Mortgage Loan Production Activities and Mortgage Servicing Rights (“MSR”) Recapture

The Company sells newly originated loans to PMT under a mortgage loan purchase agreement. Historically, the Company has used the mortgage loan purchase agreement for the purpose of selling to PMT prime jumbo residential mortgage loans. Beginning in the quarter ended September 30, 2017, the Company also sells non-government insured or guaranteed mortgage loans to PMT under the mortgage loan purchase agreement.

Pursuant to the terms of an amended and restated MSR recapture agreement, effective September 12, 2016, if the Company refinances mortgage loans for which PMT previously held the MSRs, the Company is generally required to transfer and convey cash in an amount equal to 30% of the fair market value of the MSRs related to all the mortgage 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, unless terminated earlier in accordance with the terms of the agreement.

The Company provides fulfillment and other services to PMT under an amended and restated mortgage banking services agreement for which it receives a fulfillment fee. Pursuant to the terms of mortgage banking services agreement, the monthly fulfillment fee is an amount that shall equal (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 the Company with respect to any mortgage loans underwritten to the Ginnie Mae Mortgage-Backed Securities (“MBS”) Guide. PMT does not hold the Ginnie Mae approval required to issue Ginnie Mae MBS and act as a servicer. Accordingly, under the agreement, the Company currently purchases mortgage loans underwritten in accordance with the Ginnie Mae MBS Guide “as is” and without recourse of any kind from PMT at PMT’s cost less an administrative fee 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 mortgage loans are held by PMT before being purchased by the Company.

In consideration for the mortgage banking services provided by the Company with respect to PMT’s acquisition of mortgage loans under the Company’s early purchase program, the Company is entitled to fees accruing (i) at a rate equal to \$1,500 per year per early purchase facility administered by the Company, and (ii) in the amount of \$35 for each mortgage loan that PMT acquires thereunder. The mortgage banking services agreement expires, unless terminated earlier in accordance with the agreement, on September 12, 2020, subject to automatic renewal for additional 18-month periods.

Following is a summary of mortgage loan production activities and MSR recapture between the Company and PMT:

	Quarter ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	(in thousands)			
Net gain (loss) on mortgage loans held for sale at fair value:				
Net gain on mortgage loans held for sale to PMT	\$ 15,863	\$ —	\$ 29,674	\$ —
Mortgage servicing rights and excess servicing spread recapture incurred	(936)	(1,506)	(2,361)	(3,201)
	\$ 14,927	\$ (1,506)	\$ 27,313	\$ (3,201)
Sale of mortgage loans held for sale to PMT	\$ 646,311	\$ 18,692	\$ 1,427,637	\$ 40,222
Fulfillment fee revenue	\$ 14,559	\$ 21,107	\$ 26,503	\$ 37,677
Unpaid principal balance of mortgage loans fulfilled for PMT subject to fulfillment fees	\$ 5,396,370	\$ 5,918,027	\$ 9,622,001	\$ 10,549,933
Sourcing fees paid to PMT	\$ 2,891	\$ 3,204	\$ 5,532	\$ 6,065
Unpaid principal balance of mortgage loans purchased from PMT	\$ 9,639,495	\$ 10,641,243	\$ 18,487,368	\$ 20,215,960
Tax service fees received from PMT included in <i>Mortgage loan origination fees</i>	\$ 1,542	\$ 1,890	\$ 2,750	\$ 3,269
Early purchase program fees earned from PMT included in <i>Mortgage loan servicing fees</i>	\$ —	\$ 1	\$ —	\$ 6

Mortgage Loan Servicing

The Company has a mortgage loan servicing agreement with PMT (“Servicing Agreement”). The Servicing Agreement provides for servicing fees of per-loan monthly amounts based on the delinquency, bankruptcy and/or foreclosure status of the serviced mortgage loan or the real estate acquired in settlement of loans (“REO”). The Company also remains entitled to customary ancillary income and market-based fees and charges relating to mortgage loans it services for PMT. These include boarding and deboarding fees, liquidation and disposition fees, assumption, modification and origination fees and a percentage of late charges.

- 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.
- To the extent the Company facilitates rentals of PMT's REO under its REO rental program, the Company collects 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 the Company's 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 the Company provides property management services directly. The Company is also entitled to retain any tenant paid application fees and late rent fees and seek reimbursement for certain third-party vendor fees.
- Except as otherwise provided in the MSR recapture agreement, when the Company effects a refinancing of a mortgage loan on behalf of PMT and not through a third-party lender and the resulting mortgage loan is readily saleable, or the Company originates a loan to facilitate the disposition of a REO, the Company is entitled to receive from PMT market-based fees and compensation consistent with pricing and terms the Company offers unaffiliated parties on a retail basis.
- Because PMT has a small number of employees and limited infrastructure, the Company 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. For these services, the Company receives a supplemental servicing fee of \$25 per month for each distressed mortgage loan. The Company is entitled to reimbursement for all customary, good faith reasonable and necessary out-of-pocket expenses incurred by the Company in performance of its servicing obligations.
- 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; provided, however, that with respect to any such incentive payments paid to the Company in connection with a mortgage loan modification for which PMT previously paid the Company a modification fee, the Company is required to reimburse PMT an amount equal to the incentive payments.
- The Company 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. The Company is not entitled to earn more than one liquidation fee, reperformance fee or modification fee per mortgage loan in any 18-month period.
- The base servicing fees for non-distressed mortgage loans are 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 fee rates are \$7.50 per month and \$8.50 per month for fixed-rate loans and adjustable-rate loans, respectively.

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 agreement.

Following is a summary of mortgage loan servicing fees earned from PMT:

	<u>Quarter ended June 30,</u>		<u>Six months ended June 30,</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
	(in thousands)			
Mortgage loans acquired for sale at fair value:				
Base and supplemental	\$ 96	\$ 82	\$ 152	\$ 147
Activity-based	149	176	271	319
	<u>245</u>	<u>258</u>	<u>423</u>	<u>466</u>
Mortgage loans at fair value:				
Base and supplemental	709	1,754	1,714	3,713
Activity-based	463	1,767	2,543	4,157
	<u>1,172</u>	<u>3,521</u>	<u>4,257</u>	<u>7,870</u>
Mortgage servicing rights:				
Base and supplemental	7,900	6,188	15,549	12,025
Activity-based	114	132	221	224
	<u>8,014</u>	<u>6,320</u>	<u>15,770</u>	<u>12,249</u>
	<u>\$ 9,431</u>	<u>\$ 10,099</u>	<u>\$ 20,450</u>	<u>\$ 20,585</u>
Property management fees received from PMT included in <i>Other</i> income	\$ 112	\$ 95	\$ 211	\$ 166

Investment Management Activities

The Company has a management agreement with PMT (“Management Agreement”). The Management Agreement provides that:

- The base management fee is calculated quarterly and is equal to the sum of (i) 1.5% per year of PMT’s average shareholders’ equity up to \$2 billion, (ii) 1.375% per year of PMT’s average shareholders’ equity in excess of \$2 billion and up to \$5 billion, and (iii) 1.25% per year of PMT’s average shareholders’ equity in excess of \$5 billion.
- The performance incentive fee is calculated quarterly at a defined annualized percentage of the amount by which PMT’s “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 equal to the sum of: (a) 10% of the amount by which PMT’s net income for the quarter exceeds (i) an 8% return on equity plus the “high watermark,” up to (ii) a 12% return on PMT’s equity; plus (b) 15% of the amount by which PMT’s net income for the quarter exceeds (i) a 12% return on PMT’s equity plus the “high watermark,” up to (ii) a 16% return on PMT’s equity; plus (c) 20% of the amount by which PMT’s 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 PMT’s common shares of beneficial interest computed in accordance with GAAP adjusted for certain other non-cash charges determined after discussions between the Company and PMT’s independent trustees and approval by a majority of PMT’s independent trustees.

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

The “high watermark” is the quarterly adjustment that reflects the amount by which the net income (stated as a percentage of return on equity) in that quarter exceeds or falls short of the lesser of 8% and the average Fannie Mae 30-year MBS yield (the “Target Yield”) for the four quarters then ended. 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 the Company 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 receivable quarterly in arrears. The performance incentive fee may be paid in cash or a combination of cash and PMT’s common shares (subject to a limit of no more than 50% paid in common shares), at PMT’s option.

The Management 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. In the event of termination of the Management Agreement between PMT and the Company, the Company 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 the Company, in each case during the 24-month period immediately preceding the date of termination.

Following is a summary of the base management and performance incentive fees earned from PMT:

	<u>Quarter ended June 30,</u>		<u>Six months ended June 30,</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
	(in thousands)			
Base management	\$ 5,728	\$ 5,334	\$ 11,424	\$ 10,342
Performance incentive	—	304	—	304
	<u>\$ 5,728</u>	<u>\$ 5,638</u>	<u>\$ 11,424</u>	<u>\$ 10,646</u>

Expense Reimbursement

Under the Management Agreement, PMT reimburses the Company for its organizational and operating expenses, including third-party expenses, incurred on PMT’s behalf, it being understood that the Company 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 PMT. With respect to the allocation of the Company’s and its affiliates’ personnel, from and after September 12, 2016, the Company shall be reimbursed \$120,000 per fiscal quarter, such amount to be reviewed annually and not preclude reimbursement for any other services performed by the Company or its affiliates.

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

The Company received reimbursements from PMT for expenses as follows:

	<u>Quarter ended June 30,</u>		<u>Six months ended June 30,</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
	(in thousands)			
Reimbursement of:				
Common overhead incurred by the Company (1)	\$ 1,176	\$ 1,593	\$ 2,177	\$ 3,027
Compensation	120	—	240	—
Expenses incurred on (the Company's) PMT's behalf, net	(514)	398	59	653
	<u>\$ 782</u>	<u>\$ 1,991</u>	<u>\$ 2,476</u>	<u>\$ 3,680</u>
Payments and settlements during the quarter (2)	<u>\$ 15,957</u>	<u>\$ 16,070</u>	<u>\$ 23,615</u>	<u>\$ 40,463</u>

- (1) The Company adopted ASU 2014-09 using the modified retrospective method effective January 1, 2018. Adoption of ASU 2014-09 using the modified retrospective method required the Company to include those reimbursements from PMT in *Other* revenue starting January 1, 2018.
- (2) Payments and settlements include payments for management fees and correspondent production activities itemized in the preceding tables and netting settlements made pursuant to master netting agreements between the Company and PMT.

Conditional Reimbursement of Underwriting Fees

In connection with its initial public offering of common shares of beneficial interest on August 4, 2009 (“IPO”), PMT conditionally agreed to reimburse the Company up to \$2.9 million for underwriting fees paid to the IPO underwriters by the Company on PMT’s behalf. In the event a termination fee is payable to the Company under the Management Agreement, and the Company has not received the full amount of the reimbursements and payments under the reimbursement agreement, such amount will be paid in full. The term of the reimbursement agreement expires on February 1, 2019. The Company received no reimbursement of underwriting fees from PMT during the six months ended June 30, 2018 and 2017.

Investing Activities

Master Repurchase Agreement

On December 19, 2016, the Company, through PLS, entered into a master repurchase agreement with one of PMT’s wholly-owned subsidiaries, PennyMac Holdings, LLC (“PMH”) (the “PMH Repurchase Agreement”), pursuant to which PMH may borrow from the Company for the purpose of financing PMH’s participation certificates representing beneficial ownership in ESS. 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 PennyMac, as guarantor (the “PC Repurchase Agreement”). The Issuer Trust was formed for the purpose of allowing PLS to finance MSR and ESS relating to such MSR (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 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) has issued and 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 and ESS. The maximum principal balance of the VFN is \$1,000,000,000.

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

Prior to the Company's entry into the PMH Repurchase Agreement and PC Repurchase Agreement in connection with the GNMA MSR Facility, the Company was a party to a repurchase agreement with Credit Suisse First Boston Mortgage Capital LLC ("CSFB") (the "MSR Repo"), pursuant to which it financed Ginnie Mae MSRs and servicing advance receivables and pledged to CSFB all of its rights and interests in any Ginnie Mae MSRs it owned or acquired, and a separate acknowledgement agreement with respect thereto, by and among Ginnie Mae, CSFB and the Company.

In connection with the MSR Repo described above, the Company and PMT entered into an underlying loan and security agreement, dated as of April 30, 2015, pursuant to which PMT was able to borrow up to \$150 million from the Company for the purpose of financing ESS (the "Underlying LSA"). In order to secure its borrowings, PMT pledged its ESS to the Company under the Underlying LSA and the Company, in turn, re-pledged such ESS to CSFB under the MSR Repo. The principal amount of the borrowings under the Underlying LSA was based upon a percentage of the market value of the ESS pledged by PMT, subject to the \$150 million sublimit described above. Pursuant to the Underlying LSA, PMT granted to the Company a security interest in all of its right, title and interest in, to and under the ESS pledged to secure the borrowings.

The Company and PMT agreed in connection with the Underlying LSA that PMT was required to repay the Company the principal amount of borrowings plus accrued interest to the date of such repayment, and the Company was required to repay CSFB the corresponding amount under the MSR Repo. Interest accrued on PMT's note relating to the Underlying LSA at a rate based on CSFB's cost of funds under the MSR Repo. PMT was also required to pay the Company a fee for the structuring of the Underlying LSA in an amount equal to the portion of the corresponding fee paid by the Company to CSFB and allocable to the \$150 million relating to the ESS. The Underlying LSA was replaced by the PMH Repurchase Agreement upon the closing of the GNMA MSR facility.

The Company holds an investment in PMT in the form of 75,000 common shares of beneficial interest.

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

	Quarter ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	(in thousands)			
Interest income relating to Assets purchased from PennyMac Mortgage Investment Trust under agreements to resell	\$ 1,898	\$ 2,025	\$ 3,874	\$ 3,830
Common shares of beneficial interest of PennyMac Mortgage Investment Trust:				
Dividends received from PennyMac Mortgage Investment Trust	\$ 36	\$ 35	\$ 71	\$ 71
Change in fair value of investment in common shares of PennyMac Mortgage Investment Trust	72	41	219	144
	\$ 108	\$ 76	\$ 290	\$ 215

	June 30,	December 31,
	2018	2017
	(in thousands)	
Assets purchased from PennyMac Mortgage Investment Trust under agreements to resell	\$ 138,582	\$ 144,128
Common shares of beneficial interest of PennyMac Mortgage Investment Trust:		
Fair value	\$ 1,424	\$ 1,205
Number of shares	75	75

Financing Activities

Spread Acquisition and MSR Servicing Agreements

On December 19, 2016, the Company amended and restated a master spread acquisition and MSR servicing agreement with PMT (the “Spread Acquisition Agreement”), pursuant to which the Company may sell to PMT, from time to time, the right to receive participation certificates representing beneficial ownership in ESS arising from Ginnie Mae MSRs acquired by the Company, in which case the Company 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 PMT in connection with the parties’ participation in the GNMA MSR Facility.

To the extent the Company refinances any of the mortgage loans relating to the ESS it has acquired, the Spread Acquisition Agreement also contains recapture provisions requiring that the Company transfer to PMT, 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, the Company 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 the Company 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, the Company may, at its option, wire cash to PMT in an amount equal to such fair market value in lieu of transferring such ESS.

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

	<u>Quarter ended June 30,</u>		<u>Six months ended June 30,</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
	(in thousands)			
Excess servicing spread financing:				
Issuance pursuant to recapture agreement	\$ 580	\$ 1,380	\$ 1,484	\$ 2,953
Repayment	\$ 12,018	\$ 14,278	\$ 24,309	\$ 28,910
Change in fair value	\$ 996	\$ (7,156)	\$ 7,917	\$ (9,929)
Interest expense	\$ 3,910	\$ 4,366	\$ 7,844	\$ 9,013
Recapture incurred pursuant to refinancings by the Company of mortgage loans subject to excess servicing spread financing included in <i>Net gains on mortgage loans held for sale at fair value</i>	\$ 524	\$ 1,271	\$ 1,354	\$ 2,674
			<u>June 30,</u>	<u>December 31,</u>
			<u>2018</u>	<u>2017</u>
			(in thousands)	
Excess servicing spread financing at fair value			\$ 229,470	\$ 236,534

Receivable from and Payable to PMT

Amounts receivable from and payable to PMT are summarized below:

	<u>June 30,</u> <u>2018</u>	<u>December 31,</u> <u>2017</u>
	(in thousands)	
Receivable from PMT:		
Management fees	\$ 5,728	\$ 5,901
Fulfillment fees	4,696	346
Allocated expenses and expenses incurred on PMT's behalf	3,496	11,542
Servicing fees	3,110	6,583
Correspondent production fees	1,633	1,735
Conditional Reimbursement	870	870
Interest on assets purchased under agreements to resell	128	142
	<u>\$ 19,661</u>	<u>\$ 27,119</u>
Payable to PMT:		
Deposits made by PMT to fund servicing advances	\$ 95,299	\$ 132,844
Mortgage servicing rights recapture payable	153	282
Other	3,857	3,872
	<u>\$ 99,309</u>	<u>\$ 136,998</u>

Investment Funds

Management Agreements

The Company had investment management agreements with the Investment Funds pursuant to which it received management fees consisting of base management fees and Carried Interest. The management fees were based on the lesser of the funds' net asset values or aggregate capital contributions. The base management fees accrued at annual rates ranging from 1.5% to 2.0% of the applicable amounts on which they were based.

The Carried Interest that the Company recognizes from the Investment Funds is determined by the Investment Funds' performance and its contractual rights to share in the Investments Funds' returns in excess of the preferred returns, if any, accruing to the funds' investors. The Company recognizes Carried Interest as a participation in the profits in the Investment Funds after the investors in the Investment Funds have achieved a preferred return as defined in the fund agreements. After the investors have achieved the preferred returns specified in the respective fund agreements, a "catch up" return accrues to the Company until it receives a specified percentage of the preferred return. Thereafter, the Company participates in future returns in excess of the preferred return at the rates specified in the fund agreements. The Company received \$61.3 million in cash in settlement of the majority of its Carried Interest in 2017. During the six months ended June 30, 2018, the Company received an additional distribution of \$7.8 million in cash.

In 2017 and through the six months ended June 30, 2018, the Investment Funds sold or liquidated all of their remaining investment assets. During the six months ended June 30, 2018, the Company discontinued charging management fees to the Investment Funds. The Registered Fund and the Master Fund obtained orders of de-registration on July 25, 2018, and all of the management agreements with the Registered Fund, the Master Fund and the Private Fund expired or were otherwise terminated on or before August 2, 2018. The Company expects to complete liquidation of the Investment Funds during 2018.

Mortgage Loan Servicing Agreements

The Company had loan servicing agreements with the Investment Funds. The loan servicing provided by the Company under the loan servicing agreements with the Investment Funds included collecting principal, interest and escrow account payments, if any, with respect to mortgage loans, as well as managing loss mitigation, which included, among other things, collection activities, loan workouts, modifications, foreclosures and short sales. The Company also engaged in certain loan origination activities that included refinancing mortgage loans and arranging financings that facilitate sales of REOs.

The loan servicing agreements with the Investment Funds generally provided for fee revenue, which varied depending on the type and quality of the loans being serviced. The Company was also entitled to certain customary market-based fees and charges. All of the servicing agreements with the Investment Funds expired or were otherwise terminated on or before August 2, 2018.

Amounts due from and payable to the Investment Funds are summarized below:

	<u>June 30,</u> <u>2018</u>	<u>December 31,</u> <u>2017</u>
	(in thousands)	
Carried Interest due from Investment Funds:		
PNMAC Mortgage Opportunity Fund, LLC	\$ 191	\$ 6,389
PNMAC Mortgage Opportunity Fund Investors, LLC	179	2,163
	<u>\$ 370</u>	<u>\$ 8,552</u>
Receivable from Investment Funds:		
Mortgage loan servicing fees	\$ 11	\$ 2
Expense reimbursements	1	27
Mortgage loan servicing fee rebate deposit	—	300
Management fees	—	88
	<u>\$ 12</u>	<u>\$ 417</u>
Payable to Investment Funds:		
Deposits received to fund servicing advances	\$ —	\$ 2,329
Other	404	98
	<u>\$ 404</u>	<u>\$ 2,427</u>

Exchanged Private National Mortgage Acceptance Company, LLC Unitholders

The Company entered into a tax receivable agreement with owners of PennyMac other than the Company on the date of the IPO that provides for the payment from time to time by the Company to PennyMac's exchanged unitholders an amount equal to 85% of the amount of the net tax benefits, if any, that the Company is deemed to realize as a result of (i) increases in tax basis of PennyMac's assets resulting from such unitholders' exchanges and (ii) certain other tax benefits related to entering into the tax receivable agreement, including tax benefits attributable to payments under the tax receivable agreement.

Based on the PennyMac unitholder exchanges to date, the Company has recorded a \$46.9 million and \$44.0 million *Payable to exchanged Private National Mortgage Acceptance Company, LLC unitholders under tax receivable agreement* as of June 30, 2018 and December 31, 2017, respectively. The Company did not make any payments under the tax receivable agreement during the six months ended June 30, 2018. The Company made payments of \$6.2 million during the six months ended June 30, 2017.

Note 5—Loan Sales and Servicing Activities

The Company originates or purchases and sells mortgage loans in the secondary mortgage market without recourse for credit losses. However, the Company maintains continuing involvement with the mortgage loans in the form of servicing arrangements and the liability under representations and warranties it makes to purchasers and insurers of the mortgage loans.

The following table summarizes cash flows between the Company and transferees as a result of the sale of mortgage loans in transactions where the Company maintains continuing involvement as servicer of the mortgage loans:

	<u>Quarter ended June 30,</u>		<u>Six months ended June 30,</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
	(in thousands)			
Cash flows:				
Sales proceeds	\$ 11,729,024	\$ 12,637,046	\$ 22,832,809	\$ 24,497,179
Servicing fees received (1)	\$ 117,818	\$ 89,970	\$ 230,909	\$ 174,991
Net servicing advances	\$ (14,082)	\$ 15,700	\$ (24,719)	\$ 13,791

(1) Net of guarantee fees paid to the Agencies.

The following table summarizes the UPB of the mortgage loans sold by the Company in which it maintains continuing involvement:

	June 30, 2018	December 31, 2017
	(in thousands)	
Unpaid principal balance of mortgage loans outstanding	\$ 133,557,592	\$ 120,853,138
Delinquencies:		
30-89 days	\$ 4,505,170	\$ 5,097,688
90 days or more:		
Not in foreclosure	\$ 2,279,270	\$ 2,303,114
In foreclosure	\$ 619,365	\$ 606,744
Foreclosed	\$ 30,777	\$ 30,310
Bankruptcy	\$ 829,270	\$ 657,368

The following tables summarize the UPB of the Company's mortgage loan servicing portfolio:

	June 30, 2018		
	Servicing rights owned	Contract servicing and subservicing (in thousands)	Total mortgage loans serviced
Investor:			
Non-affiliated entities:			
Originated	\$ 133,557,592	\$ —	\$ 133,557,592
Purchased	46,276,250	—	46,276,250
	<u>179,833,842</u>	<u>—</u>	<u>179,833,842</u>
Advised Entities	—	81,214,629	81,214,629
Mortgage loans held for sale	2,448,908	—	2,448,908
	<u>\$ 182,282,750</u>	<u>\$ 81,214,629</u>	<u>\$ 263,497,379</u>
Subserviced for the Company (1)	<u>\$ 319,772</u>	<u>\$ —</u>	<u>\$ 319,772</u>
Delinquent mortgage loans:			
30 days	\$ 4,755,968	\$ 406,645	\$ 5,162,613
60 days	1,388,516	99,027	1,487,543
90 days or more:			
Not in foreclosure	3,110,052	353,653	3,463,705
In foreclosure	893,302	164,000	1,057,302
Foreclosed	44,394	216,052	260,446
	<u>\$ 10,192,232</u>	<u>\$ 1,239,377</u>	<u>\$ 11,431,609</u>
Bankruptcy	<u>\$ 1,214,891</u>	<u>\$ 124,107</u>	<u>\$ 1,338,998</u>
Custodial funds managed by the Company (2)	<u>\$ 3,833,295</u>	<u>\$ 1,184,620</u>	<u>\$ 5,017,915</u>

(1) Certain of the mortgage loans serviced by the Company are subserviced on the Company's behalf by other mortgage loan servicers on a transitional basis when the Company has purchased the rights to service the loans but servicing of the loans has not yet been transferred to the Company's servicing system.

(2) Custodial funds include borrower and investor custodial cash accounts relating to mortgage loans serviced under 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.

	December 31, 2017		
	Servicing rights owned	Contract servicing and subserving (in thousands)	Total mortgage loans serviced
Investor:			
Non-affiliated entities:			
Originated	\$ 120,853,138	\$ —	\$ 120,853,138
Purchased	47,016,708	—	47,016,708
	<u>167,869,846</u>	<u>—</u>	<u>167,869,846</u>
Advised Entities	—	74,980,268	74,980,268
Mortgage loans held for sale	2,998,377	—	2,998,377
	<u>\$ 170,868,223</u>	<u>\$ 74,980,268</u>	<u>\$ 245,848,491</u>
Delinquent mortgage loans:			
30 days	\$ 5,326,710	\$ 515,922	\$ 5,842,632
60 days	1,935,216	215,957	2,151,173
90 days or more:			
Not in foreclosure	3,690,159	541,945	4,232,104
In foreclosure	916,614	293,835	1,210,449
Foreclosed	41,244	278,890	320,134
	<u>\$ 11,909,943</u>	<u>\$ 1,846,549</u>	<u>\$ 13,756,492</u>
Bankruptcy	<u>\$ 1,046,969</u>	<u>\$ 176,324</u>	<u>\$ 1,223,293</u>
Custodial funds managed by the Company (1)	<u>\$ 3,267,279</u>	<u>\$ 901,041</u>	<u>\$ 4,168,320</u>

(1) Custodial funds include borrower and investor custodial cash accounts relating to mortgage loans serviced under 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.

Following is a summary of the geographical distribution of mortgage loans included in the Company's mortgage loan servicing portfolio for the top five and all other states as measured by UPB:

State	June 30, 2018	December 31, 2017
	(in thousands)	
California	\$ 48,100,011	\$ 45,621,369
Texas	21,041,435	19,741,970
Florida	19,258,138	17,490,194
Virginia	17,205,597	16,210,673
Maryland	12,423,212	11,350,939
All other states	145,468,986	135,433,346
	<u>\$ 263,497,379</u>	<u>\$ 245,848,491</u>

Note 6—Fair Value

Most of the Company's assets and certain of its liabilities are measured based on their fair values. The application of fair value may be on a recurring or nonrecurring basis depending on the accounting principles applicable to the specific asset or liability and whether management 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 an 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 and liabilities, interest rates, prepayment speeds, credit risk and other inputs.
- Level 3—Prices determined using significant unobservable inputs. In situations where 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 an asset or liability, 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 Company 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 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

Management identified all of its non-cash financial assets other than *Assets purchased from PennyMac Mortgage Investment Trust under agreements to resell* and *Mortgage servicing liabilities* ("MSLs") to be accounted for at fair value so changes in fair value will be reflected in income as they occur and more timely reflect the results of the Company's performance. Management has also identified its ESS to be accounted for at fair value as a means of hedging the related MSR's fair value risk. Beginning January 1, 2018, the Company accounts for all MSRs at fair value. Before January 1, 2018, 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.

Assets and Liabilities Measured at Fair Value on a Recurring Basis

Following is a summary of assets and liabilities that are measured at fair value on a recurring basis:

	June 30, 2018			Total
	Level 1	Level 2	Level 3	
(in thousands)				
Assets:				
Short-term investments	\$ 98,571	\$ —	\$ —	\$ 98,571
Mortgage loans held for sale at fair value	—	2,193,065	334,166	2,527,231
Derivative assets:				
Interest rate lock commitments	—	—	58,370	58,370
Repurchase agreement derivatives	—	—	25,781	25,781
Forward purchase contracts	—	11,450	—	11,450
Forward sales contracts	—	1,256	—	1,256
MBS put options	—	844	—	844
Put options on interest rate futures purchase contracts	772	—	—	772
Call options on interest rate futures purchase contracts	2,117	—	—	2,117
Total derivative assets before netting	2,889	13,550	84,151	100,590
Netting	—	—	—	(8,119)
Total derivative assets	2,889	13,550	84,151	92,471
Investment in PennyMac Mortgage Investment Trust	1,424	—	—	1,424
Mortgage servicing rights at fair value	—	—	2,486,157	2,486,157
	<u>\$ 102,884</u>	<u>\$ 2,206,615</u>	<u>\$ 2,904,474</u>	<u>\$ 5,205,854</u>
Liabilities:				
Excess servicing spread financing at fair value payable to PennyMac Mortgage Investment Trust	\$ —	\$ —	\$ 229,470	\$ 229,470
Derivative liabilities:				
Interest rate lock commitments	—	—	2,681	2,681
Forward purchase contracts	—	377	—	377
Forward sales contracts	—	12,720	—	12,720
Total derivative liabilities before netting	—	13,097	2,681	15,778
Netting	—	—	—	(11,684)
Total derivative liabilities	—	13,097	2,681	4,094
Mortgage servicing liabilities at fair value	—	—	10,253	10,253
	<u>\$ —</u>	<u>\$ 13,097</u>	<u>\$ 242,404</u>	<u>\$ 243,817</u>

	December 31, 2017			
	Level 1	Level 2	Level 3	Total
	(in thousands)			
Assets:				
Short-term investments	\$ 170,080	\$ —	\$ —	\$ 170,080
Mortgage loans held for sale at fair value	—	2,316,892	782,211	3,099,103
Derivative assets:				
Interest rate lock commitments	—	—	60,012	60,012
Repurchase agreement derivatives	—	—	10,656	10,656
Forward purchase contracts	—	4,288	—	4,288
Forward sales contracts	—	2,101	—	2,101
MBS put options	—	3,481	—	3,481
Put options on interest rate futures purchase contracts	3,570	—	—	3,570
Call options on interest rate futures purchase contracts	938	—	—	938
Total derivative assets before netting	4,508	9,870	70,668	85,046
Netting	—	—	—	(6,867)
Total derivative assets	4,508	9,870	70,668	78,179
Investment in PennyMac Mortgage Investment Trust	1,205	—	—	1,205
Mortgage servicing rights at fair value	—	—	638,010	638,010
	<u>\$ 175,793</u>	<u>\$ 2,326,762</u>	<u>\$ 1,490,889</u>	<u>\$ 3,986,577</u>
Liabilities:				
Excess servicing spread financing at fair value payable to PennyMac Mortgage Investment Trust	\$ —	\$ —	\$ 236,534	\$ 236,534
Derivative liabilities:				
Interest rate lock commitments	—	—	1,740	1,740
Forward purchase contracts	—	1,272	—	1,272
Forward sales contracts	—	7,031	—	7,031
Total derivative liabilities before netting	—	8,303	1,740	10,043
Netting	—	—	—	(4,247)
Total derivative liabilities	—	8,303	1,740	5,796
Mortgage servicing liabilities at fair value	—	—	14,120	14,120
	<u>\$ —</u>	<u>\$ 8,303</u>	<u>\$ 252,394</u>	<u>\$ 256,450</u>

As shown above, all or a portion of the Company's mortgage loans held for sale, Interest Rate Lock Commitments ("IRLCs"), repurchase agreement derivatives, MSRs at fair value, ESS at fair value and MSLS are measured using Level 3 fair value inputs. Following are roll forwards of these items for each of the quarters and six months ended June 30, 2018 and 2017:

	Quarter ended June 30, 2018				Total
	Mortgage loans held for sale	Net interest rate lock commitments (1)	Repurchase agreement derivatives (in thousands)	Mortgage servicing rights	
Assets:					
Balance, March 31, 2018	\$ 460,399	\$ 50,896	\$ 20,974	\$ 2,354,489	\$ 2,886,758
Purchases and issuances, net	824,592	50,330	12,970	2,523	890,415
Sales and repayments	(286,433)	—	(7,471)	—	(293,904)
Mortgage servicing rights resulting from mortgage loan sales	—	—	—	155,694	155,694
Changes in fair value included in income arising from:					
Changes in instrument-specific credit risk	3,727	—	—	—	3,727
Other factors	—	5,590	(692)	(26,549)	(21,651)
	<u>3,727</u>	<u>5,590</u>	<u>(692)</u>	<u>(26,549)</u>	<u>(17,924)</u>
Transfers from Level 3 to Level 2	(665,298)	—	—	—	(665,298)
Transfers to real estate acquired in settlement of loans	(2,821)	—	—	—	(2,821)
Transfers of interest rate lock commitments to mortgage loans held for sale	—	(51,127)	—	—	(51,127)
Balance, June 30, 2018	<u>\$ 334,166</u>	<u>\$ 55,689</u>	<u>\$ 25,781</u>	<u>\$ 2,486,157</u>	<u>\$ 2,901,793</u>
Changes in fair value recognized during the quarter relating to assets still held at June 30, 2018	<u>\$ (3,584)</u>	<u>\$ 55,689</u>	<u>\$ —</u>	<u>\$ (26,549)</u>	<u>\$ 25,556</u>

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

	Quarter ended June 30, 2018		
	Excess servicing spread financing	Mortgage servicing liabilities (in thousands)	Total
Liabilities:			
Balance, March 31, 2018	\$ 236,002	\$ 12,063	\$ 248,065
Issuance of excess servicing spread financing pursuant to a recapture agreement with PennyMac Mortgage Investment Trust	580	—	580
Accrual of interest	3,910	—	3,910
Repayments	(12,018)	—	(12,018)
Mortgage servicing liabilities resulting from mortgage loan sales	—	1,770	1,770
Changes in fair value included in income	996	(3,580)	(2,584)
Balance, June 30, 2018	<u>\$ 229,470</u>	<u>\$ 10,253</u>	<u>\$ 239,723</u>
Changes in fair value recognized during the quarter relating to liabilities still outstanding at June 30, 2018	<u>\$ 996</u>	<u>\$ (3,580)</u>	<u>\$ (2,584)</u>

	Quarter ended June 30, 2017			Total
	Mortgage loans held for sale	Net interest rate lock commitments (1)	Mortgage servicing rights	
	(in thousands)			
Assets:				
Balance, March 31, 2017	\$ 327,682	\$ 66,007	\$ 506,916	\$ 900,605
Purchases	625,492	—	183,586	809,078
Sales and repayments	(264,558)	—	—	(264,558)
Interest rate lock commitments issued, net	—	71,062	—	71,062
Mortgage servicing rights resulting from mortgage loan sales	—	—	7,945	7,945
Changes in fair value included in income arising from:				
Changes in instrument-specific credit risk	(3,046)	—	—	(3,046)
Other factors	—	32,613	(20,006)	12,607
	<u>(3,046)</u>	<u>32,613</u>	<u>(20,006)</u>	<u>9,561</u>
Transfers from Level 3 to Level 2	(305,486)	—	—	(305,486)
Transfers of interest rate lock commitments to mortgage loans held for sale	—	(123,524)	—	(123,524)
Balance, June 30, 2017	<u>\$ 380,084</u>	<u>\$ 46,158</u>	<u>\$ 678,441</u>	<u>\$ 1,104,683</u>
Changes in fair value recognized during the quarter relating to assets still held at June 30, 2017	<u>\$ (3,042)</u>	<u>\$ 46,158</u>	<u>\$ (20,006)</u>	<u>\$ 23,110</u>

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

	Quarter ended June 30, 2017		
	Excess servicing spread financing	Mortgage servicing liabilities	Total
	(in thousands)		
Liabilities:			
Balance, March 31, 2017	\$ 277,484	\$ 15,994	\$ 293,478
Issuance of excess servicing spread financing pursuant to a recapture agreement with PennyMac Mortgage Investment Trust	1,380	—	1,380
Accrual of interest	4,366	—	4,366
Repayments	(14,278)	—	(14,278)
Mortgage servicing liabilities resulting from mortgage loan sales	—	3,810	3,810
Changes in fair value included in income	(7,156)	(1,509)	(8,665)
Balance, June 30, 2017	<u>\$ 261,796</u>	<u>\$ 18,295</u>	<u>\$ 280,091</u>
Changes in fair value recognized during the quarter relating to liabilities still outstanding at June 30, 2017	<u>\$ (7,156)</u>	<u>\$ (1,509)</u>	<u>\$ (8,665)</u>

	Six months ended June 30, 2018				
	Mortgage loans held for sale	Net interest rate lock commitments (1)	Repurchase agreement derivatives (in thousands)	Mortgage servicing rights	Total
Assets:					
Balance, December 31, 2017	\$ 782,211	\$ 58,272	\$ 10,656	\$ 638,010	\$ 1,489,149
Reclassification of mortgage servicing rights previously accounted for under the amortization method pursuant to a change in accounting principle	—	—	—	1,482,426	1,482,426
Balance, January 1, 2018	782,211	58,272	10,656	2,120,436	2,971,575
Purchases and issuances, net	1,471,861	115,928	23,721	30,129	1,641,639
Sales and repayments	(890,527)	—	(7,478)	—	(898,005)
Mortgage servicing rights resulting from mortgage loan sales	—	—	—	299,604	299,604
Changes in fair value included in income arising from:					
Changes in instrument-specific credit risk	(5,028)	—	—	—	(5,028)
Other factors	—	(39,323)	(1,118)	35,988	(4,453)
	(5,028)	(39,323)	(1,118)	35,988	(9,481)
Transfers from Level 3 to Level 2	(1,021,530)	—	—	—	(1,021,530)
Transfers to real estate acquired in settlement of loans	(2,821)	—	—	—	(2,821)
Transfers of interest rate lock commitments to mortgage loans held for sale	—	(79,188)	—	—	(79,188)
Balance, June 30, 2018	<u>\$ 334,166</u>	<u>\$ 55,689</u>	<u>\$ 25,781</u>	<u>\$ 2,486,157</u>	<u>\$ 2,901,793</u>
Changes in fair value recognized during the period relating to assets still held at June 30, 2018	<u>\$ (5,061)</u>	<u>\$ 55,689</u>	<u>\$ —</u>	<u>\$ 35,988</u>	<u>\$ 86,616</u>

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

	Six months ended June 30, 2018		
	Excess servicing spread financing	Mortgage servicing liabilities (in thousands)	Total
Liabilities:			
Balance, December 31, 2017	\$ 236,534	\$ 14,120	\$ 250,654
Issuance of excess servicing spread financing pursuant to a recapture agreement with PennyMac Mortgage Investment Trust	1,484	—	1,484
Accrual of interest	7,844	—	7,844
Repayments	(24,309)	—	(24,309)
Mortgage servicing liabilities resulting from mortgage loan sales	—	3,807	3,807
Changes in fair value included in income	7,917	(7,674)	243
Balance, June 30, 2018	<u>\$ 229,470</u>	<u>\$ 10,253</u>	<u>\$ 239,723</u>
Changes in fair value recognized during the period relating to liabilities still outstanding at June 30, 2018	<u>\$ 7,917</u>	<u>\$ (7,674)</u>	<u>\$ 243</u>

	Six months ended June 30, 2017			
	Mortgage loans held for sale	Net interest rate lock commitments (1)	Mortgage servicing rights	Total
	(in thousands)			
Assets:				
Balance December 31, 2016	\$ 47,271	\$ 59,391	\$ 515,925	\$ 622,587
Purchases	1,315,963	—	183,789	1,499,752
Sales and repayments	(538,860)	—	—	(538,860)
Interest rate lock commitments issued, net	—	142,819	—	142,819
Mortgage servicing rights resulting from mortgage loan sales	—	—	13,929	13,929
Changes in fair value included in income arising from:				
Changes in instrument-specific credit risk	(4,974)	—	—	(4,974)
Other factors	—	57,732	(35,202)	22,530
	<u>(4,974)</u>	<u>57,732</u>	<u>(35,202)</u>	<u>17,556</u>
Transfers from Level 3 to Level 2	(439,316)	—	—	(439,316)
Transfers of interest rate lock commitments to mortgage loans held for sale	—	(213,784)	—	(213,784)
Balance, June 30, 2017	<u>\$ 380,084</u>	<u>\$ 46,158</u>	<u>\$ 678,441</u>	<u>\$ 1,104,683</u>
Changes in fair value recognized during the year relating to assets still held at June 30, 2017	<u>\$ (4,620)</u>	<u>\$ 46,158</u>	<u>\$ (35,202)</u>	<u>\$ 6,336</u>

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

	Six months ended June 30, 2017		
	Excess servicing spread financing	Mortgage servicing liabilities	Total
	(in thousands)		
Liabilities:			
Balance December 31, 2016	\$ 288,669	\$ 15,192	\$ 303,861
Issuance of excess servicing spread financing pursuant to a recapture agreement with PennyMac Mortgage Investment Trust	2,953	—	2,953
Accrual of interest	9,013	—	9,013
Repayments	(28,910)	—	(28,910)
Mortgage servicing liabilities resulting from mortgage loan sales	—	7,869	7,869
Mortgage servicing liabilities assumed	—	—	—
Changes in fair value included in income	(9,929)	(4,766)	(14,695)
Balance, June 30, 2017	<u>\$ 261,796</u>	<u>\$ 18,295</u>	<u>\$ 280,091</u>
Changes in fair value recognized during the year relating to liabilities still outstanding at June 30, 2017	<u>\$ (9,929)</u>	<u>\$ (4,766)</u>	<u>\$ (14,695)</u>

The information used in the preceding roll forwards represents activity for assets and liabilities measured at fair value on a recurring basis and identified as using “Level 3” significant fair value inputs at either the beginning or the end of the periods presented. The Company had transfers among the fair value levels arising from transfers of IRLCs to mortgage loans held for sale at fair value upon purchase or funding of the respective mortgage loans and from the return to salability in the active secondary market of certain mortgage loans held for sale.

Assets and Liabilities Measured at Fair Value under the Fair Value Option

Net changes in fair values included in income for assets and liabilities carried at fair value as a result of management's election of the fair value option by income statement line item are summarized below:

	Quarter ended June 30,					
	2018			2017		
	Net gains on mortgage loans held for sale at fair value	Net mortgage loan servicing fees	Total	Net gains on mortgage loans held for sale at fair value	Net mortgage loan servicing fees	Total
	(in thousands)					
Assets:						
Mortgage loans held for sale at fair value	\$ 56,861	\$ —	\$ 56,861	\$ 123,657	\$ —	\$ 123,657
Mortgage servicing rights at fair value	—	(26,549)	(26,549)	—	(20,006)	(20,006)
	<u>\$ 56,861</u>	<u>\$ (26,549)</u>	<u>\$ 30,312</u>	<u>\$ 123,657</u>	<u>\$ (20,006)</u>	<u>\$ 103,651</u>
Liabilities:						
Excess servicing spread financing at fair value payable to PennyMac Mortgage Investment Trust	\$ —	\$ (996)	\$ (996)	\$ —	\$ 7,156	\$ 7,156
Mortgage servicing liabilities at fair value	—	3,580	3,580	—	1,509	1,509
	<u>\$ —</u>	<u>\$ 2,584</u>	<u>\$ 2,584</u>	<u>\$ —</u>	<u>\$ 8,665</u>	<u>\$ 8,665</u>

	Six months ended June 30,					
	2018			2017		
	Net gains on mortgage loans held for sale at fair value	Net mortgage loan servicing fees	Total	Net gains on mortgage loans held for sale at fair value	Net mortgage loan servicing fees	Total
	(in thousands)					
Assets:						
Mortgage loans held for sale at fair value	\$ 50,743	\$ —	\$ 50,743	\$ 205,967	\$ —	\$ 205,967
Mortgage servicing rights at fair value	—	35,988	35,988	—	(35,202)	(35,202)
	<u>\$ 50,743</u>	<u>\$ 35,988</u>	<u>\$ 86,731</u>	<u>\$ 205,967</u>	<u>\$ (35,202)</u>	<u>\$ 170,765</u>
Liabilities:						
Excess servicing spread financing at fair value payable to PennyMac Mortgage Investment Trust	\$ —	\$ (7,917)	\$ (7,917)	\$ —	\$ 9,929	\$ 9,929
Mortgage servicing liabilities at fair value	—	7,674	7,674	—	4,766	4,766
	<u>\$ —</u>	<u>\$ (243)</u>	<u>\$ (243)</u>	<u>\$ —</u>	<u>\$ 14,695</u>	<u>\$ 14,695</u>

Following are the fair value and related principal amounts due upon maturity of assets accounted for under the fair value option:

	June 30, 2018			December 31, 2017		
	Fair value	Principal amount due upon maturity	Difference	Fair value	Principal amount due upon maturity	Difference
	(in thousands)					
Mortgage loans held for sale:						
Current through 89 days delinquent	\$ 2,272,208	\$ 2,187,924	\$ 84,284	\$ 2,430,517	\$ 2,326,772	\$ 103,745
90 days or more delinquent:						
Not in foreclosure	201,899	204,529	(2,630)	614,329	614,357	(28)
In foreclosure	53,124	56,455	(3,331)	54,257	57,248	(2,991)
	<u>\$ 2,527,231</u>	<u>\$ 2,448,908</u>	<u>\$ 78,323</u>	<u>\$ 3,099,103</u>	<u>\$ 2,998,377</u>	<u>\$ 100,726</u>

Assets Measured at Fair Value on a Nonrecurring Basis

Following is a summary of assets and liabilities that were measured at fair value on a nonrecurring basis during the periods presented:

	June 30, 2018			
	Level 1	Level 2	Level 3	Total
	(in thousands)			
Real estate acquired in settlement of loans	\$ —	\$ —	\$ 2,036	\$ 2,036

	December 31, 2017			
	Level 1	Level 2	Level 3	Total
	(in thousands)			
Mortgage servicing rights at lower of amortized cost or fair value	\$ —	\$ —	\$ 1,463,552	\$ 1,463,552
Real estate acquired in settlement of loans	—	—	2,355	2,355
	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 1,465,907</u>	<u>\$ 1,465,907</u>

The following table summarizes the total gains (losses) on assets measured at fair value on a nonrecurring basis:

	Quarter ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	(in thousands)			
Mortgage servicing rights at lower of amortized cost or fair value	\$ —	\$ (30,635)	\$ —	\$ (16,636)
Real estate acquired in settlement of loans	(26)	(73)	(42)	(105)
	<u>\$ (26)</u>	<u>\$ (30,708)</u>	<u>\$ (42)</u>	<u>\$ (16,741)</u>

Fair Value of Financial Instruments Carried at Amortized Cost

The Company's *Assets purchased from PennyMac Mortgage Investment Trust under agreements to resell, Assets sold under agreements to repurchase, Mortgage loan participation purchase and sale agreements, Notes payable, and Obligations under capital lease* are carried at amortized cost. These assets and liabilities' fair values do not have observable inputs and the fair value is measured using management's estimate of fair value, where the inputs into the determination of fair value require significant management judgment or estimation. Accordingly, the Company has classified these financial instruments as "Level 3" fair value assets and liabilities and has concluded that those assets and liabilities' fair values approximate the carrying value due to their short terms and/or variable interest rates.

Valuation Techniques and Inputs

Most of the Company's financial assets, and all of its MSRs, ESS, derivative liabilities and MSLs, are carried at fair value with changes in fair value recognized in current period income. Certain of the Company's financial assets and all of its MSRs, ESS and MSLs are "Level 3" fair value assets and liabilities which require the use of unobservable inputs that are significant to the estimation of the items' fair values. Unobservable inputs reflect the Company'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, management has assigned the responsibility for estimating the fair value of these items to specialized staff and subjects the valuation process to significant senior management oversight. The Company's Financial Analysis and Valuation group (the "FAV group") is the Company's specialized staff responsible for estimating the fair values of "Level 3" fair value assets and liabilities other than IRLCs.

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

The FAV group is responsible for reporting to the Company's senior management 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.

With respect to IRLCs, the Company has assigned responsibility for developing fair values to its Capital Markets Risk Management staff. The fair values developed by the Capital Markets Risk Management staff are reviewed by the Company's Capital Markets Operations group.

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 Loans Held for Sale

Most of the Company's mortgage loans held for sale at fair value are saleable into active markets and are therefore categorized as "Level 2" fair value assets and their fair values are determined using their quoted market or contracted selling price or market price equivalent.

Certain of the Company's mortgage loans held for sale are not saleable into active markets and are therefore categorized as "Level 3" fair value assets. Mortgage loans held for sale categorized as "Level 3" fair value assets include:

- Certain delinquent government guaranteed or insured mortgage loans purchased by the Company from Ginnie Mae guaranteed pools in its mortgage loan servicing portfolio. The Company's right to purchase delinquent government guaranteed or insured mortgage loans arises as the result of the borrower's failure to make payments for at least three consecutive months preceding the month of repurchase by the Company and provides an alternative to the Company's obligation to continue advancing principal and interest at the coupon rate of the related Ginnie Mae security. Such repurchased mortgage loans may be resold to third-party investors and thereafter may be repurchased to the extent they become eligible for resale into a new Ginnie Mae guaranteed pool. Government guaranteed mortgage loans generally become eligible for resale when the repurchased mortgage loans become current either through the borrower's reperformance or through completion of a modification of the mortgage loan's terms.

- Certain of the Company’s mortgage loans held for sale that become non-saleable into active markets due to identification of a defect by the Company or to the repurchase by the Company of a mortgage loan with an identified defect.

The Company uses a discounted cash flow model to estimate the fair value of its “Level 3” fair value mortgage loans held for sale at fair value. The significant unobservable inputs used in the fair value measurement of the Company’s “Level 3” fair value mortgage loans held for sale at fair value are discount rates, home price projections, voluntary prepayment/resale speeds and total prepayment 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.

Following is a quantitative summary of key “Level 3” fair value inputs used in the valuation of mortgage loans held for sale at fair value:

Key inputs	June 30, 2018	December 31, 2017
Discount rate:		
Range	2.8% – 7.9%	2.9% – 10.0%
Weighted average	2.8%	2.9%
Twelve-month projected housing price index change:		
Range	2.8% – 4.9%	3.1% – 5.6%
Weighted average	3.5%	3.6%
Voluntary prepayment / resale speed (1):		
Range	0.2% – 73.3%	0.2% – 72.2%
Weighted average	29.5%	44.6%
Total prepayment speed (2):		
Range	0.2% – 75.8%	0.2% – 75.2%
Weighted average	44.5%	55.8%

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

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

Changes in fair value attributable to changes in instrument specific credit risk are measured by reference to 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. Changes in fair value of mortgage loans held for sale are included in *Net gains on mortgage loans held for sale at fair value* in the Company’s consolidated statements of income.

Derivative Financial Instruments

Interest Rate Lock Commitments

The Company categorizes IRLCs as a “Level 3” fair value asset or liability. The Company estimates the fair value of an IRLC based on quoted Agency MBS prices, its estimate of the fair value of the MSR it expects to receive in the sale of the mortgage loans and the probability that the mortgage loan will fund or be purchased (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, could result in significant changes in the IRLCs’ fair value measurement. 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 increase the pull-through rate for the mortgage loan principal and interest payment cash flow component, which has decreased in fair value. Changes in fair value of IRLCs are included in *Net gains on mortgage loans acquired for sale at fair value* and may be allocated to *Net mortgage loan servicing fees – Amortization, impairment and change in fair value of mortgage servicing rights and mortgage servicing liabilities* as a hedge of the fair value of MSRs in the consolidated statements of income when it is included as a component of the Company’s MSR hedging strategy.

Following is a quantitative summary of key “Level 3” fair value inputs used in the valuation of IRLCs:

Key inputs	June 30, 2018	December 31, 2017
Pull-through rate:		
Range	27.2% – 100%	25.0% – 100%
Weighted average	84.9%	85.6%
Mortgage servicing rights value expressed as:		
Servicing fee multiple:		
Range	1.4 – 5.7	1.4 – 5.8
Weighted average	3.9	4.0
Percentage of unpaid principal balance:		
Range	0.4% – 2.7%	0.3% – 3.0%
Weighted average	1.3%	1.4%

Hedging Derivatives

Fair value of exchange-traded hedging derivative financial instruments are categorized by the Company as “Level 1” fair value assets and liabilities. Fair value of hedging derivative financial instruments based on observable MBS prices or interest rate volatilities in the MBS market are categorized as “Level 2” fair value assets and liabilities. Changes in the fair value of hedging derivatives are included in *Net gains on mortgage loans acquired for sale at fair value*, or *Net mortgage loan servicing fees – Amortization, impairment and change in fair value of mortgage servicing rights and mortgage servicing liabilities*, as applicable, in the consolidated statements of income.

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 for financial reporting purposes as embedded derivatives and are accounted for separate from the master repurchase agreement. The Company classifies these derivatives as “Level 3” fair value assets. The significant unobservable input into the valuation of these derivative assets is the ratio of derivative value to the outstanding receivable, which represents a discount for the time value of money and the Company’s 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 June 30, 2018 and December 31, 2017.

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. This approach consists of projecting net servicing cash flows discounted at a rate that management believes market participants would use in their determinations of fair value. The key inputs used in the estimation of the fair value of MSRs include the applicable pricing spread (discount rate), the prepayment rates of the underlying mortgage loans, and the per-loan annual cost to service the respective mortgage loans. Changes in the fair value of MSRs are included in *Net mortgage loan servicing fees—Amortization, impairment and change in fair value of mortgage servicing rights and mortgage servicing liabilities* in the consolidated statements of income. Through December 31, 2017, the Company accounted for certain of its MSRs using the amortization method. Beginning January 1, 2018 and prospectively, the Company accounts for all MSRs at fair value.

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

	Quarter ended June 30,		
	2018	2017	
	Fair value	Fair value	Amortized cost
(Amount recognized and unpaid principal balance of underlying mortgage loans in thousands)			
MSR and pool characteristics:			
Amount recognized	\$ 155,694	\$ 7,945	\$ 128,927
Unpaid principal balance of underlying mortgage loans	\$ 11,142,743	\$ 795,875	\$ 11,005,607
Weighted average servicing fee rate (in basis points)	36	29	30
Key inputs:			
Pricing spread (1)			
Range	7.3% – 13.8%	7.6% – 11.0%	7.6% – 15.2%
Weighted average	10.2%	10.4%	10.7%
Annual total prepayment speed (2)			
Range	4.0% – 61.8%	4.2% – 71.8%	4.0% – 45.7%
Weighted average	10.9%	12.9%	9.7%
Life (in years)			
Range	1.1 – 11.5	0.8 – 11.5	1.6 – 11.7
Weighted average	7.3	6.5	7.7
Per-loan annual cost of servicing			
Range	\$78 – \$98	\$78 – \$98	\$79 – \$98
Weighted average	\$90	\$88	\$89

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

	Six months ended June 30,		
	2018	2017	
	Fair value	Fair value	Amortized cost
(Amount recognized and unpaid principal balance of underlying mortgage loans in thousands)			
MSR and pool characteristics:			
Amount recognized	\$299,604	\$13,929	\$259,145
Unpaid principal balance of underlying mortgage loans	\$21,305,059	\$1,299,940	\$21,706,206
Weighted average servicing fee rate (in basis points)	35	30	29
Key inputs:			
Pricing spread (1)			
Range	7.3% – 14.1%	7.6% – 11.0%	7.6% – 15.2%
Weighted average	10.3%	10.5%	10.7%
Annual total prepayment speed (2)			
Range	3.9% – 61.8%	4.2% – 71.8%	3.4% – 45.7%
Weighted average	9.9%	12.1%	9.0%
Life (in years)			
Range	1.1 – 11.6	0.8 – 11.5	1.6 – 12.2
Weighted average	7.7	6.7	8.0
Per-loan annual cost of servicing			
Range	\$78 – \$98	\$78 – \$101	\$79 – \$101
Weighted average	\$90	\$89	\$90

- (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 LIBOR curve for purposes of discounting cash flows relating to MSRs.
- (2) Prepayment speed is measured using Life Total CPR.

Following is a quantitative summary of key inputs used in the valuation and assessment for impairment of the Company's MSR's as of the dates presented and the effect on fair value from adverse changes in those inputs (weighted averages are based upon UPB):

	<u>June 30, 2018</u>	<u>December 31, 2017</u>	
	<u>Fair value</u>	<u>Fair value</u>	<u>Amortized cost</u>
	<u>(Carrying value, unpaid principal balance of underlying mortgage loans and effect on fair value amounts in thousands)</u>		
MSR and pool characteristics:			
Carrying value	\$2,486,157	\$638,010	\$1,481,578
Unpaid principal balance of underlying mortgage loans	\$178,264,241	\$51,883,539	\$114,365,698
Weighted average note interest rate	3.9%	4.0%	3.8%
Weighted average servicing fee rate (in basis points)	32	32	31
Key inputs:			
Pricing spread (1):			
Range	7.3% – 13.7%	7.6% – 14.1%	7.6% – 14.1%
Weighted average	9.9%	9.8%	10.3%
Effect on fair value of (2):			
5% adverse change	(\$44,840)	(\$10,760)	(\$27,700)
10% adverse change	(\$88,081)	(\$21,155)	(\$54,376)
20% adverse change	(\$170,079)	(\$40,916)	(\$104,869)
Prepayment speed (3):			
Range	7.1% – 74.6%	7.9% – 46.2%	7.4% – 44.1%
Weighted average	8.7%	10.5%	9.7%
Average life (in years):			
Range	0.6 – 8.3	1.2 – 7.8	2.0 – 8.3
Weighted average	7.8	6.6	7.5
Effect on fair value of (2):			
5% adverse change	(\$34,318)	(\$10,809)	(\$23,544)
10% adverse change	(\$67,530)	(\$21,239)	(\$46,284)
20% adverse change	(\$130,851)	(\$41,038)	(\$89,514)
Annual per-loan cost of servicing:			
Range	\$78 – \$98	\$78 – \$97	\$79 – \$97
Weighted average	\$90	\$89	\$89
Effect on fair value of (2):			
5% adverse change	(\$19,703)	(\$6,247)	(\$11,216)
10% adverse change	(\$39,407)	(\$12,494)	(\$22,431)
20% adverse change	(\$78,813)	(\$24,987)	(\$44,863)

- (1) The Company applies a pricing spread to the United States Dollar LIBOR curve for purposes of discounting cash flows relating to MSR's.
- (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 reduction in fair value which will be recognized 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 at a particular point in time; only contemplate the movements in the indicated inputs; do not incorporate changes 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 management to account for changing circumstances. For these reasons, the preceding estimates should not be viewed as earnings forecasts.

Excess Servicing Spread Financing at Fair Value

The Company categorizes ESS as a “Level 3” fair value liability. Because the ESS is a claim to a portion of the cash flows from MSRs, the fair value measurement of the ESS is similar to that of MSRs. The Company uses the same discounted cash flow approach to measuring the ESS as it uses to measure MSRs except that certain inputs relating to the cost to service the mortgage loans underlying the MSR and certain ancillary income are not included as these cash flows do not accrue to the holder of the ESS. The key inputs used in the estimation of ESS fair value include pricing spread (discount rate) and prepayment speed. Significant changes to either of those inputs in isolation could result in a significant change in the fair value of ESS. Changes in these key inputs are not necessarily directly related.

ESS is generally subject to fair value increases when mortgage interest rates increase. Increasing mortgage interest rates normally slow mortgage refinancing activity. Decreased refinancing activity increases the life of the mortgage loans underlying the ESS, thereby increasing its fair value. Changes in the fair value of ESS are included in *Net mortgage loan servicing fees—Change in fair value of excess servicing spread payable to PennyMac Mortgage Investment Trust*.

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

	June 30, 2018	December 31, 2017
Carrying value (in thousands)	\$229,470	\$236,534
ESS and pool characteristics:		
Unpaid principal balance of underlying mortgage loans (in thousands)	\$25,123,598	\$27,217,199
Average servicing fee rate (in basis points)	34	34
Average excess servicing spread (in basis points)	19	19
Key inputs:		
Pricing spread (1):		
Range	3.4% – 3.9%	3.8% – 4.3%
Weighted average	3.7%	4.1%
Annualized prepayment speed (2):		
Range	7.9% – 75.3%	8.4% – 41.4%
Weighted average	9.5%	10.8%
Average life (in years):		
Range	0.6 – 7.9	1.4 – 7.7
Weighted average	6.9	6.5

- (1) The Company applies a pricing spread to the United States Dollar LIBOR curve for purposes of discounting cash flows relating to ESS.
- (2) Prepayment speed is measured using Life Total CPR.

Mortgage Servicing Liabilities

MSLs are categorized as “Level 3” fair value liabilities. The Company uses a discounted cash flow approach to estimate the fair value of MSLs. This approach consists of projecting net servicing cash flows discounted at a rate that management believes market participants would use in their determinations of fair value. The key inputs used in the estimation of the fair value of MSLs include the applicable pricing spread (discount rate), the prepayment rates of the underlying mortgage loans, and the per-loan annual cost to service the respective mortgage loans. Changes in the fair value of MSLs are included in *Net servicing fees—Amortization, impairment and change in fair value of mortgage servicing rights and mortgage servicing liabilities* in the consolidated statements of income.

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

	June 30, 2018	December 31, 2017
MSL and pool characteristics:		
Carrying value (in thousands)	\$ 10,253	\$ 14,120
Unpaid principal balance of underlying mortgage loans (in thousands)	\$ 1,569,602	\$ 1,620,609
Weighted average servicing fee rate (in basis points)	25	25
Key inputs:		
Pricing spread (1)	8.5%	7.7%
Prepayment speed (2)	29.1%	32.9%
Average life (in years)	4.2	3.5
Annual per-loan cost of servicing	\$ 374	\$ 404

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

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

Note 7—Mortgage Loans Held for Sale at Fair Value

Mortgage loans held for sale at fair value include the following:

	June 30, 2018	December 31, 2017
	(in thousands)	
Government-insured or guaranteed	\$ 2,059,692	\$ 2,085,764
Conventional conforming	133,373	231,128
Purchased from Ginnie Mae pools serviced by the Company	328,233	777,300
Repurchased pursuant to representations and warranties	5,933	4,911
	<u>\$ 2,527,231</u>	<u>\$ 3,099,103</u>
Fair value of mortgage loans pledged to secure:		
Assets sold under agreements to repurchase	\$ 1,947,689	\$ 2,530,299
Mortgage loan participation purchase and sale agreements	550,894	551,688
	<u>\$ 2,498,583</u>	<u>\$ 3,081,987</u>

Note 8—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 or originate a mortgage loan acquired for sale.
- Derivatives that are embedded in a master repurchase agreement that provides for the Company to receive incentives for financing mortgage loans that satisfy certain consumer relief characteristics under the master repurchase agreement.

The Company also engages in interest rate risk management activities in an effort to reduce the variability of earnings caused by changes in market interest rates. To manage this fair value risk resulting from interest rate risk, the Company uses derivative financial instruments acquired with the intention of reducing the risk that changes in market interest rates will result in unfavorable changes in the fair value of the Company's IRLCs, inventory of mortgage loans held for sale and the portion of its MSR's not financed with ESS.

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

Derivative Notional Amounts and Fair Value of Derivatives

The Company had the following derivative financial instruments recorded on its consolidated balance sheets:

Instrument	June 30, 2018			December 31, 2017		
	Notional amount	Fair value		Notional amount	Fair value	
		Derivative assets	Derivative liabilities		Derivative assets	Derivative liabilities
	(in thousands)					
Derivatives not designated as hedging instruments:						
Not subject to master netting arrangements:						
Interest rate lock commitments	4,291,135	\$ 58,370	\$ 2,681	3,654,955	\$ 60,012	\$ 1,740
Repurchase agreement derivatives		25,781	—		10,656	—
Used for hedging purposes:						
Forward purchase contracts	6,617,888	11,450	377	4,920,883	4,288	1,272
Forward sales contracts	7,107,202	1,256	12,720	5,204,796	2,101	7,031
MBS put options	2,675,000	844	—	4,925,000	3,481	—
Put options on interest rate futures purchase contracts	1,852,500	772	—	2,125,000	3,570	—
Call options on interest rate futures purchase contracts	800,000	2,117	—	100,000	938	—
Treasury futures purchase contracts	835,000	—	—	100,000	—	—
Treasury futures sale contracts	1,450,000	—	—	—	—	—
Interest rate swap futures purchase contracts	465,000	—	—	1,400,000	—	—
Total derivatives before netting		100,590	15,778		85,046	10,043
Netting		(8,119)	(11,684)		(6,867)	(4,247)
		<u>\$ 92,471</u>	<u>\$ 4,094</u>		<u>\$ 78,179</u>	<u>\$ 5,796</u>
Deposits (received from) placed with derivative counterparties		<u>\$ (3,565)</u>			<u>\$ 2,620</u>	

The following table summarizes the notional amount activity for derivative contracts used in the Company's hedging activities:

Instrument	Quarter ended June 30, 2018			
	Amount beginning of quarter	Additions	Dispositions/ expirations	Amount end of quarter
	(in thousands)			
Forward purchase contracts	6,543,783	47,789,665	(47,715,560)	6,617,888
Forward sale contracts	6,924,346	59,686,130	(59,503,274)	7,107,202
MBS put options	3,750,000	4,375,000	(5,450,000)	2,675,000
MBS call options	—	5,450,000	(5,450,000)	—
Put options on interest rate futures purchase contracts	2,800,000	6,177,500	(7,125,000)	1,852,500
Call options on interest rate futures purchase contracts	225,000	1,075,000	(500,000)	800,000
Put options on interest rate futures sale contracts	—	7,125,000	(7,125,000)	—
Call options on interest rate futures sale contracts	—	500,000	(500,000)	—
Treasury futures purchase contracts	510,000	2,991,300	(2,666,300)	835,000
Treasury futures sale contracts	1,250,000	2,866,300	(2,666,300)	1,450,000
Interest rate swap futures purchase contracts	465,000	—	—	465,000

Instrument	Quarter ended June 30, 2017			
	Amount beginning of quarter	Additions	Dispositions/ expirations	Amount end of quarter
	(in thousands)			
Forward purchase contracts	9,292,052	46,756,266	(48,228,612)	7,819,706
Forward sale contracts	11,383,749	56,284,621	(60,026,391)	7,641,979
MBS put options	2,950,000	7,325,000	(4,200,000)	6,075,000
MBS call options	—	4,200,000	(4,200,000)	—
Put options on interest rate futures purchase contracts	1,160,000	1,400,000	(1,310,000)	1,250,000
Call options on interest rate futures purchase contracts	482,300	534,300	(816,600)	200,000
Put options on interest rate futures sale contracts	—	1,510,000	(1,310,000)	200,000
Call options on interest rate futures sale contracts	57,300	759,300	(816,600)	—
Treasury futures purchase contracts	—	61,300	(61,300)	—
Treasury futures sale contracts	—	61,300	(61,300)	—
Interest rate swap futures purchase contracts	200,000	325,000	(200,000)	325,000
Interest rate swap futures sale contracts	—	200,000	(200,000)	—

Instrument	Six months ended June 30, 2018			
	Amount beginning of period	Additions	Dispositions/ expirations	Amount end of period
	(in thousands)			
Forward purchase contracts	4,920,883	93,120,450	(91,423,445)	6,617,888
Forward sale contracts	5,204,796	116,041,682	(114,139,276)	7,107,202
MBS put options	4,925,000	8,875,000	(11,125,000)	2,675,000
MBS call options	—	11,125,000	(11,125,000)	—
Put options on interest rate futures purchase contracts	2,125,000	11,702,500	(11,975,000)	1,852,500
Call options on interest rate futures purchase contracts	100,000	1,450,000	(750,000)	800,000
Put options on interest rate futures sale contracts	—	11,975,000	(11,975,000)	—
Call options on interest rate futures sale contracts	—	750,000	(750,000)	—
Treasury futures purchase contracts	100,000	4,896,200	(4,161,200)	835,000
Treasury futures sale contracts	—	6,272,500	(4,822,500)	1,450,000
Interest rate swap futures purchase contracts	1,400,000	465,000	(1,400,000)	465,000
Interest rate swap futures sales contracts	—	1,400,000	(1,400,000)	—

Instrument	Six months ended June 30, 2017			
	Amount beginning of period	Additions	Dispositions/ expirations	Amount end of period
	(in thousands)			
Forward purchase contracts	12,746,191	88,940,575	(93,867,060)	7,819,706
Forward sale contracts	16,577,942	107,934,447	(116,870,410)	7,641,979
MBS put options	1,175,000	12,850,000	(7,950,000)	6,075,000
MBS call options	1,600,000	4,200,000	(5,800,000)	—
Put options on interest rate futures purchase contracts	1,125,000	4,460,000	(4,335,000)	1,250,000
Call options on interest rate futures purchase contracts	900,000	1,489,300	(2,189,300)	200,000
Put options on interest rate futures sale contracts	—	4,535,000	(4,335,000)	200,000
Call options on interest rate futures sales contracts	—	2,189,300	(2,189,300)	—
Treasury futures purchase contracts	—	166,100	(166,100)	—
Treasury futures sale contracts	—	166,100	(166,100)	—
Interest rate swap futures purchase contracts	200,000	525,000	(400,000)	325,000
Interest rate swap futures sales contracts	—	400,000	(400,000)	—

Derivative Balances and Netting of Financial Instruments

The Company has elected to present net derivative asset and liability positions, and cash collateral obtained from (or posted to) its counterparties when subject to a master netting arrangement that is legally enforceable on all counterparties in the event of default. The derivatives that are not subject to a master netting arrangement are IRLCs and repurchase agreement derivatives.

Offsetting of Derivative Assets

Following are summaries of derivative assets and related netting amounts:

	June 30, 2018			December 31, 2017		
	Gross amount of recognized assets	Gross amount offset in the consolidated balance sheet	Net amount of assets in the consolidated balance sheet	Gross amount of recognized assets	Gross amount offset in the consolidated balance sheet	Net amount of assets in the consolidated balance sheet
	(in thousands)					
Derivatives not subject to master netting arrangements:						
Interest rate lock commitments	\$ 58,370	\$ —	\$ 58,370	\$ 60,012	\$ —	\$ 60,012
Repurchase agreement derivatives	25,781	—	25,781	10,656	—	10,656
	<u>84,151</u>	<u>—</u>	<u>84,151</u>	<u>70,668</u>	<u>—</u>	<u>70,668</u>
Derivatives subject to master netting arrangements:						
Forward purchase contracts	11,450	—	11,450	4,288	—	4,288
Forward sale contracts	1,256	—	1,256	2,101	—	2,101
MBS put options	844	—	844	3,481	—	3,481
Put options on interest rate futures purchase contracts	772	—	772	3,570	—	3,570
Call options on interest rate futures purchase contracts	2,117	—	2,117	938	—	938
Netting	—	(8,119)	(8,119)	—	(6,867)	(6,867)
	<u>16,439</u>	<u>(8,119)</u>	<u>8,320</u>	<u>14,378</u>	<u>(6,867)</u>	<u>7,511</u>
	<u>\$ 100,590</u>	<u>\$ (8,119)</u>	<u>\$ 92,471</u>	<u>\$ 85,046</u>	<u>\$ (6,867)</u>	<u>\$ 78,179</u>

Derivative Assets, Financial Instruments, and Cash 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 netting.

	June 30, 2018				December 31, 2017			
	Net amount of assets in the consolidated balance sheet	Gross amount not offset in the consolidated balance sheet		Net amount	Net amount of assets in the consolidated balance sheet	Gross amount not offset in the consolidated balance sheet		Net amount
Financial instruments		Cash collateral received	Financial instruments			Cash collateral received		
	(in thousands)							
Interest rate lock commitments	\$ 58,370	\$ —	\$ —	\$ 58,370	\$ 60,012	\$ —	\$ —	\$ 60,012
Deutsche Bank	25,781	—	—	25,781	10,656	—	—	10,656
Barclays Capital	3,299	—	—	3,299	—	—	—	—
RJ O'Brien	2,889	—	—	2,889	4,508	—	—	4,508
Royal Bank of Canada	543	—	—	543	—	—	—	—
JPMorgan Chase Bank, N.A.	532	—	—	532	267	—	—	267
Wells Fargo Bank, N.A.	511	—	—	511	—	—	—	—
Federal National Mortgage Association	194	—	—	194	1,092	—	—	1,092
Goldman Sachs	—	—	—	—	540	—	—	540
Others	352	—	—	352	1,104	—	—	1,104
	<u>\$ 92,471</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 92,471</u>	<u>\$ 78,179</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 78,179</u>

Offsetting of Derivative Liabilities and Financial Liabilities

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

	June 30, 2018			December 31, 2017		
	Gross amount of recognized liabilities	Gross amount offset in the consolidated balance sheet	Net amount of liabilities in the consolidated balance sheet	Gross amount of recognized liabilities	Gross amount offset in the consolidated balance sheet	Net amount of liabilities in the consolidated balance sheet
	(in thousands)					
Derivatives not subject to master netting arrangements – Interest rate lock commitments	\$ 2,681	\$ —	\$ 2,681	\$ 1,740	\$ —	\$ 1,740
Derivatives subject to a master netting arrangement:						
Forward purchase contracts	377	—	377	1,272	—	1,272
Forward sale contracts	12,720	—	12,720	7,031	—	7,031
Netting	—	(11,684)	(11,684)	—	(4,247)	(4,247)
	<u>13,097</u>	<u>(11,684)</u>	<u>1,413</u>	<u>8,303</u>	<u>(4,247)</u>	<u>4,056</u>
Total derivatives	<u>15,778</u>	<u>(11,684)</u>	<u>4,094</u>	<u>10,043</u>	<u>(4,247)</u>	<u>5,796</u>
Mortgage loans sold under agreements to repurchase:						
Amount outstanding	1,825,063	—	1,825,063	2,380,866	—	2,380,866
Unamortized premiums and debt issuance costs, net	750	—	750	672	—	672
	<u>1,825,813</u>	<u>—</u>	<u>1,825,813</u>	<u>2,381,538</u>	<u>—</u>	<u>2,381,538</u>
	<u>\$ 1,841,591</u>	<u>\$ (11,684)</u>	<u>\$ 1,829,907</u>	<u>\$ 2,391,581</u>	<u>\$ (4,247)</u>	<u>\$ 2,387,334</u>

Derivative Liabilities, Financial Instruments, and Collateral Held 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 qualify under the accounting guidance for netting. All assets sold under agreements to repurchase are secured by sufficient collateral or have fair value that exceeds the liability amount recorded on the consolidated balance sheets.

	June 30, 2018				December 31, 2017			
	Net amount of liabilities in the consolidated balance sheet	Gross amounts not offset in the consolidated balance sheet		Net amount	Net amount of liabilities in the consolidated balance sheet	Gross amounts not offset in the consolidated balance sheet		Net amount
		Financial instruments	Cash collateral pledged			Financial instruments	Cash collateral pledged	
				(in thousands)				
Interest rate lock commitments	\$ 2,681	\$ —	\$ —	\$ 2,681	\$ 1,740	\$ —	\$ —	\$ 1,740
Credit Suisse First Boston								
Mortgage Capital LLC	675,589	(675,405)	—	184	1,010,562	(1,010,320)	—	242
Deutsche Bank	644,366	(644,366)	—	—	593,864	(593,864)	—	—
Bank of America, N.A.	175,125	(174,887)	—	238	406,787	(406,355)	—	432
Morgan Stanley Bank, N.A.	131,268	(131,103)	—	165	139,491	(138,983)	—	508
JPMorgan Chase Bank, N.A.	99,584	(99,584)	—	—	90,442	(90,442)	—	—
Royal Bank of Canada	47,126	(47,126)	—	—	24,835	(23,752)	—	1,083
Citibank, N.A.	31,668	(31,650)	—	18	23,010	(23,010)	—	—
BNP Paribas	20,942	(20,942)	—	—	87,753	(87,753)	—	—
Barclays Capital	—	—	—	—	6,387	(6,387)	—	—
Others	808	—	—	808	1,791	—	—	1,791
	<u>\$ 1,829,157</u>	<u>\$ (1,825,063)</u>	<u>\$ —</u>	<u>\$ 4,094</u>	<u>\$ 2,386,662</u>	<u>\$ (2,380,866)</u>	<u>\$ —</u>	<u>\$ 5,796</u>

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

Derivative activity	Income statement line	Quarter ended June 30,		Six months ended June 30,	
		2018	2017	2018	2017
				(in thousands)	
Interest rate lock commitments	Net gains on mortgage loans held for sale	\$ 4,793	\$ (19,849)	\$ (2,583)	\$ (13,234)
Repurchase agreement derivative	Interest expense	\$ (692)	\$ —	\$ (1,118)	\$ —
Hedged item:					
Interest rate lock commitments and mortgage loans held for sale	Net gains on mortgage loans held for sale	\$ 1,855	\$ (1,918)	\$ 89,602	\$ (210)
Mortgage servicing rights	Net mortgage loan servicing fees— Amortization, impairment and change in fair value of mortgage servicing rights and mortgage servicing liabilities	\$ (24,289)	\$ (2,026)	\$ (127,882)	\$ (24,192)

Note 9—Carried Interest Due from Investment Funds

The activity in the Company's Carried Interest due from Investment Funds is summarized as follows:

	Quarter ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	(in thousands)			
Balance at beginning of period	\$ 538	\$ 70,778	\$ 8,552	\$ 70,906
Carried Interest recognized during the period	(168)	241	(348)	113
Cash received during the period	—	—	(7,834)	—
Balance at end of period	<u>\$ 370</u>	<u>\$ 71,019</u>	<u>\$ 370</u>	<u>\$ 71,019</u>

Note 10—Mortgage Servicing Rights and Mortgage Servicing Liabilities

Mortgage Servicing Rights Carried at Fair Value

The activity in MSR's carried at fair value is as follows:

	Quarter ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	(in thousands)			
Balance at beginning of period	\$ 2,354,489	\$ 506,916	\$ 638,010	\$ 515,925
Reclassification of mortgage servicing rights previously accounted for under the amortization method pursuant to a change in accounting principle	—	—	1,482,426	—
Balance after reclassification	2,354,489	506,916	2,120,436	515,925
Additions:				
Purchases	2,523	183,586	30,129	183,789
Mortgage servicing rights resulting from mortgage loan sales	155,694	7,945	299,604	13,929
	<u>158,217</u>	<u>191,531</u>	<u>329,733</u>	<u>197,718</u>
Change in fair value due to:				
Changes in inputs used in valuation model (1)	44,796	(1,588)	175,245	404
Other changes in fair value (2)	(71,345)	(18,418)	(139,257)	(35,606)
Total change in fair value	<u>(26,549)</u>	<u>(20,006)</u>	<u>35,988</u>	<u>(35,202)</u>
Balance at end of period	<u>\$ 2,486,157</u>	<u>\$ 678,441</u>	<u>\$ 2,486,157</u>	<u>\$ 678,441</u>
			<u>June 30,</u>	<u>December 31,</u>
			2018	2017
			(in thousands)	
Fair value of mortgage servicing rights pledged to secure Assets sold under agreements to repurchase and Notes payable			\$ 2,333,750	\$ 630,711

(1) Principally reflects changes in discount rate and prepayment speed inputs, primarily due to changes in market interest rates, and changes in expected borrower performance and servicer losses given default.

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

Mortgage Servicing Rights Carried at Lower of Amortized Cost or Fair Value

The activity in MSRs carried at the lower of amortized cost or fair value is summarized below:

	<u>Quarter ended June 30,</u>		<u>Six months ended June 30,</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
	(in thousands)			
Amortized cost:				
Balance at beginning of period	\$ —	\$ 1,299,093	\$ 1,583,378	\$ 1,206,694
Transfer of mortgage servicing rights to mortgage servicing rights carried at fair value pursuant to a change in accounting principle	—	—	(1,583,378)	—
Balance after reclassification	—	1,299,093	—	1,206,694
Mortgage servicing rights resulting from mortgage loan sales	—	128,927	—	259,145
Amortization	—	(43,279)	—	(81,098)
Balance at end of period	—	1,384,741	—	1,384,741
Valuation allowance:				
Balance at beginning of period	—	(80,948)	(101,800)	(94,947)
Reduction resulting from transfer of mortgage servicing rights to mortgage servicing rights carried at fair value pursuant to a change in accounting principle	—	—	101,800	—
Balance after reclassification	—	(80,948)	—	(94,947)
Increase in valuation allowance	—	(30,635)	—	(16,636)
Balance at end of period	—	(111,583)	—	(111,583)
Mortgage servicing rights, net at end of period	\$ —	\$ 1,273,158	\$ —	\$ 1,273,158
Fair value of mortgage servicing rights at:				
Beginning of period		\$ 1,227,077		\$ 1,112,302
End of period		\$ 1,273,364		\$ 1,273,364
				December 31,
				2017
				(in thousands)
Fair value of mortgage servicing rights pledged to secure assets sold under agreements to repurchase and note payable				\$ 1,467,356

Mortgage Servicing Liabilities Carried at Fair Value

The activity in MSLs carried at fair value is summarized below:

	<u>Quarter ended June 30,</u>		<u>Six months ended June 30,</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
	(in thousands)			
Balance at beginning of period	\$ 12,063	\$ 15,994	\$ 14,120	\$ 15,192
Mortgage servicing liabilities resulting from mortgage loan sales	1,770	3,810	3,807	7,869
Changes in fair value due to:				
Changes in valuation inputs used in valuation model (1)	2,537	4,705	5,180	7,995
Other changes in fair value (2)	(6,117)	(6,214)	(12,854)	(12,761)
Total change in fair value	(3,580)	(1,509)	(7,674)	(4,766)
Balance at end of period	\$ 10,253	\$ 18,295	\$ 10,253	\$ 18,295

(1) Principally reflects changes in expected borrower performance and servicer losses given default.

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

Servicing fees relating to MSRs and MSLs are recorded in *Net mortgage loan servicing fees—Loan servicing fees—From non-affiliates* on the consolidated statements of income; late charges and other ancillary fees relating to MSRs and MSLs are recorded in *Net mortgage loan servicing fees—Loan servicing fees—Ancillary and other fees* on the Company’s consolidated statements of income. Such amounts are summarized below:

	Quarter ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	(in thousands)			
Contractual servicing fees	\$ 138,871	\$ 112,348	\$ 274,354	\$ 218,815
Ancillary and other fees:				
Late charges	7,049	5,905	14,508	12,589
Other	1,814	1,101	3,376	2,026
	\$ 147,734	\$ 119,354	\$ 292,238	\$ 233,430

Note 11—Borrowings

The borrowing facilities described throughout this Note 11 contain various covenants, including financial covenants governing the Company’s net worth, debt-to-equity ratio, profitability and liquidity. Management believes that the Company was in compliance with these covenants as of June 30, 2018.

Assets Sold Under Agreement to Repurchase

The Company has multiple borrowing facilities in the form of asset sales under agreements to repurchase. These borrowing facilities are secured by mortgage loans held for sale at fair value or participation certificates backed by MSRs. Eligible mortgage loans and participation certificates backed by MSRs are sold at advance rates based on the fair value of the assets sold. Interest is charged at a rate based on the buyer’s overnight cost of funds rate or on LIBOR depending on the terms of the respective agreements. Mortgage loans and MSRs financed under these agreements may be re-pledged by the lenders.

Assets sold under agreements to repurchase are summarized below:

	Quarter ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	(dollars in thousands)			
Average balance of assets sold under agreements to repurchase	\$ 1,574,012	\$ 2,082,668	\$ 1,608,535	\$ 1,801,138
Weighted average interest rate (1)	3.90 %	3.13 %	3.74 %	3.11 %
Total interest expense (2)	\$ 4,535	\$ 19,101	\$ 11,267	\$ 33,046
Maximum daily amount outstanding	\$ 2,028,713	\$ 3,617,164	\$ 2,380,121	\$ 3,617,164
			June 30,	December 31,
			2018	2017
	(dollars in thousands)			
Carrying value:				
Unpaid principal balance			\$ 1,825,063	\$ 2,380,866
Unamortized premiums and debt issuance costs, net			750	672
			\$ 1,825,813	\$ 2,381,538
Weighted average interest rate			3.92 %	3.24 %
Available borrowing capacity (3):				
Committed			\$ 516,013	\$ 316,503
Uncommitted			2,443,924	2,257,631
			\$ 2,959,937	\$ 2,574,134
Fair value of assets securing repurchase agreements:				
Mortgage loans held for sale			\$ 1,947,689	\$ 2,530,299
Servicing advances (4)			\$ 94,715	\$ 114,643
Mortgage servicing rights (4)			\$ 2,333,750	\$ 2,098,067
Assets purchased from PennyMac Mortgage Investment Trust under agreements to resell			\$ 138,582	\$ 144,128
Margin deposits placed with counterparties (5)			\$ 3,750	\$ 3,750

- (1) Excludes the effect of amortization of net premiums totaling \$10.8 million and \$18.8 million for the quarter and six months ended June 30, 2018, respectively, and commitment fees and issuance costs totaling \$2.6 million and \$4.9 million for the quarter and six months ended June 30, 2017, respectively.
- (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. The Company included \$12.5 million and \$22.7 million of such incentives as a reduction in *Interest expense* during the quarter and six months ended June 30, 2018, respectively. The master repurchase agreement is subject to a rolling six-month term through August 21, 2019, unless terminated earlier at the option of the lender. There can be no assurance that the lender will not terminate this agreement prior to its stated maturity.
- (3) The amount the Company is able to borrow under asset repurchase agreements is tied to the fair value of unencumbered assets eligible to secure those agreements and the Company's ability to fund the agreements' margin requirements relating to the assets financed.
- (4) Beneficial interests in the Ginnie Mae MSRs and servicing advances are pledged to the Issuer Trust and together serve as the collateral backing the VFN, 2017-GT2 Notes and 2018-GT1 Notes. Financing of the VFN is included in *Assets sold under agreements to repurchase* and 2017-GT2 Notes and 2018-GT1 Notes are included in *Notes payable* on the Company's consolidated balance sheet.
- (5) Margin deposits are included in *Other* assets on the Company's consolidated balance sheet.

Following is a summary of maturities of outstanding advances under repurchase agreements by maturity date:

Remaining maturity at June 30, 2018	Balance
	(dollars in thousands)
Within 30 days	\$ 474,187
Over 30 to 90 days	1,250,876
Over one to two years	100,000
Total assets sold under agreements to repurchase	\$ 1,825,063
Weighted average maturity (in months)	2.8

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) relating to the Company's assets under agreements to repurchase is summarized by counterparty below as of June 30, 2018:

Counterparty	Amount at risk (in thousands)	Weighted average maturity of advances under repurchase agreement	Facility maturity
Credit Suisse First Boston Mortgage Capital LLC	\$ 1,178,465	April 26, 2020	April 26, 2020
Credit Suisse First Boston Mortgage Capital LLC	\$ 72,919	July 20, 2018	April 26, 2019
Deutsche Bank AG	\$ 111,443	September 15, 2018	December 31, 2018
Bank of America, N.A.	\$ 14,186	August 1, 2018	August 1, 2018
Morgan Stanley Bank, N.A.	\$ 8,727	August 24, 2018	August 24, 2018
JP Morgan Chase Bank, N.A.	\$ 8,528	August 17, 2018	October 12, 2018
Royal Bank of Canada	\$ 3,170	August 3, 2018	September 28, 2018
Citibank, N.A.	\$ 1,768	September 21, 2018	June 7, 2019
BNP Paribas	\$ 1,090	September 20, 2018	November 16, 2018

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

Mortgage Loan Participation Purchase and Sale Agreements

Certain of the borrowing facilities secured by mortgage loans held 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 mortgage loans that have been pooled with Fannie Mae, Freddie Mac or Ginnie Mae, are sold to the lender pending the securitization of the mortgage loans and sale of the resulting securities. A commitment to sell the securities resulting from the pending securitization between the Company and a non-affiliate 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 that is based on a percentage of the purchase price. The holdback amount is not required to be paid to the Company until the settlement of the security and its delivery to the lender.

The mortgage loan participation purchase and sale agreements are summarized below:

	Quarter ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	(dollars in thousands)			
Average balance	\$ 246,368	\$ 180,968	\$ 231,076	\$ 193,326
Weighted average interest rate (1)	3.21 %	2.32 %	3.06 %	2.12 %
Total interest expense	\$ 2,190	\$ 1,164	\$ 3,917	\$ 2,296
Maximum daily amount outstanding	\$ 528,368	\$ 286,138	\$ 528,368	\$ 719,434

(1) Excludes the effect of amortization of facility fees totaling \$212,000 and \$102,000 for the quarters ended June 30, 2018 and 2017, respectively, and \$383,000 and \$231,000 for the six months ended June 30, 2018 and 2017, respectively.

	June 30,	December 31,
	2018	2017
	(dollars in thousands)	
Carrying value:		
Unpaid principal balance	\$ 528,368	\$ 527,706
Unamortized debt issuance costs	—	(311)
	<u>\$ 528,368</u>	<u>\$ 527,395</u>
Weighted average interest rate	3.34 %	2.81 %
Fair value of mortgage loans pledged to secure mortgage loan participation purchase and sale agreements	\$ 550,894	\$ 551,688

Notes Payable

Term Notes

On February 16, 2017, the Company, through the Issuer Trust, issued an aggregate principal amount of \$400 million in Term Notes (the “2017-GT1 Notes”) to qualified institutional buyers under Rule 144A of the Securities Act of 1933, as amended (the “Securities Act”). The 2017-GT1 Notes bore interest at a rate equal to one-month LIBOR plus 4.75% per annum. The 2017-GT1 Notes were scheduled to mature on February 25, 2020 or, if extended pursuant to the terms of the related indenture supplement, February 25, 2021 (unless earlier redeemed in accordance with their terms).

On August 10, 2017, the Company, through the Issuer Trust, issued an aggregate principal amount of \$500 million in Term Notes (the “2017-GT2 Notes”) to qualified institutional buyers under Rule 144A of the Securities Act. The 2017-GT2 Notes bear interest at a rate equal to one-month LIBOR plus 4.0% per annum. The 2017-GT2 Notes will mature on August 25, 2022 or, if extended pursuant to the terms of the related indenture supplement, August 25, 2023 (unless earlier redeemed in accordance with their terms).

On February 28, 2018, the Company, through the Issuer Trust, issued an aggregate principal amount of \$650 million in Term Notes (the “2018-GT1 Notes”) to qualified institutional buyers under Rule 144A of the Securities Act. The 2018-GT1 Notes bear interest at a rate equal to one-month LIBOR plus 2.85% per annum. The 2018-GT1 Notes will mature on February 25, 2023 or, if extended pursuant to the terms of the related indenture supplement, February 25, 2025 (unless earlier redeemed in accordance with their terms).

On February 28, 2018, in connection with its issuance of the 2018-GT1 Notes, the Company also redeemed all of the 2017-GT1 Notes previously issued by the Issuer Trust. The redemption amount for the 2017-GT1 Notes was \$400 million plus all accrued and unpaid interest.

All of the Term Notes rank pari passu with each other and with the VFN issued by the Issuer Trust to PLS and are secured by certain participation certificates relating to Ginnie Mae MSRs and ESS that are financed pursuant to the GNMA MSR Facility.

Revolving Credit Agreement

The Company entered into a revolving credit agreement pursuant to which the lenders agreed to make revolving loans in an amount not to exceed \$150 million. The proceeds of the loans are to be used solely for working capital and general corporate purposes of the Company and its subsidiaries. Interest on the loans accrues at a per annum rate of interest equal to, at an election of the Company, either LIBOR plus the applicable margin or an alternate base rate (as defined in the credit agreement). During the existence of certain events of default, interest accrues at a higher rate. The maturity date is November 16, 2018.

Notes payable are summarized below:

	Quarter ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	(dollars in thousands)			
Average balance	\$ 1,150,000	\$ 461,365	\$ 1,069,890	\$ 378,638
Weighted average interest rate (1)	5.33 %	5.79 %	5.44 %	5.78 %
Total interest expense	\$ 16,348	\$ 8,059	\$ 34,570	\$ 12,999
Maximum daily amount outstanding	\$ 1,150,000	\$ 471,868	\$ 1,150,000	\$ 546,868

- (1) Excluding the effect of amortization of debt issuance costs totaling \$0.9 million and \$1.1 million for the quarters ended June 30, 2018 and 2017, respectively, and \$5.1 million and \$2.0 million for the six months ended June 30, 2018 and 2017, respectively. Also excludes the effect of non-utilization fees of \$192,000 and \$383,000 for the quarter and six months ended June 30, 2018, respectively.

	June 30,	December 31,
	2018	2017
	(dollars in thousands)	
Carrying value:		
Unpaid principal balance	\$ 1,150,000	\$ 900,006
Unamortized debt issuance costs	(9,454)	(8,501)
	<u>\$ 1,140,546</u>	<u>\$ 891,505</u>
Weighted average interest rate	5.31 %	5.66 %
Unused amount	\$ 150,000	\$ 280,000
Assets pledged to secure notes payable:		
Cash	\$ 152,382	\$ 20,765
Carried Interest	\$ 370	\$ 8,552
Servicing advances (1)	\$ 94,715	\$ 114,643
Mortgage servicing rights (1)	\$ 2,333,750	\$ 2,098,067

- (1) Beneficial interests in the Ginnie Mae MSR and servicing advances are pledged to the Issuer Trust and together serve as the collateral backing the VFN, 2017-GT2 Notes and 2018-GT1 Notes. Financing of the VFN is included in *Assets sold under agreements to repurchase* and 2017-GT2 Notes and 2018-GT1 Notes are included in *Notes payable* on the Company's consolidated balance sheet.

Obligations under Capital Lease

In December 2015, the Company entered into a capital lease transaction secured by certain fixed assets and capitalized software. The capital lease matures on March 23, 2020 and bears interest at a spread over one-month LIBOR.

Obligations under capital lease are summarized below:

	<u>Quarter ended June 30,</u>		<u>Six months ended June 30,</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
	(dollars in thousands)			
Average balance	\$ 14,544	\$ 29,053	\$ 18,703	\$ 25,739
Weighted average interest rate	3.92 %	2.69 %	3.78 %	2.69 %
Total interest expense	\$ 152	\$ 221	\$ 322	\$ 380
Maximum daily amount outstanding	\$ 16,435	\$ 30,044	\$ 20,971	\$ 30,044
			<u>June 30,</u>	<u>December 31,</u>
			<u>2018</u>	<u>2017</u>
	(in thousands)			
Unpaid principal balance			\$ 13,032	\$ 20,971
Weighted average interest rate			3.93 %	3.26 %
Assets pledged to secure obligations under capital lease:				
Furniture, fixtures and equipment			\$ 20,656	\$ 23,915
Capitalized software			\$ 1,347	\$ 1,568

Excess Servicing Spread Financing Payable to PennyMac Mortgage Investment Trust

In conjunction with the Company's purchase from non-affiliates of certain MSR on pools of Agency-backed residential mortgage loans, the Company has entered into sale and assignment agreements with PMT. Under these agreements, the Company sold to PMT the right to receive ESS cash flows relating to certain MSRs. The Company retained a fixed base servicing fee and all ancillary income associated with servicing the loans. The Company continues to be the servicer of the mortgage loans and retains all servicing obligations, including responsibility to make servicing advances.

Following is a summary of ESS:

	<u>Quarter ended June 30,</u>		<u>Six months ended June 30,</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
	(in thousands)			
Balance at beginning of period	\$ 236,002	\$ 277,484	\$ 236,534	\$ 288,669
Issuances of excess servicing spread to PennyMac Mortgage Investment Trust pursuant to recapture agreement	580	1,380	1,484	2,953
Accrual of interest	3,910	4,366	7,844	9,013
Repayment	(12,018)	(14,278)	(24,309)	(28,910)
Change in fair value	996	(7,156)	7,917	(9,929)
Balance at end of period	<u>\$ 229,470</u>	<u>\$ 261,796</u>	<u>\$ 229,470</u>	<u>\$ 261,796</u>

Note 12—Liability for Losses Under Representations and Warranties

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

	Quarter ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
		(in thousands)		
Balance at beginning of period	\$ 20,429	\$ 19,436	\$ 20,053	\$ 19,067
Provision for losses on mortgage loans sold:				
Resulting from sales of mortgage loans	1,216	1,296	2,708	2,698
Reduction in liability due to change in estimate	(1,359)	(1,020)	(2,472)	(1,892)
Recoveries (incurred losses), net	301	(144)	298	(305)
Balance at end of period	\$ 20,587	\$ 19,568	\$ 20,587	\$ 19,568
Unpaid principal balance of mortgage loans subject to representations and warranties at end of period	\$ 133,585,457	\$ 106,284,973		

Note 13—Income Taxes

The Company's effective income tax rates were 8.4% for the quarter and six months ended June 30, 2018 and 12.4% for the same periods ended in 2017. The lower effective tax rate for 2018 reflects the effect of the change in the federal statutory tax rate from 35% to 21%, resulting from the December 22, 2017 enactment of H.R.1, known as the Tax Cuts and Jobs Act (the "Tax Act").

The difference between the Company's effective tax rate and the statutory rate is primarily due to the allocation of earnings to the noncontrolling interest unitholders. As the noncontrolling interest unitholders convert their ownership units into the Company's Class A common stock and the Company's ownership units in PennyMac is increased through vesting of equity awards, the portion of the Company's income that will be subject to corporate federal and state statutory tax rates will increase, which will in turn increase the Company's effective income tax rate. The repurchase of Company shares under the Repurchase Program as described in Note 15—*Stockholders' Equity* has the opposite effect and results in a corresponding redemption of PennyMac units from the Company pursuant to the PennyMac Limited Liability Agreement.

Note 14—Commitments and Contingencies

Litigation

The business of the Company involves the collection of numerous accounts, as well as the validation of liens and compliance with various state and federal lending and servicing laws. Accordingly, the Company may be involved in proceedings, claims, and legal actions arising in the ordinary course of business. As of June 30, 2018, the Company was not involved in any legal proceedings, claims, or actions that in management's view would be reasonably likely to have a material adverse effect on the Company.

Regulatory Matters

The Company and/or its subsidiaries are subject to various state and federal regulations related to its loan production and servicing operations, as well as regulations by various federal agencies, such as the Bureau of Consumer Financial Protection (“BCFP”), HUD, and the Federal Housing Administration. The Company and/or its subsidiaries are also subject to certain requirements by the Agencies to which it sells loans and for which it performs loan servicing activities. As the result, the Company may become involved in information-gathering requests, reviews, investigations and proceedings (both formal and informal) by the various federal, state and local regulatory bodies.

Commitments to Purchase and Fund Mortgage Loans

The Company’s commitments to purchase and fund mortgage loans totaled \$4.3 billion as of June 30, 2018.

Leases

The Company leases office facilities. Rent expense was \$4.4 million and \$4.2 million for the quarters ended June 30, 2018 and 2017, respectively and \$8.7 million and \$7.6 million for the six months ended June 30, 2018 and 2017, respectively.

The following table provides a summary of future minimum lease payments required under lease agreements as of June 30, 2018:

<u>Twelve months ended June 30,</u>	<u>Future minimum lease payments</u>
	<u>(in thousands)</u>
2019	\$ 14,941
2020	15,474
2021	13,595
2022	11,056
2023	10,135
Thereafter	27,558
	<u>\$ 92,759</u>

Commitment to Make Distributions to PennyMac Owners

Under the terms of its Limited Liability Company Agreement, PennyMac is required to make cash distributions to the Company’s noncontrolling interest holders in amounts sufficient to allow such noncontrolling interest holders to pay federal and state taxes on their allocable share of PennyMac taxable income. Such distributions are calculated and, if required, made quarterly.

Note 15—Stockholders’ Equity

In June 2017, the Company’s board of directors authorized a stock repurchase program (“Repurchase Program”) under which the Company may repurchase up to \$50 million of its outstanding Class A common stock.

The following table summarizes the Company’s stock repurchase activity:

	<u>Quarter ended June 30,</u>		<u>Six months ended June 30,</u>		<u>Cumulative</u>
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>	<u>Total (1)</u>
	<u>(in thousands)</u>				
Shares of Class A common stock repurchased	236	—	236	—	741
Cost of shares of Class A common stock repurchased	\$ 4,826	\$ —	\$ 4,826	\$ —	\$ 13,425

(1) Amounts represent the total shares of Class A common stock repurchased under the Repurchase Program through June 30, 2018.

The shares of repurchased Class A common stock were canceled upon settlement of the repurchase transactions and returned to the authorized but unissued common stock pool.

Note 16—Noncontrolling Interest

Net income attributable to the Company's common stockholders and the effects of changes in noncontrolling ownership interest in PennyMac are summarized below:

	<u>Quarter ended June 30,</u>		<u>Six months ended June 30,</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
	(in thousands)			
Net income attributable to PennyMac Financial Services, Inc. common stockholders	\$ 17,837	\$ 10,479	\$ 34,456	\$ 21,358
Increase in the Company's additional paid-in capital for exchanges of Class A units of Private National Mortgage Acceptance Company, LLC to Class A common stock of PennyMac Financial Services, Inc.	\$ 13,265	\$ 8,164	\$ 28,124	\$ 16,927
Shares of Class A common stock of PennyMac Financial Services, Inc. issued pursuant to exchange of Class A units of Private National Mortgage Acceptance Company, LLC by noncontrolling interest unitholders and issued as equity compensation	737	555	1,485	1,046
			<u>June 30,</u>	<u>December 31,</u>
			<u>2018</u>	<u>2017</u>
Percentage of noncontrolling interest in Private National Mortgage Acceptance Company, LLC			67.7 %	69.2 %

Note 17—Net Gains on Mortgage Loans Held for Sale

Net gains on mortgage loans held for sale at fair value is summarized below:

	<u>Quarter ended June 30,</u>		<u>Six months ended June 30,</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
	(in thousands)			
From non-affiliates:				
Cash (loss) gain:				
Mortgage loans	\$ (110,242)	\$ 1,904	\$ (292,043)	\$ (56,777)
Hedging activities	(12,567)	5,317	91,829	6,424
	(122,809)	7,221	(200,214)	(50,353)
Non-cash gain:				
Mortgage servicing rights and mortgage servicing liabilities resulting from mortgage loan sales	153,924	133,062	295,797	265,205
Provision for losses relating to representations and warranties:				
Pursuant to mortgage loan sales	(1,216)	(1,296)	(2,708)	(2,698)
Reduction in liability due to change in estimate	1,359	1,020	2,472	1,892
Change in fair value relating to mortgage loans and hedging derivatives held at quarter end:				
Interest rate lock commitments	4,793	(19,849)	(2,583)	(13,234)
Mortgage loans	(4,454)	(13,326)	14,510	(5,930)
Hedging derivatives	14,422	(7,235)	(2,227)	(6,634)
	46,019	99,597	105,047	188,248
From PennyMac Mortgage Investment Trust	14,927	(1,506)	27,313	(3,201)
	<u>\$ 60,946</u>	<u>\$ 98,091</u>	<u>\$ 132,360</u>	<u>\$ 185,047</u>

Note 18—Net Interest Income (Expense)

Net interest expense is summarized below:

	<u>Quarter ended June 30,</u>		<u>Six months ended June 30,</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
	(in thousands)			
Interest income:				
From non-affiliates:				
Short-term investments	\$ 579	\$ 657	\$ 1,187	\$ 994
Mortgage loans held for sale at fair value	34,434	23,714	61,041	40,329
Placement fees relating to custodial funds	18,193	8,577	31,617	13,679
	<u>53,206</u>	<u>32,948</u>	<u>93,845</u>	<u>55,002</u>
From PennyMac Mortgage Investment Trust—Assets purchased from PennyMac Mortgage Investment Trust under agreements to resell				
	1,898	2,025	3,874	3,830
	<u>55,104</u>	<u>34,973</u>	<u>97,719</u>	<u>58,832</u>
Interest expense:				
To non-affiliates:				
Assets sold under agreements to repurchase (1)	4,535	19,101	11,267	33,046
Mortgage loan participation purchase and sale agreements	2,190	1,164	3,917	2,296
Notes payable	16,348	8,059	34,570	12,999
Obligations under capital lease	152	221	322	380
Interest shortfall on repayments of mortgage loans serviced for Agency securitizations	4,546	3,304	9,376	6,927
Interest on mortgage loan impound deposits	935	662	2,065	1,690
	<u>28,706</u>	<u>32,511</u>	<u>61,517</u>	<u>57,338</u>
To PennyMac Mortgage Investment Trust—Excess servicing spread financing at fair value				
	3,910	4,366	7,844	9,013
	<u>32,616</u>	<u>36,877</u>	<u>69,361</u>	<u>66,351</u>
	<u>\$ 22,488</u>	<u>\$ (1,904)</u>	<u>\$ 28,358</u>	<u>\$ (7,519)</u>

- (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. The Company included \$12.5 million and \$22.7 million of such incentives as a reduction in *Interest expense* during the quarter and six months ended June 30, 2018, respectively. The master repurchase agreement is subject to a rolling six-month term through August 21, 2019, unless terminated earlier at the option of the lender. There can be no assurance that the lender will not terminate this agreement prior to its stated maturity.

Note 19—Stock-based Compensation

As of June 30, 2018, the Company had one stock-based compensation plan. Following is a summary of the stock-based compensation activity:

	<u>Quarter ended June 30,</u>		<u>Six months ended June 30,</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
	<u>(in thousands)</u>			
Grants:				
Units:				
Performance-based RSUs	—	—	524	694
Stock options	—	—	674	861
Time-based RSUs	—	—	316	405
Grant date fair value:				
Performance-based RSUs	\$ —	\$ —	\$ 12,791	\$ 12,474
Stock options	—	—	6,147	5,772
Time-based RSUs	—	—	7,703	7,302
Total	\$ —	\$ —	\$ 26,641	\$ 25,548
Vestings and exercises:				
Performance-based RSUs vested	774	446	774	446
Stock options exercised	33	5	229	25
Time-based RSUs vested	11	22	244	160
Compensation expense	\$ 6,063	\$ 4,866	\$ 12,234	\$ 10,390

The performance-based RSUs provide for the issuance of shares of the Company's Class A common stock based on the attainment of earnings per share and/or return on equity target performance goals and are subject to adjustment based on individual performance of the grantees. The satisfaction of the performance goals and issuance of shares are approved by the compensation committee of the Company's board of directors.

Note 20—Earnings Per Share of Common Stock

Basic earnings per share of common stock is determined using net income attributable to the Company's common stockholders divided by the weighted average number of shares of common stock outstanding during the period. Diluted earnings per share of common stock is determined by dividing net income attributable to the Company's common stockholders by the weighted average number of shares of common stock outstanding, assuming all dilutive shares of common stock were issued.

Potentially dilutive shares of common stock include non-vested stock-based compensation awards and PennyMac Class A units. The Company applies the treasury stock method to determine the diluted weighted average shares of common stock outstanding represented by the non-vested stock-based compensation awards. The diluted earnings per share calculation includes an evaluation of whether the exchange of PennyMac Class A units for shares of common stock is dilutive. Accordingly, in this evaluation, earnings attributable to the Company's common stockholders is also adjusted to include the earnings allocated to the PennyMac Class A units after taking into account the income taxes that would be applicable to such earnings.

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

	<u>Quarter ended June 30,</u>		<u>Six months ended June 30,</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
	(in thousands, except per share amounts)			
Basic earnings per share of common stock:				
Net income attributable to common stockholders	\$ 17,837	\$ 10,479	\$ 34,456	\$ 21,358
Weighted average shares of common stock outstanding	24,959	23,388	24,399	23,006
Basic earnings per share of common stock	\$ 0.71	\$ 0.45	\$ 1.41	\$ 0.93
Diluted earnings per share of common stock:				
Net income attributable to common stockholders	\$ 17,837	\$ 10,479	\$ 34,456	\$ 21,358
Net income attributable to dilutive stock-based compensation units	614	253	1,842	661
Effect of net income attributable to PennyMac Class A units exchangeable to Class A common stock, net of income taxes	<u>36,766</u>	<u>23,596</u>	<u>72,396</u>	<u>48,742</u>
Net income attributable to common stockholders for diluted earnings per share	<u>\$ 55,217</u>	<u>\$ 34,328</u>	<u>\$ 108,694</u>	<u>\$ 70,761</u>
Weighted average shares of common stock outstanding applicable to basic earnings per share	24,959	23,388	24,399	23,006
Effect of dilutive shares:				
Common shares issuable under stock-based compensation plan	1,381	887	1,965	1,154
PennyMac Class A units exchangeable to Class A common stock	<u>52,485</u>	<u>53,375</u>	<u>52,583</u>	<u>53,481</u>
Weighted average shares of common stock applicable to diluted earnings per share	<u>78,825</u>	<u>77,650</u>	<u>78,947</u>	<u>77,641</u>
Diluted earnings per share of common stock	\$ 0.70	\$ 0.44	\$ 1.38	\$ 0.91

Calculations of diluted earnings per share require certain potentially dilutive shares to be excluded when their inclusion in the diluted earnings per share calculation would be anti-dilutive. The following table summarizes the weighted-average number of anti-dilutive restricted stock units (“RSUs”) and stock options excluded from the calculation of diluted earnings per share:

	Quarter ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	(in thousands except for weighted-average exercise price)			
Performance-based RSUs (1)	1,190	1,433	1,003	1,192
Time-based RSUs	209	134	132	87
Stock options (2)	1,299	2,636	629	2,335
Total anti-dilutive stock-based compensation units	2,698	4,203	1,764	3,614
Weighted average exercise price of anti-dilutive stock options (2)	\$ 17.79	\$ 16.38	\$ 17.79	\$ 16.38

- (1) Certain performance-based RSUs were outstanding but not included in the computation of earnings per share because the performance thresholds included in such RSUs have not been achieved.
- (2) Certain stock options were outstanding but not included in the computation of diluted earnings per share because the weighted-average exercise prices were above the average stock price for the period.

Note 21—Supplemental Cash Flow Information

	Six months ended June 30,	
	2018	2017
	(in thousands)	
Cash paid for interest	\$ 85,540	\$ 68,884
(Refunds received) cash paid for income taxes, net	\$ (416)	\$ 36
Non-cash investing activity:		
Mortgage servicing rights resulting from mortgage loan sales	\$ 299,604	\$ 273,074
Mortgage servicing liabilities resulting from mortgage loan sales	\$ 3,807	\$ 7,869
Unsettled portion of MSR acquisitions	\$ —	\$ 24,323
Non-cash financing activity:		
Transfer of <i>Excess servicing spread payable to PennyMac Mortgage Investment Trust</i> pursuant to a recapture agreement	\$ 1,484	\$ 2,953
Issuance of Class A common stock in settlement of director fees	\$ 160	\$ 169

Note 22—Regulatory Capital and Liquidity Requirements

The Company, through PLS and PennyMac, is required to maintain specified levels of equity and liquid assets to remain a seller/servicer in good standing with the Agencies. Such equity and liquid asset requirements generally are tied to the size of the Company’s loan servicing portfolio or loan origination volume.

The Company is subject to financial eligibility requirements for sellers/servicers eligible to sell or service mortgage loans with Fannie Mae and Freddie Mac. The eligibility requirements include tangible net worth of \$2.5 million plus 25 basis points of the Company’s total 1-4 unit mortgage loan servicing portfolio, excluding mortgage loans subserviced for others and a liquidity requirement equal to 3.5 basis points of the aggregate UPB serviced for the Agencies plus 200 basis points of total nonperforming Agency servicing UPB in excess of 6.0%.

The Company is also subject to financial eligibility requirements for Ginnie Mae single-family issuers. The eligibility requirements include net worth of \$2.5 million plus 35 basis points of PLS’ outstanding Ginnie Mae single-family obligations and a liquidity requirement equal to the greater of \$1.0 million or 10 basis points of PLS’ outstanding Ginnie Mae single-family securities.

The Agencies' capital and liquidity requirements, the calculations of which are specified by each Agency, are summarized below:

Agency—company subject to requirement	June 30, 2018		December 31, 2017	
	Actual (1)	Requirement (1)	Actual (1)	Requirement (1)
(dollars in thousands)				
Capital				
Fannie Mae & Freddie Mac – PLS	\$ 1,700,168	\$ 458,207	\$ 1,561,977	\$ 429,671
Ginnie Mae – PLS	\$ 1,471,829	\$ 676,720	\$ 1,307,580	\$ 674,133
Ginnie Mae – PennyMac	\$ 1,692,354	\$ 744,392	\$ 1,511,201	\$ 741,574
HUD – PLS	\$ 1,471,829	\$ 2,500	\$ 1,307,580	\$ 2,500
Liquidity				
Fannie Mae & Freddie Mac – PLS	\$ 272,858	\$ 62,942	\$ 196,415	\$ 58,754
Ginnie Mae – PLS	\$ 272,858	\$ 166,071	\$ 196,415	\$ 153,431
Tangible net worth / Total assets ratio				
Fannie Mae & Freddie Mac – PLS	22 %	6 %	21 %	6 %

(1) Calculated in compliance with the respective Agency's requirements.

Noncompliance with an Agency's requirements can result in such Agency taking various remedial actions up to and including terminating PennyMac's ability to sell loans to and service loans on behalf of the respective Agency.

Note 23—Segments and Related Information

The Company operates in three segments: production, servicing and investment management.

Two of the segments are in the mortgage banking business: production and servicing. The production segment performs mortgage loan origination, acquisition and sale activities. The servicing segment performs servicing of newly originated mortgage loans, execution and management of early buyout transactions and servicing of mortgage loans sourced and managed by the investment management segment for PMT, including executing the loan resolution strategy identified by the investment management segment relating to distressed mortgage loans.

The investment management segment represents the activities of the Company's investment manager, which include sourcing, performing diligence, bidding and closing investment asset acquisitions, managing correspondent production activities for PMT and managing the acquired assets for PMT.

Financial performance and results by segment are as follows:

	Quarter ended June 30, 2018				
	Mortgage Banking			Investment	Total
	Production	Servicing	Total	Management	
	(in thousands)				
Revenue: (1)					
Net gains on mortgage loans held for sale at fair value	\$ 33,966	\$ 26,980	\$ 60,946	\$ —	\$ 60,946
Mortgage loan origination fees	24,428	—	24,428	—	24,428
Fulfillment fees from PennyMac Mortgage Investment Trust	14,559	—	14,559	—	14,559
Net mortgage loan servicing fees	—	113,689	113,689	—	113,689
Management fees	—	—	—	5,664	5,664
Carried Interest from Investment Funds	—	—	—	(168)	(168)
Net interest income (expense):					
Interest income	16,874	38,230	55,104	—	55,104
Interest expense	1,025	31,576	32,601	15	32,616
	15,849	6,654	22,503	(15)	22,488
Other	536	728	1,264	1,428	2,692
Total net revenue	89,338	148,051	237,389	6,909	244,298
Expenses	70,320	93,483	163,803	5,797	169,600
Income before provision for income taxes	\$ 19,018	\$ 54,568	\$ 73,586	\$ 1,112	\$ 74,698
Segment assets at quarter end (2)	\$ 2,280,251	\$ 4,542,815	\$ 6,823,066	\$ 10,633	\$ 6,833,699

(1) All revenues are from external customers.

(2) Excludes parent Company assets, which consist primarily of working capital of \$8.0 million.

	Quarter ended June 30, 2017				
	Mortgage Banking			Investment	Total
	Production	Servicing	Total	Management	
	(in thousands)				
Revenue: (1)					
Net gains on mortgage loans held for sale at fair value	\$ 74,706	\$ 23,385	\$ 98,091	\$ —	\$ 98,091
Mortgage loan origination fees	30,193	—	30,193	—	30,193
Fulfillment fees from PennyMac Mortgage Investment Trust	21,107	—	21,107	—	21,107
Net mortgage loan servicing fees	—	46,913	46,913	—	46,913
Management fees	—	—	—	6,007	6,007
Carried Interest from Investment Funds	—	—	—	241	241
Net interest income (expense):					
Interest income	15,279	19,694	34,973	—	34,973
Interest expense	11,330	25,534	36,864	13	36,877
	3,949	(5,840)	(1,891)	(13)	(1,904)
Other	531	446	977	96	1,073
Total net revenue	130,486	64,904	195,390	6,331	201,721
Expenses	63,780	76,117	139,897	3,864	143,761
Income (loss) before provision for income taxes	\$ 66,706	\$ (11,213)	\$ 55,493	\$ 2,467	\$ 57,960
Segment assets at quarter end (2)	\$ 2,732,947	\$ 3,574,239	\$ 6,307,186	\$ 94,525	\$ 6,401,711

(1) All revenues are from external customers.

(2) Excludes parent Company assets, which consist primarily of working capital of \$3.0 million.

	Six months ended June 30, 2018				
	Mortgage Banking			Investment	Total
	Production	Servicing	Total	Management	
(in thousands)					
Revenue: (1)					
Net gains on mortgage loans held for sale at fair value	\$ 70,164	\$ 62,196	\$ 132,360	\$ —	\$ 132,360
Loan origination fees	48,991	—	48,991	—	48,991
Fulfillment fees from PennyMac Mortgage Investment Trust	26,503	—	26,503	—	26,503
Net servicing fees	—	230,478	230,478	—	230,478
Management fees	—	—	—	11,439	11,439
Carried Interest from Investment Funds	—	—	—	(348)	(348)
Net interest income (expense):					
Interest income	31,122	66,597	97,719	—	97,719
Interest expense	3,127	66,203	69,330	31	69,361
	27,995	394	28,389	(31)	28,358
Other	852	1,123	1,975	2,743	4,718
Total net revenue	174,505	294,191	468,696	13,803	482,499
Expenses	138,317	184,748	323,065	11,740	334,805
Income before provision for income taxes	\$ 36,188	\$ 109,443	\$ 145,631	\$ 2,063	\$ 147,694
Segment assets at period end (2)	\$ 2,280,251	\$ 4,542,815	\$ 6,823,066	\$ 10,633	\$ 6,833,699

(1) All revenues are from external customers.

(2) Excludes parent Company assets, which consist primarily of working capital of \$8.0 million.

	Six months ended June 30, 2017				
	Mortgage Banking			Investment	Total
	Production	Servicing	Total	Management	
(in thousands)					
Revenue: (1)					
Net gains on mortgage loans held for sale at fair value	\$ 137,543	\$ 47,504	\$ 185,047	\$ —	\$ 185,047
Loan origination fees	55,767	—	55,767	—	55,767
Fulfillment fees from PennyMac Mortgage Investment Trust	37,677	—	37,677	—	37,677
Net servicing fees	—	121,076	121,076	—	121,076
Management fees	—	—	—	11,381	11,381
Carried Interest from Investment Funds	—	—	—	113	113
Net interest income (expense):					
Interest income	28,215	30,617	58,832	—	58,832
Interest expense	20,152	46,175	66,327	24	66,351
	8,063	(15,558)	(7,495)	(24)	(7,519)
Other	1,476	917	2,393	259	2,652
Total net revenue	240,526	153,939	394,465	11,729	406,194
Expenses	126,316	151,736	278,052	8,150	286,202
Income (loss) before provision for income taxes	\$ 114,210	\$ 2,203	\$ 116,413	\$ 3,579	\$ 119,992
Segment assets at period end (2)	\$ 2,732,947	\$ 3,574,239	\$ 6,307,186	\$ 94,525	\$ 6,401,711

(1) All revenues are from external customers.

(2) Excludes parent Company assets, which consist primarily of working capital of \$3.0 million.

Note 24—Recently Issued Accounting Pronouncements

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)* (“ASU 2016-02”). ASU 2016-02 sets out the principles for the recognition, measurement, presentation and disclosure of leases for both parties to a contract (i.e. lessees and lessors) and supersedes previous lease accounting standards. ASU 2016-02 requires lessees to apply a dual approach, classifying leases as either finance or operating leases based on the principle of whether the lease is effectively a financed purchase of the leased asset by the lessee. A lessee is also required to record a right-of-use asset and a lease liability for all leases with a term of greater than 12 months regardless of their classification.

ASU 2016-02 is effective for the Company for reporting periods beginning after December 15, 2018, with early adoption permitted. The Company is currently assessing the potential effect that the adoption of ASU 2016-02 will have on its consolidated financial statements. As shown in Note 14 – *Commitments and Contingencies*, the Company had approximately \$92.8 million in future minimum lease payment commitments as of June 30, 2018. Were the Company to adopt ASU 2016-02 as of June 30, 2018, it would be required to recognize a right-of-use asset and a corresponding liability based on the present value of such obligation as of June 30, 2018. The Company does not expect to recognize a significant cumulative effect adjustment to its stockholders’ equity as a result of adopting ASU 2016-02.

Note 25—Subsequent Events

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

- During July 2018, the Company acquired from three non-affiliate sellers bulk portfolios of Ginnie Mae MSRs with a total UPB of approximately \$6.5 billion.
- During July 2018, the Company entered into letters of intent to acquire approximately \$7.4 billion in UPB of bulk MSRs from three different non-affiliate sellers. The MSR acquisitions by the Company are subject to the negotiation and execution of definitive documentation, continuing due diligence and customary closing conditions. There can be no assurance that the committed amounts will ultimately be acquired or that the transactions will be completed at all.
- On July 30, 2018, the Company, through its indirect controlled subsidiary, PennyMac Loan Services, LLC (“PLS”), executed a Temporary Increase Letter (the “DB Temporary Increase”) in connection with that certain Master Repurchase Agreement, dated as of August 21, 2017, by and among Deutsche Bank AG, Cayman Islands Branch (“Deutsche Bank”) and PLS (the “Repurchase Agreement”). Pursuant to the terms of the DB Temporary Increase, the maximum aggregate principal amount outstanding provided for thereunder was temporarily increased from \$750 million to \$950 million. The period for the DB Temporary Increase commenced on July 30, 2018 and will expire on September 28, 2018. Upon the expiration of the DB Temporary Increase, the maximum aggregate principal amount outstanding will revert back to \$750 million. All other terms and conditions of the Repurchase Agreement and the related guaranty remain the same in all material respects.
- On July 30, 2018, the Company, through PLS, executed a Temporary Increase Letter (the “BANA Temporary Increase”) in connection with that certain Mortgage Loan Participation Purchase and Sale Agreement, dated December 23, 2011, by and among Bank of America, N.A. (“BANA”) and the Company (the “BANA Participation Agreement”). Pursuant to the terms of the BANA Temporary Increase, the aggregate transaction limit of purchase prices for participation certificates owned by BANA provided for thereunder was temporarily increased from \$550 million to \$750 million. The period for the BANA Temporary Increase commenced on July 30, 2018 and will expire on September 15, 2018. Upon the expiration of the BANA Temporary Increase, the aggregate transaction limit of purchase prices will revert back to \$550 million. All other terms and conditions of the BANA Participation Agreement remain the same in all material respects.

- On August 2, 2018, the Company’s board of directors declared a special, one-time cash dividend of \$0.40 per share of the Company’s Class A common stock to holders of record of Class A common stock as of August 13, 2018 that is to be distributed on or about August 30, 2018.
- On August 2, 2018, the Company’s board of directors approved and the Company entered into a Contribution Agreement and Plan of Merger to reorganize under a new public holding company (the “Reorganization”). The Reorganization will allow the Company, among other things, to eliminate its “Up-C” structure and to transition to a single class of common stock held by all stockholders of the Company, as opposed to the two classes of common stock, Class A and Class B, that are currently authorized, issued and outstanding today.
- All agreements to sell assets under agreements to repurchase that matured between June 30, 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

Cautionary Statement Regarding Forward-Looking Statements

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 Financial Services, Inc. ("PFSI") 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.

Overview

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 PFSI.

Our Company

We are a specialty financial services firm with a comprehensive mortgage platform and integrated business primarily focused on the production and servicing of U.S. residential mortgage loans (activities which we refer to as mortgage banking) and the management of investments related to the U.S. mortgage market. We believe that our operating capabilities, specialized expertise, access to long-term investment capital, and our management's experience across all aspects of the mortgage business will allow us to profitably grow these activities and capitalize on other related opportunities as they arise in the future.

We operate and control all of the business and affairs of Private National Mortgage Acceptance Company, LLC ("PennyMac") and are its sole managing member. PennyMac was founded in 2008 by members of our executive leadership team and two strategic partners, BlackRock Mortgage Ventures, LLC and HC Partners, LLC, formerly known as Highfields Capital Investments, LLC, together with its affiliates.

Our principal mortgage banking subsidiary, PennyMac Loan Services, LLC ("PLS"), is a non-bank producer and servicer of mortgage loans in the United States. PLS is a seller/servicer for the Federal National Mortgage Association ("Fannie Mae") and the Federal Home Loan Mortgage Corporation ("Freddie Mac"), each of which is a government sponsored entity ("GSE"). PLS is also an approved issuer of securities guaranteed by the Government National Mortgage Association ("Ginnie Mae"), a lender of the Federal Housing Administration ("FHA"), a lender/servicer of the Veterans Administration ("VA") and the U.S. Department of Agriculture ("USDA"), and a servicer for the Home Affordable Modification Program. We refer to each of Fannie Mae, Freddie Mac, Ginnie Mae, FHA, VA and USDA as an "Agency" and collectively as the "Agencies." PLS is able to service loans in all 50 states, the District of Columbia, Guam and the U.S. Virgin Islands, and originate loans in 49 states and the District of Columbia, either because PLS is properly licensed in a particular jurisdiction or exempt or otherwise not required to be licensed in that jurisdiction.

Our investment management subsidiary is PNMAC Capital Management, LLC ("PCM"), a Delaware limited liability company registered with the Securities and Exchange Commission ("SEC") as an investment adviser under the Investment Advisers Act of 1940, as amended. PCM manages PennyMac Mortgage Investment Trust ("PMT"), a mortgage real estate investment trust, listed on the New York Stock Exchange under the ticker symbol PMT. PCM also previously managed PNMAC Mortgage Opportunity Fund, LLC (the "Registered Fund") and PNMAC Mortgage Opportunity Fund, LP (the "Master Fund"), both formerly registered under the Investment Company Act of 1940, as

amended, an affiliate of these funds and PNMAC Mortgage Opportunity Fund Investors, LLC (the “Private Fund”). We refer to these funds collectively as our “Investment Funds” and, together with PMT, as our “Advised Entities.” In 2017 through the six months ended June 30, 2018, the Investment Funds sold or liquidated all of their remaining investments. The Registered Fund and the Master Fund obtained orders of de-registration on July 25, 2018 and the management agreements with the Registered Fund, the Master Fund and the Private Fund expired or were otherwise terminated on or before August 2, 2018. We expect to complete liquidation of the Investment Funds during 2018.

We conduct our business in three segments: production, servicing (together, production and servicing comprise our mortgage banking activities) and investment management.

- The production segment performs mortgage loan origination, acquisition and sale activities.
- The servicing segment performs mortgage loan servicing for both newly originated loans and loans we service for others, including for PMT.
- The investment management segment represents our investment management activities, which include the activities associated with investment asset acquisitions and dispositions such as sourcing, due diligence, negotiation and settlement; managing correspondent production activities for PMT; and managing the acquired investments for PMT.

Results of Operations

Our results of operations are summarized below:

	Quarter ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	(in thousands)			
Revenues:				
Net gains on mortgage loans held for sale at fair value	\$ 60,946	\$ 98,091	\$ 132,360	\$ 185,047
Mortgage loan origination fees	24,428	30,193	48,991	55,767
Fulfillment fees from PennyMac Mortgage Investment Trust	14,559	21,107	26,503	37,677
Net mortgage loan servicing fees	113,689	46,913	230,478	121,076
Management fees & Carried Interest	5,496	6,248	11,091	11,494
Net interest income (expense)	22,488	(1,904)	28,358	(7,519)
Other	2,692	1,073	4,718	2,652
Total net revenue	244,298	201,721	482,499	406,194
Expenses	169,600	143,761	334,805	286,202
Provision for income taxes	6,293	7,214	12,363	14,860
Net income	\$ 68,405	\$ 50,746	\$ 135,331	\$ 105,132
Annualized return on average stockholders' equity	13.7 %	11.1 %	13.7 %	11.7 %
Income before provision for income taxes by segment:				
Mortgage banking:				
Production	\$ 19,018	\$ 66,706	\$ 36,188	\$ 114,210
Servicing	54,568	(11,213)	109,443	2,203
Total mortgage banking	73,586	55,493	145,631	116,413
Investment management	1,112	2,467	2,063	3,579
	\$ 74,698	\$ 57,960	\$ 147,694	\$ 119,992
During the quarter:				
Interest rate lock commitments issued	\$ 11,854,920	\$ 13,489,651	\$ 22,712,555	\$ 24,595,550
Unpaid principal balance of mortgage loans fulfilled for PMT subject to fulfillment fees	\$ 5,396,370	\$ 5,918,027	\$ 9,622,001	\$ 10,549,933
At quarter end:				
Unpaid principal balance of mortgage loan servicing portfolio:				
Owned:				
Mortgage servicing rights	\$ 178,264,240	\$ 157,223,909		
Mortgage servicing liabilities	1,569,602	1,698,588		
Mortgage loans held for sale	2,448,908	2,915,346		
	182,282,750	161,837,843		
Subserviced for Advised Entities	81,214,629	67,125,932		
	\$ 263,497,379	\$ 228,963,775		
Net assets of Advised Entities:				
PennyMac Mortgage Investment Trust	\$ 1,545,487	\$ 1,454,832		
Investment Funds	765	144,744		
	\$ 1,546,252	\$ 1,599,576		
Book value per share	\$ 21.19	\$ 16.40		

During the quarter and six months ended June 30, 2018, net income increased \$17.7 million and \$30.2 million, respectively, compared to the same periods in 2017. The increases were primarily due to an increase in *Net mortgage loan servicing fees*, which reflects both growth in our servicing portfolio and improved fair value related adjustments, and an increase in net interest income, which reflects the effect of incentives we receive for financing mortgage loans held for sale approved for satisfying certain customer relief characteristics. The increases were partially offset by decreases in *Net gains on mortgage loans held for sale at fair value*, *Fulfillment fees from PennyMac Mortgage Investment Trust* and *Mortgage loan origination fees*, which reflect the reduced size of the mortgage origination market during 2018 as compared to 2017.

Net Gains on Mortgage Loans Held for Sale at Fair Value

Most of our mortgage loan production consists of government-insured or guaranteed mortgage loans that we source primarily through PMT. PMT is not approved by Ginnie Mae as an issuer of Ginnie Mae-guaranteed securities which are backed by government-insured or guaranteed mortgage loans. We purchase such mortgage loans that PMT acquires through its correspondent production activities and pay PMT a sourcing fee ranging from two to three and one-half basis points on the UPB of such mortgage loans.

During the quarter and six months ended June 30, 2018, we recognized *Net gains on mortgage loans held for sale at fair value* totaling \$60.9 million and \$132.4 million, respectively, a decrease of \$37.1 million and \$52.7 million, respectively, compared to the same periods in 2017. The decreases were primarily due to decreases in profit margins reflecting 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 acquisition and origination of mortgage loans.

Our net gains on mortgage loans held for sale are summarized below:

	Quarter ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	(in thousands)			
From non-affiliates:				
Cash loss:				
Mortgage loans	\$ (110,242)	\$ 1,904	\$ (292,043)	\$ (56,777)
Hedging activities	(12,567)	5,317	91,829	6,424
	(122,809)	7,221	(200,214)	(50,353)
Non-cash gain:				
Mortgage servicing rights and mortgage servicing liabilities resulting from mortgage loan sales	153,924	133,062	295,797	265,205
Provision for losses relating to representations and warranties:				
Pursuant to mortgage loan sales	(1,216)	(1,296)	(2,708)	(2,698)
Reduction in liability due to change in estimate	1,359	1,020	2,472	1,892
Change in fair value of mortgage loans and derivative financial instruments outstanding at quarter end:				
Interest rate lock commitments	4,793	(19,849)	(2,583)	(13,234)
Mortgage loans	(4,454)	(13,326)	14,510	(5,930)
Hedging derivatives	14,422	(7,235)	(2,227)	(6,634)
	46,019	99,597	105,047	188,248
From PennyMac Mortgage Investment Trust	14,927	(1,506)	27,313	(3,201)
	\$ 60,946	\$ 98,091	\$ 132,360	\$ 185,047
During the period:				
Interest rate lock commitments issued:				
Government-insured or guaranteed mortgage loans	\$ 10,757,969	\$ 12,685,150	\$ 20,513,407	\$ 23,122,464
Conventional mortgage loans	1,096,951	804,501	2,199,148	1,473,086
	\$ 11,854,920	\$ 13,489,651	\$ 22,712,555	\$ 24,595,550
At period end:				
Mortgage loans held for sale at fair value	\$ 2,527,231	\$ 3,037,602		
Commitments to fund and purchase mortgage loans	\$ 4,291,135	\$ 3,999,761		

Provision for Losses on Representations and Warranties

We record our estimate of the losses that we expect to incur in the future as a result of claims against us made in connection with the representations and warranties provided to the purchasers and insurers of the mortgage loans we sold in our *Net gains on sale of mortgage loans held for sale at fair value*. Our agreements with the purchasers and insurers include representations and warranties related to the mortgage loans we sell to purchasers. 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.

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 purchaser 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 originators that 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 used to estimate our losses on representations and warranties is a function of our estimate of future defaults, mortgage loan repurchase rates, the severity of loss in the event of default, if applicable, 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.

We recorded provisions for losses under representations and warranties relating to current mortgage loan sales as a component of *Net gains on mortgage loans held for sale at fair value* totaling \$1.2 million and \$2.7 million during the quarter and six months ended June 30, 2018, respectively, compared to \$1.3 million and \$2.7 million during the quarter and six months ended June 30, 2017, respectively. We also recorded reductions in the liability of \$1.4 million and \$2.5 million during the quarter and six months ended June 30, 2018, respectively compared to \$1.0 million and \$1.9 million during the quarter and six months ended June 30, 2017, respectively. The reductions in the liability resulted from reductions relating to mortgage loans meeting previously announced limitations on pursuit by the Agencies of claims on mortgage loans with certain performance histories.

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

	Quarter ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	(in thousands)			
During the period:				
Indemnification activity				
Mortgage loans indemnified by PFSI at beginning of period	\$ 10,001	\$ 6,288	\$ 7,579	\$ 5,599
New indemnifications	546	723	3,178	1,412
Less:				
Indemnified mortgage loans sold, repaid or refinanced	213	214	423	214
Mortgage loans indemnified by PFSI at end of period	<u>\$ 10,334</u>	<u>\$ 6,797</u>	<u>\$ 10,334</u>	<u>\$ 6,797</u>
Repurchase activity				
Total mortgage loans repurchased by PFSI	\$ 6,672	\$ 6,217	\$ 12,985	\$ 11,520
Less:				
Mortgage loans repurchased by correspondent lenders	4,259	4,827	10,905	7,410
Mortgage loans repaid by borrowers or resold with defects resolved	450	2,332	566	5,551
Net mortgage loans resold or repaid with losses chargeable to liability for representations and warranties	<u>\$ 1,963</u>	<u>\$ (942)</u>	<u>\$ 1,514</u>	<u>\$ (1,441)</u>
Net (recoveries credited) losses charged to liability for representations and warranties	<u>\$ (301)</u>	<u>\$ 144</u>	<u>\$ (298)</u>	<u>\$ 305</u>
At period end:				
Unpaid principal balance of mortgage loans subject to representations and warranties	\$ 133,585,457	\$ 106,284,973		
Liability for representations and warranties	\$ 20,587	\$ 19,568		

During the quarter and six months ended June 30, 2018, we repurchased mortgage loans totaling \$6.7 million and \$13.0 million, respectively, in UPB. We recorded net recoveries of \$301,000 and \$298,000, respectively, as a result of these repurchases during the quarter and six months ended June 30, 2018. As the outstanding balance of mortgage loans we purchase and sell subject to representations and warranties increases and the loans sold continue to season, we expect that the level of repurchase activity may increase.

The level of the liability for losses under representations and warranties is difficult to estimate and requires considerable management judgment. The level of mortgage loan repurchase losses is dependent on economic factors, purchaser or insurer loss mitigation strategies, and other external conditions that may change over the lives of the underlying mortgage loans. Our estimate of the liability for representations and warranties is developed by our credit administration staff and approved by our senior management credit committee which includes our senior executives and senior management in our loan production, loan servicing and credit risk management areas.

Our representations and warranties are generally not subject to stated limits of exposure. However, we believe that the current UPB of mortgage loans sold by us to date represents the maximum exposure to repurchases related to representations and warranties.

Other mortgage loan production-related revenues

Mortgage loan origination fees decreased \$5.8 million and \$6.8 million during the quarter and six months ended June 30, 2018, respectively, compared to the same periods in 2017. The decrease was primarily due to a decrease in volume of mortgage loans we produced, which reflects the reduced size of the mortgage origination market during 2018 as compared to 2017.

Fulfillment fees from PMT represent fees we collect for services we perform on behalf of PMT in connection with the acquisition, packaging and sale of mortgage loans. The fulfillment fees are calculated as a percentage of the UPB of the mortgage loans we fulfill for PMT.

Summarized below are our fulfillment fees:

	Quarter ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	(in thousands)			
Fulfillment fee revenue	\$ 14,559	\$ 21,107	\$ 26,503	\$ 37,677
Unpaid principal balance of mortgage loans fulfilled subject to fulfillment fees	\$ 5,396,370	\$ 5,918,027	\$ 9,622,001	\$ 10,549,933
Average fulfillment fee rate (in basis points)	27	36	28	36

Fulfillment fees decreased \$6.5 million and \$11.2 million during the quarter and six months ended June 30, 2018, respectively, compared to the same periods in 2017. The decrease is primarily due to a lower fulfillment fee rate pursuant to an amendment to our mortgage banking services agreement with PMT.

Net mortgage loan servicing fees

Following is a summary of our net mortgage loan servicing fees:

	Quarter ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	(in thousands)			
Net mortgage loan servicing fees:				
Mortgage loan servicing fees:				
From non-affiliates	\$ 138,871	\$ 112,348	\$ 274,354	\$ 218,815
From PennyMac Mortgage Investment Trust	9,431	10,099	20,450	20,585
From Investment Funds	3	543	3	1,039
Ancillary and other fees	13,637	11,202	27,808	23,068
	161,942	134,192	322,615	263,507
Amortization, impairment and change in fair value of mortgage servicing rights, mortgage servicing liabilities and excess servicing spread financing net of hedging results	(48,253)	(87,279)	(92,137)	(142,431)
Net mortgage loan servicing fees	\$ 113,689	\$ 46,913	\$ 230,478	\$ 121,076
Average mortgage loan servicing portfolio	\$ 259,413,456	\$ 212,671,694	\$ 254,525,871	\$ 206,055,588

Amortization, impairment and change in fair value of mortgage servicing rights and excess servicing spread are summarized below:

	Quarter ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	(in thousands)			
Amortization and realization of cash flows	\$ (65,227)	\$ (55,482)	\$ (126,403)	\$ (103,942)
Other changes in fair value of, and provision for impairment of, mortgage servicing rights and mortgage servicing liabilities	42,259	(36,927)	170,065	(24,226)
Change in fair value of excess servicing spread	(996)	7,156	(7,917)	9,929
Hedging results	(24,289)	(2,026)	(127,882)	(24,192)
Total fair value adjustments, net of hedging results	16,974	(31,797)	34,266	(38,489)
Total amortization, impairment and change in fair value of mortgage servicing rights, mortgage servicing liabilities and excess servicing spread	\$ (48,253)	\$ (87,279)	\$ (92,137)	\$ (142,431)
Average mortgage servicing rights balances:				
Carried at fair value	\$ 2,437,780	\$ 1,235,077	\$ 2,351,373	\$ 1,199,327
Carried at lower of amortized cost or fair value	—	551,740	—	534,918
	\$ 2,437,780	\$ 1,786,817	\$ 2,351,373	\$ 1,734,245
Average mortgage servicing liabilities	\$ 10,854	\$ 15,241	\$ 11,372	\$ 15,084
Mortgage servicing rights at period end:				
Carried at fair value	\$ 2,486,157	\$ 1,273,158		
Carried at lower of amortized cost or fair value	—	678,441		
	\$ 2,486,157	\$ 1,951,599		
Mortgage servicing liabilities at period end	\$ 10,253	\$ 18,295		

Following is a summary of our mortgage loan servicing portfolio:

	June 30,	December 31,
	2018	2017
	(in thousands)	
Mortgage loans serviced		
Prime servicing:		
Owned:		
Mortgage servicing rights		
Originated	\$ 132,307,067	\$ 119,673,403
Acquired	45,957,173	46,575,834
	178,264,240	166,249,237
Mortgage servicing liabilities	1,569,602	1,620,609
Mortgage loans held for sale	2,448,908	2,998,377
	182,282,750	170,868,223
Subserviced for Advised Entities	80,359,635	73,651,608
Total prime servicing	262,642,385	244,519,831
Special servicing – Subserviced for Advised Entities	854,994	1,328,660
Total mortgage loans serviced	\$ 263,497,379	\$ 245,848,491

Net mortgage loan servicing fees increased \$66.8 million and \$109.4 million during the quarter and six months ended June 30, 2018, respectively, compared to the same periods in 2017. The increases were due to a combination of increased mortgage loan servicing fees resulting from growth in our mortgage loan servicing portfolio and a net gain in fair value of MSR, MSL and ESS, net of hedging results, reflecting the effect of rising interest rates during the quarter and six months ended June 30, 2018.

Mortgage loan servicing fees increased \$27.8 million and \$59.1 million during the quarter and six months ended June 30, 2018, respectively, compared to the same periods in 2017 reflecting increases in our average servicing portfolio of 22% and 24% for the quarter and six months ended June 30, 2018, respectively, compared to the same periods in 2017. The decrease of \$39.0 million and \$50.3 million in amortization, impairment and MSR, MSL and ESS valuation adjustments net of hedging results during the quarter and six months ended June 30, 2018, respectively, compared to the same periods in 2017 reflect the effect of generally increasing interest rates in the market during 2018 compared to generally decreasing interest rates during the same periods in 2017. Increasing interest rates discourage refinancings which extend the expected life of the servicing asset, thereby increasing cash flow expectations and the fair value of MSRs.

Management fees and Carried Interest

Management fees and Carried Interest are summarized below:

	<u>Quarter ended June 30,</u>		<u>Six months ended June 30,</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
	(in thousands)			
Management Fees:				
PennyMac Mortgage Investment Trust:				
Base management	\$ 5,728	\$ 5,334	\$ 11,424	\$ 10,342
Performance incentive	—	304	—	304
	<u>5,728</u>	<u>5,638</u>	<u>11,424</u>	<u>10,646</u>
Investment Funds	(64)	369	15	735
Total management fees	<u>5,664</u>	<u>6,007</u>	<u>11,439</u>	<u>11,381</u>
Carried Interest	(168)	241	(348)	113
Total management fees and Carried Interest	<u>\$ 5,496</u>	<u>\$ 6,248</u>	<u>\$ 11,091</u>	<u>\$ 11,494</u>
Net assets of Advised Entities at period end:				
PennyMac Mortgage Investment Trust	\$ 1,545,487	\$ 1,454,832		
Investment Funds	765	144,744		
	<u>\$ 1,546,252</u>	<u>\$ 1,599,576</u>		

Management fees from PMT increased \$90,000 and \$778,000 during the quarter and six months ended June 30, 2018 compared to the same period in 2017. The increases were due to increases in PMT's average shareholders' equity, upon which its base management fees are calculated. The increases in PMT's average shareholders' equity during the quarter and six months ended June 30, 2018 compared to the same periods in 2017 were primarily due to the issuance of additional equity by PMT in the form of preferred shares in July 2017.

Management fees from the Investment Funds decreased \$433,000 and \$720,000 during the quarter and six months ended June 30, 2018, respectively, compared to the same periods in 2017. The reduction of management fees was anticipated as the Investment Funds sold or liquidated all of their investment assets in 2017 and through the six months ended June 30, 2018 and distributed most of the sale proceeds to the funds' investors. Due to their substantial liquidation during the six months ended June 30, 2018, we stopped charging management fees to the Investment Funds.

Other revenues

Net Interest Income

Net interest income increased \$24.4 million and \$35.9 million during the quarter and six months ended June 30, 2018, respectively, compared to the same periods in 2017. The increase in net interest income is primarily due to an increase in placement fees relating to custodial funds and recognition of incentives that we received relating to our financing of certain mortgage loans satisfying certain consumer relief characteristics.

The placement fees relating to custodial funds increased \$9.6 million and \$17.9 million during the quarter and six months ended June 30, 2018, respectively, compared to the same periods in 2017 reflected an increase in the placement fee rate we receive and the growth of our servicing portfolio resulting in an increase in average custodial funds managed by the Company in 2018 compared to 2017.

In September 2017, we entered into a master repurchase agreement that provides us with incentives to finance mortgage loans approved for satisfying certain consumer relief characteristics as provided in the agreement. We recorded \$12.5 million and \$22.7 million of such incentives as a reduction of *Interest expense* for the quarter and six months ended June 30, 2018, respectively. The master repurchase agreement is subject to a rolling six-month term through August 21, 2019, unless terminated earlier at the option of the lender. There is no assurance that the lender will not terminate this agreement prior to its stated maturity.

Change in Fair Value of Investment in and Dividends Received from PMT

Change in fair value of investment in and dividends received from PMT increased \$32,000 and \$75,000 during the quarter and six months ended June 30, 2018, compared to the same periods in 2017. The change reflects the increase in share price of our investment in PMT. We held 75,000 common shares of PMT during each of the periods ended June 30, 2018 and 2017, with a fair value of \$1.4 million at the end of each period.

Expenses

Compensation

Our compensation expense is summarized below:

	<u>Quarter ended June 30,</u>		<u>Six months ended June 30,</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
	(in thousands)			
Salaries and wages	\$ 63,109	\$ 55,971	\$ 126,489	\$ 112,874
Incentive compensation	16,938	12,100	36,514	23,628
Taxes and benefits	12,430	10,031	25,316	21,315
Stock and unit-based compensation	6,063	4,865	12,234	10,390
	<u>\$ 98,540</u>	<u>\$ 82,967</u>	<u>\$ 200,553</u>	<u>\$ 168,207</u>
Head count:				
Average	3,300	2,912	3,270	2,944
Quarter end	3,323	2,976		

Compensation expense increased \$15.6 million and \$32.3 million during the quarter and six months ended June 30, 2018 compared to the same periods in 2017. The increases were primarily due to an increase in salaries and wages due to increased average head count resulting from the growth in our mortgage banking activities, as well as an increase in incentive compensation reflecting our expectation of improved results of operations during 2018.

Servicing

Servicing expenses increased \$3.8 million and \$3.2 million during the quarter and six months ended June 30, 2018, respectively, compared to the same periods in 2017. The increases were primarily due to growth in the Company's mortgage loan servicing portfolio.

Technology

Technology expense increased \$3.6 million and \$6.8 million during the quarter and six months ended June 30, 2018, respectively, compared to the same periods in 2017 primarily due to our continued investment in loan production and servicing infrastructure.

Occupancy and equipment

Occupancy and equipment expenses increased \$542,000 and \$1.9 million during the quarter and six months ended June 30, 2018, respectively, compared to the same periods in 2017. The increases were primarily attributable to expansion of our facilities made to accommodate our growth.

Expenses Allocated to PMT

PMT reimburses us for other expenses, including common overhead and personnel expenses incurred on its behalf by us, in accordance with the terms of our management agreement with PMT. We adopted Accounting Standards Update 2014-09, *Revenue from Contracts with Customers (Subtopic 606)* (“ASU 2014-09”) using the modified retrospective method effective January 1, 2018. Adoption of ASU 2014-09 using the modified retrospective method required us to include those expenses in *Other* income starting January 1, 2018.

The expense amounts presented in our income statement are net of these allocations during 2017 and a component of *Other* revenue during 2018. Common overhead and personnel expense amounts allocated to PMT are summarized below:

	<u>Quarter ended June 30,</u>		<u>Six months ended June 30,</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
	(in thousands)			
Technology	\$ 302	\$ 424	\$ 522	\$ 881
Occupancy and equipment	647	839	1,236	1,626
Compensation	120	—	240	—
Other	227	330	419	520
Total expenses	<u>\$ 1,296</u>	<u>\$ 1,593</u>	<u>\$ 2,417</u>	<u>\$ 3,027</u>

Provision for Income Taxes

Our effective tax rate was 8.4% during the quarter and six months ended June 30, 2018, compared to 12.4% during the same periods in 2017. The lower effective tax rate for 2018 reflects the effect of a reduction in the federal statutory rate from 35% to 21% under the Tax Act of 2017. The difference between our effective tax rate and the statutory rate is primarily due to the allocation of earnings to the noncontrolling interest unitholders. As the noncontrolling interest unitholders convert their ownership units into our shares and our ownership in PennyMac is increased through vesting of equity awards, we expect an increase in allocated earnings that will be subject to corporate federal and state statutory tax rates, which will in turn increase our effective income tax rate.

Balance Sheet Analysis

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

	June 30, 2018	December 31, 2017
	(in thousands)	
ASSETS		
Cash and short-term investments	\$ 288,234	\$ 207,805
Mortgage loans held for sale at fair value	2,527,231	3,099,103
Servicing advances, net	258,900	318,066
Investments in and advances to affiliates	159,679	172,869
Carried Interest due from Investment Funds	370	8,552
Mortgage servicing rights	2,486,157	2,119,588
Mortgage loans eligible for repurchase	879,621	1,208,195
Other	241,514	233,915
Total assets	<u>\$ 6,841,706</u>	<u>\$ 7,368,093</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Borrowings	\$ 3,507,759	\$ 3,821,409
Payable to affiliates	376,086	419,970
Liability for mortgage loans eligible for repurchase	879,621	1,208,195
Other	216,296	198,845
Total liabilities	4,979,762	5,648,419
Stockholders' equity	1,861,944	1,719,674
Total liabilities and stockholders' equity	<u>\$ 6,841,706</u>	<u>\$ 7,368,093</u>

Total assets decreased \$526.4 million from \$7.4 billion at December 31, 2017 to \$6.8 billion at June 30, 2018. The decrease was primarily due to a decrease of \$571.8 million in mortgage loans held for sale at fair value resulting from a reduction in mortgage loans held for sale and a decrease of \$328.6 million in mortgage loans eligible for repurchase, partially offset by an increase of \$366.6 million in our investment in MSRs reflecting continued additions from our mortgage loan production activities and servicing portfolio acquisitions and an increase of \$80.4 million in cash and short-term investments.

Total liabilities decreased by \$668.7 million from \$5.6 billion as of December 31, 2017 to \$5.0 billion as of June 30, 2018. The decrease was primarily attributable to a decrease in borrowings required to finance a smaller inventory of mortgage loans held for sale at June 30, 2018 as compared to December 31, 2017.

Cash Flows

Our cash flows for the six months ended June 30, 2018 and 2017 are summarized below:

	Six months ended June 30,		
	2018	2017	Change
	(in thousands)		
Operating	\$ 595,898	\$ (852,928)	\$ 1,448,826
Investing	(95,751)	(274,348)	178,597
Financing	(348,170)	1,104,003	(1,452,173)
Net increase (decrease) in cash and restricted cash	<u>\$ 151,977</u>	<u>\$ (23,273)</u>	<u>\$ 175,250</u>

Our cash flows resulted in a net increase in cash and restricted cash of \$152.0 million during the six months ended June 30, 2018 as discussed below.

Operating activities

Net cash provided by operating activities totaled \$595.9 million during six months ended June 30, 2018 and net cash used in operating activities totaled \$852.9 million during the same period in 2017. Our cash flows from operating activities are primarily influenced by changes in the levels of our inventory of mortgage loans as shown below:

	<u>Six months ended June 30,</u>	
	<u>2018</u>	<u>2017</u>
	(in thousands)	
Cash flows from:		
Mortgage loans held for sale at fair value	\$ 458,582	\$ (886,292)
Other operating sources	137,316	33,364
	<u>\$ 595,898</u>	<u>\$ (852,928)</u>

Investing activities

Net cash used in investing activities during the six months ended June 30, 2018 totaled \$95.8 million primarily due to a \$126.9 million net use of cash in net settlement of derivative financial instruments used to hedge our investment in MSRs and purchases of MSRs totaling \$30.1 million, partially offset by a \$71.5 million decrease in short-term investments. Net cash used in investing activities during the six months ended June 30, 2017 totaled \$274.3 million primarily due to purchases of MSRs totaling \$181.6 million.

Financing activities

Net cash used in financing activities totaled \$348.2 million during the six months ended June 30, 2018 primarily due to net repurchases of assets sold under agreements to repurchase, reflecting a reduction in our financing of mortgage loans held for sale. Net cash provided by financing activities totaled \$1.1 billion during the six months ended June 30, 2017, primarily to finance the growth in our inventory of mortgage loans held for sale at fair value and our investments in MSRs.

Liquidity and Capital Resources

Our liquidity reflects our ability to meet our current obligations (including our operating expenses and, when applicable, the retirement of, and margin calls relating to, our debt, and margin calls relating to hedges on our commitments to purchase or originate mortgage loans and on our MSR investments), fund new originations and purchases, and make investments as we identify them. We expect our primary sources of liquidity to be through cash flows from business activities, proceeds from bank borrowings, proceeds from and issuance of ESS and/or equity or debt offerings. We believe that our liquidity is sufficient to meet our current liquidity needs.

Our current borrowing strategy is to finance our assets where we believe such borrowing is prudent, appropriate and available. Our borrowing activities are in the form of sales of assets under agreements to repurchase, sales of mortgage loan participation certificates, ESS, notes payable (including a revolving credit agreement) and a capital lease. All of our borrowings other than ESS, term notes payable and our obligation under capital lease have short-term maturities and provide for terms of approximately one year. 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.

Our repurchase agreements represent the sales of assets together with agreements for us to buy back the respective assets at a later date. The table below presents the average outstanding, maximum and ending balances:

	Quarter ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	(in thousands)		(in thousands)	
Average balance	\$ 1,574,012	\$ 2,082,668	\$ 1,608,535	\$ 1,801,138
Maximum daily balance	\$ 2,028,713	\$ 3,617,164	\$ 2,380,121	\$ 3,617,164
Balance at period end	\$ 1,825,063	\$ 2,036,366		

The differences between the average and maximum daily balances on our repurchase agreements reflect the fluctuations throughout the month of our inventory as we fund and pool mortgage loans for sale in guaranteed mortgage securitizations.

Our secured financing agreements at PLS require us to comply with various financial covenants. The most significant financial covenants currently include the following:

- positive net income during each calendar quarter;
- a minimum in unrestricted cash and cash equivalents of \$40 million;
- a minimum tangible net worth of \$500 million;
- a maximum ratio of total liabilities to tangible net worth of 10:1; and
- at least one other warehouse or repurchase facility that finances amounts and assets that are similar to those being financed under certain of our existing secured financing agreements.

With respect to servicing performed for PMT, PLS is also subject to certain covenants under PMT's debt agreements. Covenants in PMT's debt agreements are equally, or sometimes less, restrictive than the covenants described above.

In addition to the covenants noted above, PennyMac's revolving credit agreement and capital lease contain additional financial covenants including, but not limited to,

- a minimum of cash and carried interest equal to the amount borrowed under the revolving credit agreement;
- a minimum of unrestricted cash and cash equivalents equal to \$40 million;
- a minimum of tangible net worth of \$500 million;
- a minimum asset coverage ratio (the ratio of the total asset amount to the total commitment) of 2.5; and
- a maximum ratio of total indebtedness to tangible net worth ratio of 5:1.

Although these financial covenants limit the amount of indebtedness that we may incur and affect 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.

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. 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.

We are also subject to liquidity and net worth requirements established by FHFA for Agency seller/servicers and Ginnie Mae for single-family issuers. FHFA and Ginnie Mae have established minimum liquidity requirements and revised their net worth requirements for their approved non-depository single-family sellers/servicers in the case of Fannie Mae, Freddie Mac, and Ginnie Mae for its approved single-family issuers, as summarized below:

- FHFA liquidity requirement is equal to 0.035% (3.5 basis points) of total Agency servicing UPB plus an incremental 200 basis points of the amount by which total nonperforming Agency servicing UPB exceeds 6% of the applicable Agency servicing UPB; allowable assets to satisfy liquidity requirement include cash and cash equivalents (unrestricted), certain investment-grade securities that are available for sale or held for trading including Agency mortgage-backed securities, obligations of Fannie Mae or Freddie Mac, and U.S. Treasury obligations, and unused and available portions of committed servicing advance lines;
- FHFA net worth requirement is a minimum net worth of \$2.5 million plus 25 basis points of UPB for total 1-4 unit residential mortgage loans serviced and a tangible net worth/total assets ratio greater than or equal to 6%;
- Ginnie Mae single-family issuer minimum liquidity requirement is equal to the greater of \$1.0 million or 0.10% (10 basis points) of the issuer's outstanding Ginnie Mae single-family securities, which must be met with cash and cash equivalents; and
- Ginnie Mae net worth requirement is equal to \$2.5 million plus 0.35% (35 basis points) of the issuer's outstanding Ginnie Mae single-family obligations.

We believe that we are currently in compliance with the applicable Agency requirements.

We have purchased portfolios of MSRs and have financed them in part through the sale to PMT of the right to receive ESS. The outstanding amount of the ESS is based on the current fair value of such ESS and amounts received on the underlying mortgage loans.

Our Board of Directors approved stock repurchase program allows us to repurchase up to \$50 million of our Class A common stock using open market stock purchases or privately negotiated transactions in accordance with applicable rules and regulations. The stock repurchase program does not have an expiration date and the authorization does not obligate us to acquire any particular amount of Class A common stock. We intend to finance the stock repurchase program through cash on hand.

We continue to explore a variety of means of financing our continued growth, including debt financing through bank warehouse lines of credit, bank loans, repurchase agreements, securitization transactions and corporate debt. However, there can be no assurance as to how much additional financing capacity such efforts will produce, what form the financing will take or whether such efforts will be successful.

Off-Balance Sheet Arrangements and Aggregate Contractual Obligations

Off-Balance Sheet Arrangements and Guarantees

As of June 30, 2018, we have not entered into any off-balance sheet arrangements.

Contractual Obligations

As of June 30, 2018 we had contractual obligations aggregating \$8.6 billion, comprised of borrowings, commitments to purchase and originate mortgage loans and a payable to exchanged Private National Mortgage Acceptance Company, LLC unitholders under a tax receivable agreement. We also lease our office facilities and license certain software to support our loan servicing operations.

Payment obligations under these agreements are summarized below:

<u>Contractual obligations</u>	<u>Payments due by year</u>				
	<u>Total</u>	<u>Less than 1 year</u>	<u>1-3 years</u>	<u>3-5 years</u>	<u>More than 5 years</u>
	(in thousands)				
Commitments to purchase and originate mortgage loans	\$ 4,291,135	\$ 4,291,135	\$ —	\$ —	\$ —
Short-term debt	2,353,431	2,353,431	—	—	—
Long-term debt	1,392,502	9,860	3,172	1,150,000	229,470
Interest on long-term debt	358,521	74,628	144,750	102,851	36,292
Payable to exchanged Private National Mortgage Acceptance Company, LLC unitholders under tax receivable agreement	46,903	—	—	—	46,903
Software licenses (1)	26,179	17,908	8,271	—	—
Office leases	92,759	14,941	29,069	21,191	27,558
Total	<u>\$ 8,561,430</u>	<u>\$ 6,761,903</u>	<u>\$ 185,262</u>	<u>\$ 1,274,042</u>	<u>\$ 340,223</u>

- (1) Software licenses include both volume and activity based fees that are dependent on the number of loans serviced during each period and include a base fee of approximately \$1.7 million per month. Estimated payments for software licenses above are based on the number of loans currently serviced by us, which totaled approximately \$1.3 million at June 30, 2018. Future amounts due may significantly fluctuate based on changes in the number of loans serviced by us. For the six months ended June 30, 2018, software license fees totaled \$12.4 million.

Debt Obligations

As described further above in “Liquidity and Capital Resources,” we currently finance certain of our assets through borrowings with major financial institution counterparties in the form of sales of assets under agreements to repurchase, mortgage loan participation purchase and sale agreements, three notes payable, ESS and a capital lease. The borrower under each of these facilities is PLS with the exception of the Credit Agreement, which is classified as a note payable, and the capital lease, in each case where the borrower is PennyMac. All PLS obligations as previously noted are guaranteed by PennyMac.

Under the terms of these agreements, PLS is required to comply with certain financial covenants, as described further above in “Liquidity and Capital Resources,” and various non-financial covenants customary for transactions of this nature. As of June 30, 2018, we were in compliance in all material respects with these covenants.

The agreements also contain margin call provisions that, upon notice from the applicable lender, require us to transfer cash or, in some instances, additional assets in an amount sufficient to eliminate any margin deficit. 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.

In addition, the agreements contain events of default (subject to certain materiality thresholds and grace periods), including payment defaults, breaches of covenants and/or certain representations and warranties, cross-defaults, guarantor defaults, servicer termination events and defaults, material adverse changes, bankruptcy or insolvency proceedings and other events of default customary for these types of transactions. The remedies for such events of default are also customary for these types of transactions and include the acceleration of the principal amount outstanding under the agreements and the liquidation by our lenders of the mortgage loans or other collateral then subject to the agreements.

The borrowings have maturities as follows:

Lender	Outstanding indebtedness (1)	Total facility size (2)	Committed facility (2)	Maturity date (2)
(dollar amounts in thousands)				
Assets sold under agreements to repurchase				
Credit Suisse First Boston Mortgage Capital LLC	\$ 575,405	\$ 1,100,000	\$ 300,000	April 26, 2019
Credit Suisse First Boston Mortgage Capital LLC (3)	\$ 100,000	\$ 400,000	\$ 400,000	April 26, 2020
Deutsche Bank AG	\$ 644,366	\$ 750,000	\$ —	February 1, 2019
Bank of America, N.A.	\$ 174,887	\$ 500,000	\$ 225,000	October 1, 2018
Morgan Stanley Bank, N.A.	\$ 131,103	\$ 500,000	\$ 175,000	August 24, 2018
JPMorgan Chase Bank, N.A.	\$ 99,584	\$ 500,000	\$ 50,000	October 12, 2018
Royal Bank of Canada	\$ 47,126	\$ 135,000	\$ 40,000	September 28, 2018
Citibank, N.A.	\$ 31,650	\$ 700,000	\$ 350,000	June 7, 2019
BNP Paribas	\$ 20,942	\$ 200,000	\$ 100,000	November 16, 2018
Mortgage loan participation purchase and sale agreements				
Bank of America, N.A.	\$ 528,368	\$ 550,000	\$ —	July 1, 2019
Notes payable				
GMSR 2017-GT2 Term Note	\$ 500,000	\$ —	\$ —	August 25, 2022
GMSR 2018-GT1 Term Note	\$ 650,000	\$ —	\$ —	February 25, 2023
Credit Suisse AG	\$ —	\$ 150,000	\$ —	November 16, 2018
Credit Suisse AG (3)	\$ —	\$ —	\$ —	February 1, 2020
Obligations under capital lease				
Banc of America Leasing and Capital LLC	\$ 13,032	\$ 35,000	\$ —	March 23, 2020

(1) Outstanding indebtedness as of June 30, 2018.

(2) Total facility size, committed facility and maturity date include contractual changes through the date of this Report.

(3) The borrowing of \$100 million with Credit Suisse First Boston Mortgage Capital LLC is in the form of a sale of a variable funding note under an agreement to repurchase up to a maximum of \$400 million. To the extent not utilized, \$130 million can be allocated to the Credit Suisse AG note payable facility.

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 June 30, 2018:

Counterparty	Amount at risk (in thousands)	Weighted average maturity of advances under repurchase agreement	Facility Maturity
Credit Suisse First Boston Mortgage Capital LLC (1)	\$ 1,178,465	April 26, 2020	April 26, 2020
Credit Suisse First Boston Mortgage Capital LLC (2)	\$ 72,919	July 20, 2018	April 26, 2019
Deutsche Bank AG	\$ 111,443	September 15, 2018	December 31, 2018
Bank of America, N.A.	\$ 14,186	August 1, 2018	August 1, 2018
Morgan Stanley Bank, N.A.	\$ 8,727	August 24, 2018	August 24, 2018
JP Morgan Chase Bank, N.A.	\$ 8,528	August 17, 2018	October 12, 2018
Royal Bank of Canada	\$ 3,170	August 3, 2018	September 28, 2018
Citibank, N.A.	\$ 1,768	September 21, 2018	June 7, 2019
BNP Paribas	\$ 1,090	September 20, 2018	November 16, 2018

(1) The borrowing facility with Credit Suisse First Boston Mortgage Capital LLC is in the form of a sale of a variable funding note under an agreement to repurchase.

(2) The borrowing facility with Credit Suisse First Boston Mortgage Capital LLC is in the form of an asset sale under agreement to repurchase.

All debt financing arrangements that matured between June 30, 2018 and the date of this Report have been renewed or extended and are described in Note 11—*Borrowings* to the accompanying consolidated financial statements.

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 credit risk, interest rate risk, prepayment risk, inflation risk and fair value risk.

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 Servicing Rights

The following tables summarize the estimated change in fair value of MSR as of June 30, 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%
	(dollar amounts in thousands)					
Fair value	\$ 2,683,287	\$ 2,580,978	\$ 2,532,681	\$ 2,441,317	\$ 2,398,076	\$ 2,316,078
Change in fair value:						
\$	\$ 197,130	\$ 94,821	\$ 46,523	\$ (44,840)	\$ (88,081)	\$ (170,079)
%	7.9 %	3.8 %	1.9 %	(1.8)%	(3.5)%	(6.8)%
Prepayment speed shift in %	-20%	-10%	-5%	+5%	+10%	+20%
	(dollar amounts in thousands)					
Fair value	\$ 2,635,715	\$ 2,558,347	\$ 2,521,639	\$ 2,451,839	\$ 2,418,627	\$ 2,355,306
Change in fair value:						
\$	\$ 149,558	\$ 72,190	\$ 35,482	\$ (34,318)	\$ (67,530)	\$ (130,851)
%	6.0 %	2.9 %	1.4 %	(1.4)%	(2.7)%	(5.3)%
Per-loan servicing cost shift in %	-20%	-10%	-5%	+5%	+10%	+20%
	(dollar amounts in thousands)					
Fair value	\$ 2,564,970	\$ 2,525,564	\$ 2,505,860	\$ 2,466,454	\$ 2,446,750	\$ 2,407,344
Change in fair value:						
\$	\$ 78,813	\$ 39,407	\$ 19,703	\$ (19,703)	\$ (39,407)	\$ (78,813)
%	3.2 %	1.6 %	0.8 %	(0.8)%	(1.6)%	(3.2)%

Excess Servicing Spread Financing

The following tables summarize the estimated change in fair value of our ESS accounted for using the fair value method as of June 30, 2018, given several shifts in pricing spreads and prepayment speed (decrease in the liabilities' values increases net income):

Pricing spread shift in %	-20%	-10%	-5%	+5%	+10%	+20%
	(dollar amounts in thousands)					
Fair value	\$ 236,984	\$ 233,169	\$ 231,306	\$ 227,663	\$ 225,882	\$ 222,401
Change in fair value:						
\$	\$ 7,514	\$ 3,699	\$ 1,835	\$ (1,808)	\$ (3,588)	\$ (7,070)
%	3.3 %	1.6 %	0.8 %	(0.8)%	(1.6)%	(3.1)%
Prepayment speed shift in %	-20%	-10%	-5%	+5%	+10%	+20%
	(dollar amounts in thousands)					
Fair value	\$ 249,944	\$ 239,292	\$ 234,284	\$ 224,841	\$ 220,387	\$ 211,965
Change in fair value:						
\$	\$ 20,473	\$ 9,822	\$ 4,813	\$ (4,629)	\$ (9,083)	\$ (17,506)
%	8.9 %	4.3 %	2.1 %	(2.0)%	(4.0)%	(7.6)%

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, as amended (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 Rule 13a-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.

Changes in Internal Control over Financial Reporting

There has been no change in our internal control over financial reporting during the six months ended June 30, 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 June 30, 2018, we were not involved in any such legal proceedings, claims or actions that management believes would be reasonably likely to have a material adverse effect on us.

Item 1A. *Risk Factors*

There have been 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 9, 2018 and our Quarterly Reports on Form 10-Q filed thereafter.

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

There were no sales of unregistered equity securities during the six months ended June 30, 2018.

Repurchases of our Common Stock

The following table summarizes the stock repurchase activity since the stock repurchase program was approved:

	Total number of shares purchased	Average price paid per share	Total number of shares purchased as part of publicly announced plans or program (1)	Approximate dollar value of shares that may yet be purchased under the plans or program (1)
July 1, 2017 – July 31, 2017	—	\$ —	—	\$ 50,000,000
August 1, 2017 – August 31, 2017	270,905	\$ 17.06	270,905	\$ 45,379,288
September 1, 2017 – September 30, 2017	233,911	\$ 17.01	233,911	\$ 41,401,192
October 1, 2017 – December 31, 2017	—	\$ —	—	\$ 41,401,192
January 1, 2018 – March 31, 2018	—	\$ —	—	\$ 41,401,192
April 1, 2018 – April 30, 2018	—	\$ —	—	\$ 41,401,192
May 1, 2018 – May 31, 2018	236,423	\$ 20.43	236,423	\$ 36,575,218
June 1, 2018 – June 30, 2018	—	\$ —	—	\$ 36,575,218
Total	741,239	\$ —	741,239	\$ 36,575,218

(1) As disclosed in our current report on Form 8-K filed on June 21, 2017, our Board of Directors approved a stock repurchase program authorizing us to repurchase up to \$50.0 million of our outstanding Class A common stock. The stock repurchase program does not require us to purchase a specific number of shares, and the timing and amount of any shares repurchased are based on market conditions and other factors, including price, regulatory requirements and capital availability. Stock repurchases may be effected through negotiated transactions or open market purchases, including pursuant to a trading plan implemented pursuant to Rule 10b5-1 of the Securities Exchange Act of 1934, as amended. The stock repurchase program does not have an expiration date but may be suspended, modified or discontinued at any time without prior notice.

Item 3. *Defaults Upon Senior Securities*

None.

Item 4. *Mine Safety Disclosures*

Not applicable.

Item 5. Other Information

On May 31, 2018, at the Company's Annual Meeting of Stockholders, the Company's stockholders approved an amendment (the "Amendment") to the Company's 2013 Equity Incentive Plan, as previously amended (the "2013 Plan"). The Amendment became effective on the date of the Annual Meeting. The principal purpose of the Amendment was to increase the total number of shares authorized to be issued pursuant to awards under the 2013 Plan by an additional 2 million shares of Class A common stock.

Item 6. Exhibits

Exhibit No.	Exhibit Description	Incorporated by Reference from the Below-Listed Form (Each Filed under SEC File Number 15-68669)	
		Form	Filing Date
3.1	Amended and Restated Certificate of Incorporation of PennyMac Financial Services, Inc.	8-K	May 14, 2013
3.2	Second Amended and Restated Bylaws of PennyMac Financial Services, Inc.	8-K	March 6, 2018
10.1†	Second Amendment to the PennyMac Financial Services, Inc. 2013 Equity Incentive Plan.	DEF14A	April 17, 2018
10.2†	PennyMac Financial Services, Inc. 2013 Equity Incentive Plan Form of Restricted Stock Unit Subject to Performance Components Award Agreement (2018).	*	
10.3†	PennyMac Financial Services, Inc. 2013 Equity Incentive Plan Form of Restricted Stock Unit Subject to Continued Service Award Agreement (2018).	*	
10.4†	PennyMac Financial Services, Inc. 2013 Equity Incentive Plan Form of Stock Option Award Agreement (2018).	*	
10.5	Amendment No. 1 to Master Repurchase Agreement, dated as of April 17, 2018, by and between Deutsche Bank AG, Cayman Islands Branch and PennyMac Loan Services LLC.	10-Q	May 4, 2018
10.6	Amendment No. 7 to Mortgage Loan Participation Purchase and Sale Agreement, dated as of April 20, 2018, by and among Bank of America, N.A., PennyMac Loan Services, LLC and Private National Mortgage Acceptance Company, LLC.	10-Q	May 4, 2018
10.7	Amendment No. 12 to Master Repurchase Agreement, dated as of April 20, 2018, by and among Bank of America, N.A., PennyMac Loan Services, LLC and Private National Mortgage Acceptance Company LLC.	10-Q	May 4, 2018
10.8	Amendment No. 4 to Third Amended and Restated Master Repurchase Agreement, dated as of April 27, 2018, by and among Credit Suisse First Boston Mortgage Capital LLC, Credit Suisse AG, Cayman Islands Branch, Alpine Securitization LTD, PennyMac Loan Services, LLC and Private National Mortgage Acceptance Company, LLC.	*	
10.9	Amendment Number Three to the Amended and Restated Master Repurchase Agreement, dated as of May 1, 2018, by and between PennyMac Loan Services, LLC and Citibank, N.A.	*	

**Incorporated by Reference from the
Below-Listed Form (Each Filed under
SEC File Number 15-68669)**

<u>Exhibit No.</u>	<u>Exhibit Description</u>	<u>Form</u>	<u>Filing Date</u>
10.10	Amendment Number Four to the Amended and Restated Master Repurchase Agreement, dated as of May 9, 2018, by and between PennyMac Loan Services, LLC and Citibank, N.A.	*	
10.11	Amendment Number Five to the Amended and Restated Master Repurchase Agreement, dated as of May 14, 2018, by and between PennyMac Loan Services, LLC and Citibank, N.A.	8-K	May 18, 2018
10.12	Amendment Number Six to the Amended and Restated Master Repurchase Agreement, dated as of June 8, 2018, by and between PennyMac Loan Services, LLC and Citibank, N.A.	*	
31.1	Certification of David A. Spector pursuant to Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	*	
31.2	Certification of Andrew S. Chang pursuant to Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	*	
32.1	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.	**	
32.2	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.	**	
101	Interactive data files pursuant to Rule 405 of Regulation S-T: (i) the Consolidated Balance Sheets as of June 30, 2018 and December 31, 2017 (ii) the Consolidated Statements of Income for the quarters ended June 30, 2018 and June 30, 2017, (iii) the Consolidated Statements of Changes in Stockholders' Equity for the quarters ended June 30, 2018 and June 30, 2017, (iv) the Consolidated Statements of Cash Flows for the quarters ended June 30, 2018 and June 30, 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.

† Indicates management contract or compensatory plan or arrangement.

