2021 ANNUAL REPORT

PennyMac Financial Services, Inc. (NYSE: PFSI) is a specialty financial services firm with a comprehensive mortgage platform and integrated business focused on the origination, acquisition, and servicing of U.S. residential mortgage loans and the management of investments related to the U.S. mortgage market.

Our company was founded in 2008 by members of our executive leadership team, and two strategic partners, BlackRock Mortgage Ventures, LLC and HC Partners, LLC. Since our founding, we have pursued opportunities to acquire, originate and manage mortgage loans and mortgage-related assets and established what we believe is the leading residential mortgage platform in the U.S.

We manage PennyMac Mortgage Investment Trust (NYSE: PMT), a publicly-traded mortgage real estate investment trust (REIT). PMT is a tax-efficient vehicle for investing in mortgage-related assets and has a successful track record of deploying and managing capital in mortgage-related investments for more than 12 years.

Dear Fellow Stockholders,

2021 was another exceptional year for PennyMac Financial with record operational results in its production and servicing businesses. Now more than two years after Congress passed the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) in response to COVID-19, I remain immensely proud of the entire Pennymac team. In what was the largest mortgage origination market ever, our production team members worked tirelessly throughout the year to address the increased demand for mortgage loans driven by historically low mortgage rates. Similarly, our servicing team members continued to effectively leverage our proprietary servicing system, providing exit solutions for borrowers who previously entered forbearance plans – helping them into stronger financial positions and keeping them in their homes. All of these activities contributed to PennyMac Financial's strong performance in 2021, with revenue and net income of $3.2 billion and $1.0 billion, respectively. Diluted earnings per share were $14.87, or a 29 percent return on equity, and drove an increase in book value at year-end to $60.11, up 26 percent from December 31, 2020.

In what *Inside Mortgage Finance* estimated was a $4.8 trillion origination market, PennyMac Financial's total production, including acquisitions made by PennyMac Mortgage Investment Trust (NYSE: PMT) was $234 billion in unpaid principal balance (UPB), up 19 percent from the previous year. Importantly, more than 25 percent of our total production in 2021 was originated in the higher-margin consumer and broker direct lending channels, up meaningfully from prior years as investments made in these channels drive higher conversion rates, faster closing times and lower loan manufacturing costs over the long term. In total, these production volumes continued to drive the growth of our servicing portfolio despite elevated prepayment activity and we ended 2021 with a total servicing portfolio of $510 billion in UPB, also up 19 percent year-over-year.

These record operational activities would not have been possible without our commitment to capital and liquidity management. Since the company's founding in 2008, we have taken pride in our ability to effectively manage shareholder capital, and 2021 was no different. Strong earnings generated elevated levels of excess capital, which we prudently returned to shareholders through a combination of share repurchases and dividends. In fact, we returned more than $1 billion in capital to shareholders in 2021 and we have now repurchased more than 30 percent of the total shares outstanding since the beginning of 2020. Additionally, we opportunistically accessed the capital markets, successfully issuing $1.15 billion in long-term senior unsecured notes. The issuance of these notes deepened our capital structure and, combined with continued strong financial performance, resulted in a recent upgrade to our corporate debt ratings. All of this was done with a careful eye towards the future growth of the company as we invested in the infrastructure and technology that we believe will be essential to our continued success in mortgage banking over the long-term. In 2021, we invested approximately $100

million on transformational technology projects particularly focused on elevating the capabilities of our direct lending channels and we expect these investments will drive continued efficiencies and operational scale across all our businesses.

To highlight some of these investments and show just how significantly Pennymac has grown, we hosted our first Investor Day for PFSI. We trust our stockholders and other stakeholders walked away with a strong understanding of our balanced business model, including the structural advantages provided by PMT; our risk management disciplines; why we believe it is important to operate in all three production channels; and why servicing and hedging are important in the long-term. Additionally, we hope we effectively demonstrated that this management team, with its breadth of knowledge and experience, are second to none in the mortgage industry. Finally, we illustrated what we believe success looks like for PennyMac Financial in the medium-term and are committed to pursuing these objectives while maintaining our top priority of disciplined execution and targeting a return on equity of approximately 20 percent in more normalized market conditions.

While these goals look out into the medium-term, 2022 will undoubtedly be a year of transition for the industry as mortgage interest rates have seen a meaningful and rapid increase in recent months and are not likely to return to the all-time low levels of 2020 and 2021. This increase has driven a significant reduction in the size of the origination market as refinance volumes have declined. Leading economists are currently forecasting a total origination market of $3.0 trillion in 2022, of which approximately two-thirds is expected to be purchase loans. While still a large market by historical standards, the overall speed and size of reduction in demand for mortgages has resulted in excess industry capacity and increased competition for a smaller population of loans among market participants, adding pressure to margins in what is already a very competitive market. Further, the FHFA and other regulators have made it clear that regulatory requirements are increasing for non-bank mortgage lenders and servicers as their overall share has grown meaningfully over the last several years.

While these dynamics have the potential to disrupt other independent mortgage banks, we believe PennyMac Financial is well-positioned to successfully navigate the changing mortgage landscape. We have gained a meaningful amount of market share in the direct lending channels as we have invested in technology, including automated workflows to drive efficiency. With a careful eye towards expenses and further deployment of new technologies in the near term, I believe we have a great opportunity to continue growing share in these channels with a focus on new customer acquisition and purchase-money loans. Income from our large and growing servicing business is an important component of our earnings as prepayment speeds return to more normalized levels and production margins remain tight. Additionally, our unwavering commitment to disciplined capital, liquidity, and enterprise risk management, including the disciplined hedging of mortgage servicing rights, will prove to be a competitive advantage, providing us the ability to take advantage of opportunities should they present themselves in a rapidly changing mortgage market.

Pennymac is a leader in the mortgage industry, and yet historically we have not invested significantly in branding and marketing. With a more refined focus on our direct lending activities and increased prominence in mortgage loan servicing, we have introduced a new

evolution of our brand and the launch of our "Greatness Lives Here" campaign. This campaign is designed to bring awareness to Pennymac's history and core values of being accountable, reliable and ethical in all that we do and demonstrate Pennymac's commitment to enabling our customers and business partners to achieve their highest potential through the power of homeownership. Given our multi-channel production and large servicing businesses, we are uniquely positioned to represent trust, stability, and long-term partnership with all our customers and business partners. These marketing investments will be disciplined and targeted, leveraging our investments in technology to drive returns on our marketing dollars in the most effective and efficient way possible.

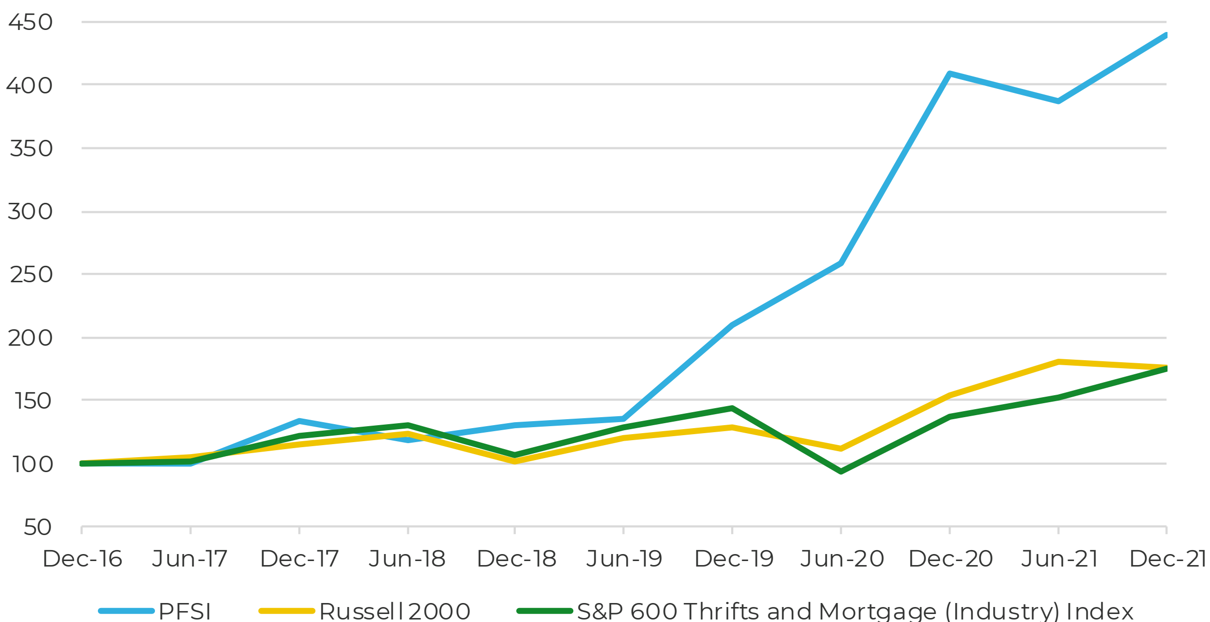
We are pleased with our results in 2021 and remain optimistic about the future. As a public company for nearly nine years, PennyMac Financial has a proven record of success in navigating shifts in the market environment, managing our business for the long term, and growing shareholder value. Although 2022 presents challenges for the broader mortgage industry as capacity established in recent years is expected to be reduced, I believe the company remains extraordinarily well-positioned to achieve the medium-term goals we laid out in our Investor Day, leveraging the expertise of our talented team and operational scale to create long-term value for all of our stakeholders. Again, thank you for your continued support and confidence in PennyMac Financial.

Sincerely,

David A. Spector
Chairman and Chief Executive Officer
April 13, 2022

STOCK PERFORMANCE GRAPH

The following graph and table describe certain information comparing the cumulative total return on our common stock to the cumulative total return of the Russell 2000 Index and the S&P 600 Thrifts and Mortgage (Industry) Index. The comparison period is from December 31, 2016 to December 31, 2021, and the calculation assumes reinvestment of any dividends. The graph and table illustrate the value of a hypothetical investment in our common stock and the two other indices on December 31, 2016.



	12/31/16	12/31/17	12/31/18	12/31/19	12/31/20	12/31/21
PFSI	100	134	130	209	408	440
Russell 2000 Index	100	115	102	128	154	176
S&P 600 Thrifts and Mortgage (Industry) Index	100	122	106	144	137	175

Source: S&P Global Market Intelligence

The information in the performance graph and table has been obtained from sources believed to be reliable, but neither its accuracy nor its completeness can be guaranteed. The historical information set forth above is not necessarily indicative of future performance. Accordingly, we do not make or endorse any predictions as to future share performance. The share performance graph and table shall not be deemed, under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, to be (i) “soliciting material” or “filed” or (ii) incorporated by reference by any general statement into any filing made by us with the Securities and Exchange Commission, except to the extent that we specifically incorporate such share performance graph and table by reference.

CORPORATE INFORMATION

Corporate Offices
3043 Townsgate Road
Westlake Village, CA 91361
(818) 264-4907
www.ir.pennymacfinancial.com

2022 Annual Meeting*
The 2022 Annual Meeting of Stockholders will be held at 11:00 a.m. PT on May 24, 2022, via a live webcast at
www.virtualshareholdermeeting.com/PFSI2022

Independent Registered Public Accounting Firm
Deloitte & Touche LLP
Los Angeles, CA

Market Data of PennyMac Financial Services, Inc.
Common Stock
Traded: New York Stock Exchange
Symbol: PFSI

Transfer Agent
Computershare Shareowner Services LLC
Jersey City, NJ

Pursuant to Rule 303A.12 of the New York Stock Exchange Listed Companies Manual, each listed company CEO must certify to the NYSE each year that he or she is not aware of any violation by the company of NYSE corporate governance listing standards. David A. Spector's annual CEO certification regarding the NYSE's corporate governance listing standards was submitted to the NYSE on July 6, 2021.

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

Form 10-K

(Mark One)

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

For the fiscal year ended December 31, 2021

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: 001-38727

PennyMac Financial Services, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**83-1098934**
(State or other jurisdiction of incorporation or organization)	(IRS Employer Identification No.)
3043 Townsgate Road, Westlake Village, California	**91361**
(Address of principal executive offices)	(Zip Code)

(818) 224-7442

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $0.0001 par value	PFSI	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

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 every Interactive Data File required to be submitted 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 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 ☐	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 has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. Yes ☒ No ☐

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

As of June 30, 2021 the aggregate market value of the registrant's Common Stock, $0.0001 par value ("common stock"), held by non-affiliates was $2,465,484,895 based on the closing price as reported on the New York Stock Exchange on that date.

As of February 21, 2022, the number of outstanding shares of common stock of the registrant was 55,422,903.

Documents Incorporated by Reference

Document	Parts Into Which Incorporated
Definitive Proxy Statement for 2022 Annual Meeting of Stockholders	Part III

PENNYMAC FINANCIAL SERVICES, INC.
FORM 10-K
December 31, 2021
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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K (this "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 as set forth in Item IA. of Part I hereof and any subsequent Quarterly Reports on Form 10-Q.

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

- our exposure to risks of loss resulting from adverse weather conditions, man-made or natural disasters, the effect of climate change, and pandemics, such as COVID-19;
- failure to modify, resell or refinance early buyout loans or defaults of early buyout loans beyond our expectations;
- 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;
- 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;
- our ability to manage third-party service providers and vendors and their compliance with laws, regulations and investor requirements;
- 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;
- maintaining sufficient capital and liquidity to support business growth including compliance with financial covenants;
- changes in prevailing interest rates;
- our substantial amount of indebtedness;
- increases in loan delinquencies and defaults;
- 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 exposure to counterparties that are unwilling or unable to honor contractual obligations, including their obligation to indemnify us or repurchase defective mortgage loans;
- our ability to realize the anticipated benefit of potential future acquisitions of mortgage servicing rights ("MSRs");
- our obligation to indemnify PMT 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 PMT;
- the effect of public opinion on our reputation;
- our recent growth;
- our ability to effectively identify, manage and hedge our credit, interest rate, prepayment, liquidity and climate risks;
- our initiation of new business activities or expansion of existing business activities;

- our ability to detect misconduct and fraud;
- our ability to effectively deploy new information technology applications and infrastructure;
- our ability to mitigate cybersecurity risks and cyber incidents;
- our ability to pay dividends to our stockholders; 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

Item 1. *Business*

The following description of our business should be read in conjunction with the information included elsewhere in this Report. This description contains forward-looking statements that involve risks and uncertainties. Actual results could differ significantly from the projections and results discussed in the forward-looking statements due to the factors described under the caption "Risk Factors" and elsewhere in this Report. References in this Report to "we," "our," "us," and the "Company" refer to PennyMac Financial Services, Inc. ("PFSI") and its consolidated subsidiaries.

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 over time and capitalize on other related opportunities as they arise in the future.

We operate and control all of the business and affairs and consolidate the financial results of Private National Mortgage Acceptance Company, LLC ("PNMAC") and its subsidiaries described below:

- Our principal mortgage banking subsidiary, PennyMac Loan Services, LLC ("PLS"), is a non-bank producer and servicer of mortgage loans. 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"), and a lender/servicer of the Veterans Administration ("VA") and the United States. Department of Agriculture ("USDA"). 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 United States Virgin Islands, and originate loans in 49 states and the District of Columbia, either because it 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 (the "Advisers Act"), 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.

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 loan origination, acquisition and sale activities for our account as well as for PMT.
- The servicing segment performs loan servicing for both newly originated loans we are holding for sale 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.

Following is a summary of our segments' results:

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
Net revenues:			
Production	$ 2,306,764	$ 2,824,999	$ 993,884
Servicing	817,295	840,762	440,784
Investment management	43,302	39,836	42,736
	$ 3,167,361	$ 3,705,597	$ 1,477,404
Income (loss) before income taxes:			
Production	$ 1,044,411	$ 1,964,121	$ 527,834
Servicing	306,678	262,144	(14,751)
Investment management	8,094	14,344	16,361
	$ 1,359,183	$ 2,240,609	$ 529,444
Total assets at year end:			
Production	$ 8,934,032	$ 7,870,398	$ 4,836,472
Servicing	9,821,436	23,709,122	5,347,549
Investment management	21,144	18,275	19,996
	$ 18,776,612	$ 31,597,795	$ 10,204,017
Unpaid principal balance ("UPB") of loans purchased and originated for our account and for PMT	$ 234,597,882	$ 196,589,353	$ 117,564,799
UPB of loans serviced for PMT and non-affiliates at year end	$ 509,708,281	$ 426,750,830	$ 368,684,232
PMT assets under management at year end	$ 2,367,518	$ 2,296,859	$ 2,450,916

Mortgage Banking

Loan Production

Our loan production segment sources new prime credit quality first-lien residential conventional and government-insured or guaranteed mortgage loans through three channels: correspondent production, consumer direct lending and broker direct lending as described below.

Correspondent Production

In correspondent production we manage, on behalf of PMT and for our own account, the purchase from non-affiliates of mortgage loans that have been underwritten to investor guidelines. Our correspondent loans are directed to each entity based on the guarantor of the mortgage-backed securities ("MBS") created from the loans: our production focus has been on loans insured or guaranteed by the FHA, VA or USDA for sale into MBS guaranteed by Ginnie Mae, whereas PMT's production focus has been on loans that can be sold into MBS guaranteed by Fannie Mae or Freddie Mac.

This arrangement exists, in part, because PMT is not approved as an issuer of Ginnie Mae guaranteed MBS. As a result, PMT sells the government-insured or guaranteed loans that it purchases from correspondent sellers to us and we pay PMT a sourcing fee ranging from one to two basis points, generally based on the average number of calendar days that PMT holds the loans before our purchase. We generally pool the government-insured or guaranteed loans into Ginnie Mae guaranteed MBS and then sell such MBS to institutional investors.

In our correspondent production activities, for loans we source for our own account, we earn loan origination fees from the correspondent sellers, interest income on the loans during the time we hold such loans, gains or losses from the date we make a commitment to purchase the loans through the sale of these loans, and, in sales to entities other than PMT, we generally retain and recognize the fair value of the contractual rights to service the loans on behalf of the purchaser of the loans. These contracts are referred to as mortgage servicing rights ("MSRs").

In our loan fulfillment activities in support of PMT's correspondent production activities, we earn fulfillment fees and tax service fees. We may also serve as a correspondent seller of newly originated loans from our consumer direct and broker direct lending channels to PMT under a mortgage loan purchase agreement. When we sell loans to PMT, PMT obtains the mortgage servicing rights relating to such loans. As such, our gains on sale of loans to PMT are primarily cash gains.

Between 2017 and early 2020, we sold newly originated conventional conforming loans to PMT as PMT had available a selling arrangement that offered us more attractive pricing for certain conventional conforming loans than was otherwise available to us. We ceased such sales to PMT during the second quarter of 2020 as the more attractive pricing was no longer available to us. However, we may in the future enter into other sales arrangements with PMT where such arrangements are attractive to us and approved by the related party matters committees of both companies' board of directors or trustees, as applicable. Both companies' related party matters committees are comprised of independent directors or trustees as applicable, from the respective board.

Consumer Direct Lending

Through our consumer direct lending channel, we originate mortgage loans on a national basis. Our consumer direct model relies on the Internet and call center-based staff to acquire and interact with customers across the country. We do not have a "brick and mortar" branch network.

In our consumer direct lending activities, we earn loan origination fees from the borrower, interest income during the time we hold the loan before sale, gains or losses from the date we make a commitment to fund the loan through the sale of these loans, and, in sales to entities other than to PMT, we retain and recognize the fair value of the associated MSRs. To the extent we refinance loans that we subservice for PMT where PMT owns the related MSRs or excess servicing spread, we are generally required to transfer and convey to PMT a recapture fee payable in cash.

Broker Direct Lending

In broker direct lending, we obtain loan application packages from nonaffiliated mortgage loan brokers, underwrite and fund the resulting loans for sale. In our broker direct lending activities, we earn interest income, gains or losses from the date we make a commitment to fund the loan through the sale of these loans, and, in sales to entities other than PMT, we retain and recognize the fair value of the associated MSRs.

Our loan production activity is summarized below:

	Year ended December 31,		
	2021	**2020**	**2019**
		(in thousands)	
UPB of loans purchased and originated for sale through our:			
Correspondent lending channel, from PennyMac Mortgage Investment Trust	$ 64,774,728	$ 60,540,530	$ 47,937,306
Consumer direct channel	43,060,266	23,491,465	9,752,500
Broker direct channel	16,759,314	12,168,106	3,841,289
	124,594,308	96,200,101	61,531,095
UPB of conventional loans fulfilled for PennyMac Mortgage Investment Trust	110,003,574	100,389,252	56,033,704
Total loan production	$ 234,597,882	$ 196,589,353	$ 117,564,799

The effect of our loan production transactions with PMT on our financial statements are summarized below:

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
Net gains on loans held for sale at fair value:			
Net gains on loans held for sale to PMT	$ —	$ 81,295	$ 190,416
Mortgage servicing rights and excess servicing spread recapture incurred	(51,473)	(30,614)	(7,051)
	$ (51,473)	$ 50,681	$ 183,365
Fulfillment fee revenue	$ 178,927	$ 222,200	$ 160,610
Tax service fees earned from PMT included in *Loan origination fees*	$ 26,126	$ 23,408	$ 14,695
Sourcing fees paid to PMT included in cost of loans purchased	$ 6,472	$ 11,037	$ 14,381

Loan Servicing

Our loan servicing segment performs loan administration, collection, and default management activities, including the collection and remittance of loan payments; responds to customer inquiries; provides accounting for principal and interest; holds custodial (impounded) funds for the payment of property taxes and insurance premiums; counsels delinquent borrowers; administers loss mitigation activities, including modification and forbearance programs; and supervises foreclosures and property dispositions.

We service loans both as the owner of MSRs and mortgage servicing liabilities ("MSLs") and as the subservicer on behalf of PMT.

The UPB of our loan servicing portfolio is summarized below:

	December 31,	
	2021	2020
	(in thousands)	
Mortgage servicing rights and Mortgage servicing liabilities:		
Originated	$ 254,524,015	$ 199,655,361
Purchased	23,861,358	41,612,940
	278,385,373	241,268,301
Loans held for sale	9,430,766	11,063,938
Total owned servicing	287,816,139	252,332,239
Subserviced for PennyMac Mortgage Investment Trust	221,892,142	174,418,591
Total	$ 509,708,281	$ 426,750,830

Our responsibilities and risks relating to loans we service in arrangements where we own the MSRs or MSLs differ from those where we act as subservicer for the owner of the servicing rights. As the owner of the servicing rights:

- We recognize our investment in the servicing rights received in loan sale transactions where we retain the contractual obligation to service the loans as well the investment we make when we buy MSRs or assume MSLs. We carry these assets and liabilities at fair value and as such they are subject to subsequent changes in fair value owing to the anticipated realization of the cash flows from the asset or liability or to changes in the market for such MSRs and MSLs;

- Because our investment in MSRs can be significant and the fair value of this asset is sensitive to changes in prepayment activity, the cost to service the loans and marketplace return requirements, we incur costs to hedge this investment – primarily the risk of changes in fair value arising from changes in prepayment speeds in response to changes in interest rates; and

- We are responsible for advancing our corporate funds to protect the loan owners' interest in the collateral securing such loans for such items as hazard insurance, property taxes and foreclosure-related costs, subject to future reimbursement, as well as advancing delinquent principal and interest payments to MBS holders. As the owner of Ginnie Mae MSRs, we have the option to purchase loans that are at least three months delinquent out of the underlying Ginnie Mae securities as an alternative to continuing to advance principal and interest payments to the holders of the Ginnie Mae securities. Our objective is to work with the borrowers to cure the loan delinquency through either borrower reperformance or modification of the loans' terms. When curing the delinquency is not feasible, we work to settle the loan and collect our claims from the applicable insurer or guarantor. When we are able to cure the delinquency, we are able to re-deliver the cured loan into another Ginnie Mae guaranteed security.

As the subservicer for the owner of servicing rights, we do not carry MSRs or MSLs on our balance sheet and therefore do not recognize changes in the fair value of MSRs or MSLs and are generally not responsible for financing the advance of corporate funds to protect the loan owners' interest in the collateral securing such loans. As a result, the fees we earn from such arrangements are generally less on a per-loan basis than those we earn from holding MSRs and MSLs.

Following is a summary of our net loan servicing fees:

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
Net loan servicing fees:			
From non-affiliates:			
Loan servicing fees:			
Contractually specified	$ 875,570	$ 814,646	$ 730,165
Other	118,884	116,464	98,564
	994,454	931,110	828,729
Effect of MSRs and MSLs:			
Realization of cash flows	(347,576)	(392,152)	(429,571)
Other changes in fair value of MSRs and MSLs	(68,330)	(1,109,841)	(559,043)
Hedging results	(475,215)	918,180	395,497
	(891,121)	(583,813)	(593,117)
Net loans servicing fees from non-affiliates	103,333	347,297	235,612
From affiliates:			
Loan servicing fees from PennyMac Mortgage Investment Trust	80,658	67,181	48,797
Change in fair value of excess servicing spread financing payable to PennyMac Mortgage Investment Trust	(1,037)	24,970	9,256
Net loans servicing fees from affiliates	79,621	92,151	58,053
Net loan servicing fees	$ 182,954	$ 439,448	$ 293,665
Average UPB of loan serviced for:			
Non-affiliates (1)	$ 258,759,523	$ 235,567,838	$ 218,963,947
Subserviced for PMT	$ 202,047,495	$ 151,379,311	$ 111,888,543

(1) Excluding PFSI-owned loans

Investment Management

We are an investment manager through our subsidiary, PCM, which provides investment management services to PMT. We earn management fees as a percentage of PMT's net assets and may earn incentive compensation based on PMT's investment performance.

Following is a summary of our management fee revenue:

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
Base management	$ 34,794	$ 34,538	$ 29,303
Performance incentive	3,007	—	7,189
	$ 37,801	$ 34,538	$ 36,492
Net assets of PMT at end of year	$ 2,367,518	$ 2,296,859	$ 2,450,916

Human Capital

Our long-term growth and success is highly dependent upon our employees and our ability to maintain a diverse, equitable and inclusive workplace representing a broad spectrum of backgrounds, ideas and perspectives. As part of these efforts, we strive to offer competitive compensation and benefits, foster a community where everyone feels a greater sense of belonging and purpose, and provide employees with the opportunity to give back and make an impact in the communities where we live and serve.

We had over 6,900 domestic employees as of the end of fiscal year 2021. In addition, as of the end of fiscal year 2021, our workforce was 51.7%% female and 48.3% male, and the ethnicity of our workforce was 42.9% White, 22.3% Hispanic or Latino, 17.2% Black or African American, 11.5% Asian and 6.1% other (which includes American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and "Two or More Races").

Recruiting and Employee Retention

We believe in attracting, developing and engaging the best talent, while providing a supportive work environment that prioritizes the health and safety of our employees. Our compensation programs are designed to motivate and reward employees who possess the necessary skills to support our business strategy and create long-term value for our stockholders. Employee compensation may include base salary, annual cash incentives, and long-term equity incentives, as well as life and health insurance and 401(k) plan matching contributions.

Employees receive regular business and compliance training to help further enhance their career development objectives. For example, the average employee business and compliance training completion rate was 97% company-wide in 2021. We also actively manage enterprise-wide and divisional mentoring programs and have partnered with an external vendor to establish a comprehensive, fully integrated wellness program designed to enhance the productivity of our employees. We also support the U.S. military through our continued focus on recruiting and creating opportunities for veterans. For example, we maintain the SERVE (Support & Engagement for Reservist & Veteran Employees) Business Resource Group ("BRG") to further our efforts to attract, develop and engage an inclusive community of veterans and their families.

Diversity, Equity and Inclusion

We believe that building a diverse, equitable and inclusive, high-performing workforce where our employees bring varied perspectives and experiences to work every day creates a positive influence in our workplace, community and business operations. Our Board of Directors, our Nominating and Corporate Governance Committee, Compensation Committee, and Risk Committee provide regular oversight of our corporate sustainability program, including our diversity, equity and inclusion programs and initiatives. We have also taken proactive measures to strategically and sustainably advance equity in the workplace through the establishment of several BRGs, a diversity hiring initiative, mentorship programs, and external partnerships with organizations such as the Mortgage Bankers Association and the National Association of Minority Mortgage Bankers of America. We also established leadership goals and created customized initiatives that focus on our continued effort to increase the number of women and underrepresented minorities in management positions throughout our company and its business divisions. As it relates to our inclusive culture, we established the following BRGs to emphasize career growth, networking, and learning opportunities for employees and allies with shared backgrounds and experiences: the BOLD BRG (for Black and African American employees and allies), the HOLA BRG (for Hispanic, Latino and Latinx employees and allies, the InspirASIAN BRG

(for our Asian American and Pacific Islander employees and allies), the Pennymac PRIDE BRG (for our LGBTQIA employees and allies), the SERVE BRG (for our veteran and military family employees and allies), and the wEMRG BRG (for our women employees and allies). We also foster a more inclusive culture through a variety of initiatives, including corporate training, special events, community outreach and corporate philanthropy.

Community Involvement

We have a corporate philanthropy program that is governed by a philosophy of giving that prioritizes the support of causes and issues that are important in our local communities, and drives a culture of employee engagement and collaboration throughout our organization. We are committed to empowering our employees to be a positive influence in the communities where we live and serve, and believe that this commitment supports our efforts to attract and engage employees and improve retention. Our philanthropy program consists of three key components: an employee matching gift program, a charitable grants program and a corporate sponsorship program. Our five philanthropic focus areas are: community development and equitable housing, financial literacy and economic inclusion, human and social services, health and medical research, and environmental sustainability. We have established a separate donor advised fund to facilitate donations to various local and national charitable organizations and have provided funding to several charitable organizations located near our office sites and national organizations that support missions such as sustainable homeownership, mortgage and rental assistance, food insecurity, disaster recovery, family and child advocacy, and community empowerment.

U.S. Mortgage Market

The U.S. residential mortgage market is one of the largest financial markets in the world, with approximately $14.1 trillion of outstanding debt as of September 30, 2021. According to Inside Mortgage Finance, first lien mortgage loan origination volume was approximately $4.8 trillion in 2021. Many of the largest financial institutions, primarily banks which have traditionally held the majority of the market share in mortgage origination and servicing, have reduced their participation in the mortgage market creating opportunities for non-bank participants.

The residential mortgage industry is characterized by high barriers to entry, including the necessity for approvals required to sell loans to and service loans for the Agencies, state licensing requirements for non-federally chartered banks, sophisticated infrastructure, technology, risk management, and processes required for successful operations, and financial capital requirements.

Our Business Strategies

Our business growth strategies include:

Consumer Direct Lending

We expect to grow our consumer direct lending business over time by leveraging our growing servicing portfolio through the recapture of existing customers for refinance and purchase-money loans as well as increasing our non-portfolio originations. As our servicing portfolio grows, we will have a greater number of leads to pursue, which we believe will lead to greater origination activity through our consumer direct business. As of December 31, 2021, we serviced 2.1 million loans. At the same time, we are making significant investments in technology, personnel and marketing to increase our non-portfolio originations. We believe that our national call center model and our technology will enable us to drive origination process efficiencies and best-in-class customer service.

Broker Direct Lending

The broker lending channel involves the underwriting and funding of mortgage loans sourced by mortgage loan brokers and other financial intermediaries. According to Inside Mortgage Finance, the broker lending channel represented approximately 15% of U.S. residential mortgage originations in 2021. In 2021, 2020 and 2019, we funded $16.8 billion, $12.2 billion and $3.8 billion of mortgage loans, respectively, through our broker direct channel. We plan on growing our mortgage loan volume by adding broker relationships and offering our mortgage loan brokers access to our technology through a dedicated portal.

Correspondent Lending

We expect to support our correspondent production market share by expanding the number and types of sellers from which we purchase loans and increasing the proportion of our sellers' production volumes that we purchase as we continue to expand to the loan products and services we offer. We believe that we are well positioned to continue taking advantage of this opportunity based on our management expertise in the correspondent production business, our relationships with correspondent sellers, and our supporting systems and processes.

Mortgage Loan Servicing Portfolio

We expect to grow our servicing portfolio through loan production activities, as our correspondent government-insured production and consumer and broker direct lending add new servicing for owned MSRs, and correspondent conventional production adds new subservicing. We or PMT may also grow our servicing portfolio through acquisitions. In 2021, our correspondent, consumer direct and broker direct loan production totaled $234.6 billion in UPB.

Expansion into New Markets and Products

We regularly evaluate opportunities to grow our business, including expansion into new markets and providing additional services to our customers directly or through external partnerships. We also continue to develop new products to satisfy demand from customers in each of our production channels and respond to changing circumstances in the market for mortgage-related financing.

Compliance and Regulatory

Our business is subject to extensive federal, state and local regulation. The CFPB was established on July 21, 2010 under Title X of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act"). The CFPB is responsible for ensuring consumers are provided with timely and understandable information to make responsible decisions about financial transactions, federal consumer financial laws are enforced and consumers are protected from unfair, deceptive, or abusive acts and practices and from discrimination. Although the CFPB's actions may improve consumer protection, such actions also have resulted in a meaningful increase in costs to consumers and financial services companies including mortgage originators and servicers.

Our loan production and loan servicing operations are regulated at the state level by state licensing authorities and administrative agencies. We, along with certain PNMAC employees who engage in regulated activities, must apply for licensing as a mortgage banker or lender, loan servicer and debt collector pursuant to applicable state law. These state licensing requirements typically require an application process, the payment of fees, background checks and administrative review. Our servicing operations are licensed (or exempt or otherwise not required to be licensed) to service mortgage loans in all 50 states, the District of Columbia, Guam and the United States Virgin Islands. Our consumer direct lending business is licensed to originate loans in 49 states and the District of Columbia. From time to time, we receive requests from states and Agencies and various investors for records, documents and information regarding our policies, procedures and practices regarding our loan production and loan servicing business activities, and undergo periodic examinations by federal and state regulatory agencies. We incur significant ongoing costs to comply with these licensing and examination requirements.

The Secure and Fair Enforcement for Mortgage Licensing Act of 2008 (the "SAFE Act") requires all states to enact laws that require all individuals acting in the United States as mortgage loan originators to be individually licensed or registered if they intend to offer mortgage loan products. These licensing requirements include enrollment in the Nationwide Mortgage Licensing System, application to state regulators for individual licenses and the completion of pre-licensing education, annual education and the successful completion of both national and state exams.

We must comply with a number of federal consumer protection laws, including, among others:

- the Real Estate Settlement Procedures Act ("RESPA"), and Regulation X thereunder, which require certain disclosures to mortgagors regarding the costs of mortgage loans, the administration of tax and insurance escrows, the transferring of servicing of mortgage loans, the response to consumer complaints, and payments between lenders and vendors of certain settlement services;

- the Truth in Lending Act ("TILA"), and Regulation Z thereunder, which require certain disclosures to mortgagors regarding the terms of their mortgage loans, notices of sale, assignments or transfers of ownership of mortgage loans, new servicing rules involving payment processing, and adjustable rate mortgage change notices and periodic statements;

- the Equal Credit Opportunity Act and Regulation B thereunder, which prohibit discrimination on the basis of age, race and certain other characteristics, in the extension of credit;

- the Fair Housing Act, which prohibits discrimination in housing on the basis of race, sex, national origin, and certain other characteristics;

- the Home Mortgage Disclosure Act and Regulation C thereunder, which require financial institutions to report certain public loan data;

- the Homeowners Protection Act, which requires the cancellation of private mortgage insurance once certain equity levels are reached, sets disclosure and notification requirements, and requires the return of unearned premiums;

- the Servicemembers Civil Relief Act, which provides, among other things, interest and foreclosure protections for service members on active duty;

- the Gramm-Leach-Bliley Act and Regulation P thereunder, which require us to maintain privacy with respect to certain consumer data in our possession and to periodically communicate with consumers on privacy matters;

- the Fair Debt Collection Practices Act, which regulates the timing and content of debt collection communications;

- the Fair Credit Reporting Act and Regulation V thereunder, which regulate the use and reporting of information related to the credit history of consumers;

- the National Flood Insurance Reform Act of 1994, which provides for lenders to require from borrowers or to purchase flood insurance on behalf of borrower/owners of properties in special flood hazard areas; and

- the CARES Act, which allows borrowers with federally-backed loans to request temporary payment forbearance in response to the increased borrower hardships resulting from the ongoing COVID-19 pandemic.

Many of these laws are further impacted by the SAFE Act and implementation of new rules by the CFPB.

Our senior management team has established a comprehensive compliance management system ("CMS") that is designed to ensure compliance with applicable mortgage origination and servicing laws and regulations. The components of our CMS include: (a) oversight by senior management and our Board of Directors to ensure that our compliance culture, guidance, and resources are appropriate; (b) a compliance program to ensure that our policies, training and monitoring activities are complete and comprehensive; (c) a complaint management program to ensure that consumer complaints are appropriately addressed and that any required actions are implemented on a timely basis; and (d) independent oversight to ensure that our CMS is functioning as designed.

An important component of the CMS is management's Mortgage Regulatory Compliance Committee ("MRCC"). This committee oversees the CMS and supports our cultural initiatives that reinforce the importance of regulatory compliance. The MRCC also monitors changes in the internal and external environment, approves mortgage compliance policies, monitors compliance with those policies and ensures any required remediation is implemented on a timely basis. The MRCC has identified individuals throughout the organization to oversee specific areas of compliance. MRCC membership includes senior management from all areas of the Company impacted by mortgage compliance laws and regulations. The MRCC meets on a regular basis throughout the year.

Intellectual Property

We rely on a combination of trademarks, copyrights, and trade secrets, as well as confidentiality and contractual provisions to protect our intellectual property and proprietary technologies. We hold or have otherwise applied for various registered trademarks, including trademarks with respect to the name Pennymac and various additional designs and word marks relating to the Pennymac name. Depending upon the jurisdiction, trademarks generally are valid as long as they are in use and/or their registrations are properly maintained. We generally intend to renew our trademarks as they come up for renewal. Our other intellectual property includes proprietary know-how and technological innovations, such as our proprietary workflow driven cloud based servicing system, as well as proprietary pricing engines, loan-level analytics systems and other trade secrets that we have developed to maintain our competitive position.

Competition

Given the diverse and specialized nature of our businesses, we do not believe we have a direct competitor for the totality of our business. We compete with a number of nationally-focused companies in each of our businesses.

In our loan production and servicing segments, we compete with large financial institutions, including the cash windows of the GSEs, and with other independent residential mortgage loan producers and servicers, such as Wells Fargo, JP Morgan Chase, Rocket Mortgage, Mr. Cooper and United Wholesale Mortgage. In our loan production segment, we compete primarily on the basis of customer service, marketing penetration, customer network, product offerings, technical knowledge, manufacturing quality, speed of execution, rate and fees. In our servicing segment, we compete primarily on the basis of experience in the residential loan servicing business, quality and efficiency of execution and servicing performance. In our investment management segment, we compete for capital with both traditional and alternative investment managers. We compete primarily on the basis of historical track record of risk-adjusted returns, experience of investment management team, the return profile of prospective investment opportunities and on the level of fees and expenses.

Available Information

Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, proxy statements and amendments to those reports filed with or furnished to the SEC pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), are available free of charge through the investor relations section of our website at www.pennymacfinancial.com as soon as reasonably practicable after electronically filing such material with the SEC. The SEC maintains an Internet site that contains reports, proxy and information statements and other information regarding our filings at www.sec.gov. The above references to our website and the SEC's website do not constitute incorporation by reference of the information contained on those websites and should not be considered part of this document.

Item 1A. ***Risk Factors***

Summary Risk Factors

We are subject to a number of risks that, if realized, could have a material adverse effect on our business, financial condition, liquidity, results of operations and our ability to make distributions to our stockholders. Some of our more significant challenges and risks include, but are not limited to, the following, which are described in greater detail below:

- Our business, financial condition and results of operations may be adversely affected by the ongoing COVID-19 pandemic.
- Failure to successfully modify, resell or refinance early buyout loans or defaults of the early buyout loans ("EBO") beyond expected levels may adversely affect our business, financial condition, liquidity and results of operations.
- We operate in a highly regulated industry and the continually changing federal, state and local laws and regulations could materially and adversely affect our business, financial condition, liquidity and results of operations.
- New CFPB or state rules and regulations and more stringent enforcement of existing rules and regulations by these regulators could result in enforcement actions, fines, penalties and the inherent reputational risk that results from such actions.
- We are highly dependent on U.S. government-sponsored entities and government agencies, and any organizational or pricing changes at such entities or their regulators could materially and adversely affect our business, liquidity, financial condition and results of operations.
- We are required to hold various Agency approvals in order to conduct our business and there is no assurance that we will be able to obtain or maintain those Agency approvals or that changes in Agency guidelines will not materially and adversely affect our business, financial condition, liquidity and results of operations.
- Our mortgage banking revenues are highly dependent on macroeconomic factors and real estate market, mortgage market and financial market conditions.
- We may not be able to effectively manage significant increases or decreases in our loan production volume, which could negatively affect our business, financial condition, liquidity and results of operations.
- We have a substantial amount of indebtedness, which may limit our financial and operating activities, expose us to substantial increases in costs due to interest rate fluctuations, expose us to the risk of default under our debt obligations and may adversely affect our ability to incur additional debt to fund future needs.
- We rely on external financial arrangements to fund mortgage loans and operate our business and our inability to refinance or enter new financial arrangements could be detrimental to our business.
- Our earnings may decrease because of changes in prevailing interest rates.
- Increases in delinquencies and defaults may adversely affect our business, financial condition, liquidity and results of operations.
- A disruption in the MBS market could materially and adversely affect our business, financial condition, liquidity and results of operations.
- We are required to make servicing advances that can be subject to delays in recovery or may not be recoverable in certain circumstances, which could adversely affect our business, financial condition, liquidity and results of operations.
- We depend on counterparties and vendors to provide services that are critical to our business, which subjects us to a variety of risks.
- Our operations, businesses and customers could be materially adversely affected by the impacts related to climate change and related environmental sustainability matters.
- Our failure to appropriately address various issues that may give rise to reputational risk could cause harm to our business and adversely affect our earnings.

- We rely on PennyMac Mortgage Investment Trust ("PMT") as a significant source of financing for, and revenue related to, our mortgage banking business, and the termination of, or material adverse change in, the terms of this relationship, or a material adverse change to PMT or its operations, could adversely affect our business, financial condition, liquidity and results of operations.
- A significant portion of our loan servicing operations are conducted pursuant to subservicing contracts with PMT, and any termination by PMT of these contracts, or a material change in the terms thereof that is adverse to us, would adversely affect our business, financial condition, liquidity and results of operations.
- Market conditions could reduce the fair value of the assets that we manage, which would reduce our management and incentive fees.
- Our failure to comply with the extensive amount of regulation applicable to our investment management segment could materially and adversely affect our business, financial condition, liquidity and results of operations.
- We may encounter conflicts of interest in trying to appropriately allocate our time and services between activities for our own account and for PMT, or in trying to appropriately allocate investment opportunities among ourselves and for PMT.
- Our risk management efforts may not be effective.
- Initiating new business activities, developing new products or significantly expanding existing business activities may expose us to new risks and increase our cost of doing business.
- Cybersecurity risks, cyber incidents and technology failures may adversely affect our business by causing a disruption to our operations, a compromise or corruption of our confidential information, and/or damage to our business relationships, all of which could negatively impact our financial results.
- We operate in a highly competitive market and decreased margins resulting from increased competition or our inability to compete successfully could adversely affect our business, financial condition, liquidity and results of operations.

Risk Factors

In addition to the other information set forth in this Report, you should carefully consider the following factors, which could materially adversely affect our business, financial condition, liquidity and results of operations in future periods. The risks described below are not the only risks that we face. Additional risks not presently known to us or that we currently deem immaterial may also materially adversely affect our business, financial condition, liquidity and results of operations in future periods.

Risks Related to Our Mortgage Banking Segment

Regulatory Risks

Our business, financial condition and results of operations may be adversely affected by the ongoing COVID-19 pandemic.

The COVID-19 pandemic, inclusive of any variants, has created unprecedented economic, financial and public health disruptions that have adversely affected, and are likely to continue to adversely affect, our business, financial condition and results of operations. The extent to which COVID-19 continues to negatively affect our business, financial condition and results of operations will depend on future developments, which are highly uncertain and cannot be predicted, including the scope and duration of the COVID-19 pandemic and actions taken by governmental authorities and other third parties in response to the COVID-19 pandemic.

The federal government enacted the Coronavirus Aid, Relief, and Economic Security Act ("CARES Act"), which allows borrowers with federally-backed loans to request temporary payment forbearance in response to the increased borrower hardships resulting from the ongoing COVID-19 pandemic. As a result of the CARES Act and other forbearance requirements, we expect to experience delinquencies in our servicing portfolio that may require us to finance

substantial amounts of advances of principal and interest payments to the investors holding those loans, as well as advances of property taxes, insurance premiums and other expenses to protect investors' interests in the properties securing the loans. Prepayment activity has thus far been sufficient to cover principal and interest payment advances required under the CARES Act and other requirements, however, in the future prepayment activity may be insufficient to cover required principal and interest advances. The CARES Act and other forbearance requirements have reduced our servicing fee income and increased our servicing expenses due to the increased number of delinquent loans, significant levels of forbearance that we have granted and continue to grant, as well as the resolution of loans that we expect to ultimately default as the result of the ongoing COVID-19 pandemic. Future servicing advances will be driven by a number of factors, including: the number of borrower delinquencies, including those resulting from payment forbearance; the amount of time borrowers remain delinquent; and the level of successful resolution of delinquent payments, all of which will be impacted by the pace at which the economy recovers from the ongoing COVID-19 pandemic. As of December 31, 2021, 1.3% of loans in our predominantly government-insured or guaranteed MSR portfolio were in forbearance plans and delinquent, resulting in an increase in the level of servicing advances we have been required to make due to borrower delinquencies. Servicing advances resulting from the COVID-19 pandemic could have a significant adverse impact on our cash flows and could also have a detrimental effect on our business and financial condition.

Financial markets have experienced federal government intervention to lower the federal funds rate and support market liquidity by purchasing assets in many financial markets, including the mortgage-backed securities market. The CARES Act and other forbearance requirements have negatively impacted the fair value of our servicing assets and further market volatility or economic weakness may result in additional reductions in the value of our servicing assets and make it increasingly difficult to optimize our hedging activities. Our liquidity and/or regulatory capital could also be adversely impacted by volatility and disruptions in the capital and credit markets. If we fail to meet or satisfy any of the covenants in our repurchase agreements or other financing arrangements as a result of the impact of the COVID-19 pandemic, we would be in default under these agreements, which could result in a cross-default or cross-acceleration under other financing arrangements, and our lenders could elect to declare outstanding amounts due and payable (or such amounts may automatically become due and payable), terminate their commitments, require the posting of additional collateral and enforce their respective interests against existing collateral.

We may have difficulty accessing debt and equity capital on attractive terms, or at all, as a result of the impact of the COVID-19 pandemic, which may adversely affect our access to capital necessary to fund our operations or address maturing liabilities on a timely basis. This includes renewals of our existing credit facilities with our lenders who may be adversely impacted by the volatility and dislocations in the financial markets and may not be willing or able to continue to extend us credit on the same terms, or on favorable terms, or at all.

Our business could be disrupted if we are unable to operate due to changing governmental restrictions such as travel bans and quarantines placed or reinstituted on our employees or operations, including, successfully operating our business from remote locations, ensuring the protection of our employees' health and maintaining our information technology infrastructure. Further, increased operational expenses to address these restrictions and widespread employee illnesses could negatively affect staffing within our various businesses and geographies.

Federal, state, and local executive, legislative and regulatory responses to the ongoing COVID-19 pandemic are rapidly evolving, may be inconsistent and conflict in scope or application, and may be subject to change without advance notice. These regulatory responses may impose additional compliance obligations, and may extend existing CARES Act and other forbearance requirements. In addition, the CARES Act and other federal, state and local regulations are subject to interpretation given the existing ambiguities in the rules and regulations, which may result in future class action and other litigation risk.

The outcome of the COVID-19 related governmental measures are unknown and they may not be sufficient to address future market dislocations or avert severe and prolonged reductions in economic activity. We may also face increased risks of disputes with our business partners, litigation and governmental and regulatory scrutiny as a result of the effects of the COVID-19 pandemic. The scope and duration of the COVID-19 pandemic and the efficacy of the extraordinary measures put in place to address it, including as to the effectiveness of vaccines and efforts to widely distribute them, are currently unknown. Even after the COVID-19 pandemic subsides, the economy may not fully

recover for some time and we may be materially and adversely affected by a prolonged recession or economic downturn. Further, additional vaccine and testing mandates may be announced in jurisdictions in which we operate our business, and there could be potential conflicts with state and federal mandates. Requirements to mandate COVID-19 vaccination of our workforce or require our unvaccinated employees to be tested could result in labor disruptions, employee attrition and difficulty securing future labor needs.

To the extent the COVID-19 pandemic adversely affects our business, financial condition and results of operations, it may also have the effect of heightening many of the other risks described in this Item 1A.

Failure to successfully modify, resell or refinance early buyout loans or defaults of the early buyout loans beyond expected levels may adversely affect our business, financial condition, liquidity and results of operations.

The ongoing COVID-19 pandemic has significantly increased the number of Ginnie Mae loans that are seriously delinquent in our Ginnie Mae MSR portfolio. As a mortgage servicer, we have an early buyout repurchase option for loans at least three months delinquent in our Ginnie Mae MSR portfolio. During the year ended December 31, 2021, we have repurchased $20.1 billion delinquent Ginnie Mae loans from our Ginnie Mae MSR portfolio. Purchasing delinquent Ginnie Mae loans provides us with an alternative to our mortgage servicing obligation of advancing principal and interest at the coupon rate of the related Ginnie Mae security.

While our EBO program reduces the cost of servicing the Ginnie Mae loans, it may also accelerate loss recognition when the loans are repurchased because we are required to write off accumulated non-reimbursable interest advances and other costs at the time of repurchase. After purchasing delinquent Ginnie Mae loans, we expect to repool many of the delinquent loans into another Ginnie Mae guaranteed security upon the delinquent loans becoming current either through the borrower's reperformance or through the completion of a loan modification; however, there is no guarantee that any delinquent loan will reperform or be modified or resold.

The ongoing COVID-19 pandemic as well as changing government regulations, including Ginnie Mae's 2020 regulations requiring reperforming loan borrowers to make six months of timely payments in certain circumstances before a loan can be repooled into another Ginnie Mae guaranteed security, has made estimating the timing and amount of the loans expected to be modified, resold or refinanced more difficult. Failure to successfully modify, resell or refinance our repurchased Ginnie Mae loans or if a significant portion of the repurchased Ginnie Mae loans default may adversely affect our business, financial condition, liquidity and results of operations.

We operate in a highly regulated industry and the continually changing federal, state and local laws and regulations could materially and adversely affect our business, financial condition, liquidity and results of operations.

We are required to comply with a wide array of federal, state and local laws and regulations that regulate, among other things, the manner in which we conduct our businesses. These regulations directly impact our business and require constant compliance, monitoring and internal and external audits and examinations by federal and state regulators. Our failure to operate effectively and in compliance with any of these laws, regulations and rules could subject us to lawsuits or governmental actions and damage our reputation, which could materially and adversely affect our business, financial condition, liquidity and results of operations. In addition, our failure to comply with these laws, regulations and rules may result in increased costs of doing business, reduced payments by borrowers, modification of the original terms of mortgage loans, permanent forgiveness of debt, delays in the foreclosure process, increased servicing advances, litigation, reputational damage, enforcement actions, and repurchase and indemnification obligations. Further, we may be required to pay substantial penalties imposed by our regulators due to compliance errors, or we may lose our licenses to originate and/or service loans.

We must also comply with a number of federal, state and local consumer protection and state foreclosure laws. These statutes apply to loan origination, servicing, debt collection, marketing, use of credit reports, safeguarding of non-public, personally identifiable information about our clients, foreclosure and claims handling, investment of and interest payments on escrow balances and escrow payment features, and mandate certain disclosures and notices to customers.

Because we are not a federally chartered depository institution, we generally do not benefit from federal pre-emption of state mortgage loan banking, loan servicing or debt collection licensing and regulatory requirements and must comply with multiple state licensing and compliance requirements. These state rules and regulations generally provide for, but are not limited to: originator, servicer and debt collector licensing requirements, requirements as to the form and content of contracts and other documentation, employee licensing and background check requirements, fee requirements, interest rate limits, and disclosure and record-keeping requirements.

Regulatory agencies and consumer advocacy groups are becoming more aggressive in asserting fair lending, fair housing and other claims that the practices of lenders and loan servicers result in a disparate impact on protected classes. Antidiscrimination statutes, such as the Fair Housing Act and the Equal Credit Opportunity Act, prohibit creditors from discriminating against loan applicants and borrowers based on certain characteristics, such as race, religion and national origin. Various federal regulatory agencies and departments take the position that these laws apply not only to intentional discrimination, but also to neutral practices that have a disparate impact on a group that shares a characteristic that a creditor may not consider in making credit decisions (i.e., creditor or servicing practices that have a disproportionately negative affect on a protected class of individuals).

The failure of our correspondent sellers to comply with any applicable laws, regulations and rules may also result in these adverse consequences. We have in place a due diligence program designed to assess areas of risk with respect to loans we acquire from such correspondent sellers. However, we may not detect every violation of law and, to the extent any correspondent sellers, third party originators, servicers or brokers with which we do business fail to comply with applicable laws or regulations and any of their mortgage loans or MSRs become part of our assets, it could subject us, as an assignee or purchaser of the related mortgage loans or MSRs, to monetary penalties or other losses. While we may have contractual rights to seek indemnity or repurchase from certain of these lenders, third party originators, servicers or brokers, if any of them are unable to fulfill their indemnity or repurchase obligations to us to a material extent, our business, liquidity, financial condition and results of operations could be materially and adversely affected. Our service providers and other vendors are also required to operate in compliance with applicable laws, regulations and rules. Our failure to adequately manage service providers and other vendors to mitigate risks of noncompliance with applicable laws may also have these negative results.

Federal and state administrations could enact significant policy changes increasing regulatory scrutiny and enforcement actions in our industry. While it is not possible to predict when and whether significant policy or regulatory changes would occur, any such changes on the federal, state or local level could significantly impact, among other things, our operating expenses, the availability of mortgage financing, interest rates, consumer spending, the economy and the geopolitical landscape. To the extent that the current government administration takes action by proposing and/or passing regulatory policies that could have a negative impact on our industry, such actions may have a material adverse effect on our business, financial condition and results of operations.

The Financial Stability Oversight Council ("FSOC") and Conference of State Bank Supervisors ("CSBS") have been reviewing whether state chartered nonbank mortgage servicers should be subject to "safety and soundness" standards similar to those imposed by federal law on insured depository institutions, even though nonbank mortgage servicers do not have any federally insured deposit accounts. For example, on July 26, 2021, the CSBS released model state regulatory prudential standards for state oversight of nonbank mortgage servicers. The model CSBS prudential standards include revised minimum net worth, capital ratio and liquidity standards similar to existing FHFA requirements and require servicers to maintain sufficient allowable assets to cover normal operating expenses in addition to the amounts required for servicing expenses. In addition, the FSOC has encouraged state regulators to work to develop prudential and corporate governance standards for nonbank mortgage servicers and has issued guidance describing the process FSOC would follow if it were to consider making a determination to subject a nonbank financial company to supervision by the Board of Governors of the Federal Reserve System and prudential standards. To the extent any such state regulators impose new minimum net worth, capital ratio and liquidity standards that are overly burdensome, such actions may have a material adverse effect on our business, financial condition and results of operations.

New CFPB or state rules and regulations or more stringent enforcement of existing rules and regulations by these regulators could result in enforcement actions, fines, penalties and the inherent reputational risk that results from such actions.

The CFPB has regulatory authority over certain aspects of our business as a result of our residential mortgage banking activities, including, without limitation, the authority to conduct investigations, bring enforcement actions, impose monetary penalties, require remediation of practices, pursue administrative proceedings or litigation, and obtain cease and desist orders for violations of applicable federal consumer financial laws. The current CFPB administration has stated its intention to aggressively supervise, investigate and, where it deems appropriate, bring enforcement actions against servicers the CFPB believes are engaged in activities that violate federal laws and regulations. In addition, examinations by state regulators and enforcement actions in the residential mortgage and servicing sectors by state attorneys general have increased and may continue to increase. Failure to comply with the CFPB and state laws, rules or regulations to which we are subject, whether actual or alleged, could have a material adverse effect on our business, liquidity, financial condition and results of operations.

Our failure to comply with the laws, rules or regulations to which we are subject, whether actual or alleged, would expose us to fines, penalties or potential litigation liabilities, including costs, settlements and judgments, any of which could have a material adverse effect on our business, liquidity, financial condition and results of operations and our ability to make distributions to our stockholders.

We are highly dependent on U.S. government-sponsored entities and government agencies, and any organizational or pricing changes at such entities or their regulators could materially and adversely affect our business, liquidity, financial condition and results of operations.

Our ability to generate revenues through mortgage loan sales depends on programs administered by GSEs, such as Fannie Mae and Freddie Mac, government agencies, including Ginnie Mae, and others that facilitate the issuance of MBS in the secondary market. We originate loans directly with borrowers and assist PMT in acquiring loans from mortgage lenders through our correspondent production activities that qualify under existing standards for inclusion in MBS issued by Fannie Mae or Freddie Mac or guaranteed by Ginnie Mae. We, or PMT, also derive other material financial benefits from our Agency relationships, including the ability to avoid certain loan inventory finance costs through streamlined loan funding and sale procedures.

A number of legislative proposals have been introduced in recent years that would wind down or phase out the GSEs, including a proposal by the prior federal administration to end the conservatorship and privatize Fannie Mae and Freddie Mac. On November 18, 2020 the FHFA finalized new regulatory capital rules for Fannie Mae and Freddie Mac that requires them to increase their capital to $280 billion. FHFA did not specify how the new regulatory capital requirements will be achieved or a timeframe for meeting the capital target, however, any increase in guaranty fees or other costs imposed by Fannie Mae and Freddie Mac to raise additional capital may have a negative impact on the mortgage market and could reduce Fannie Mae and Freddie Mac's future role in the mortgage industry. It is not possible to predict the scope and nature of the actions that the U.S. government, including the current federal administration, will ultimately take with respect to the GSEs. Any changes in laws and regulations affecting the relationship between Fannie Mae and Freddie Mac and their regulators or the U.S. federal government, and any changes in leadership at these entities, could adversely affect our business and prospects. Any discontinuation of, or significant reduction in, the operation of Fannie Mae or Freddie Mac or any significant adverse change in their capital structure, financial condition, activity levels in the primary or secondary mortgage markets or in underwriting criteria could materially and adversely affect our business, financial condition, liquidity and results of operations and our ability to make distributions to our stockholders.

Our ability to generate revenue from newly originated loans that we assist PMT in acquiring through its correspondent production business is also highly dependent on the fact that the Agencies have not historically acquired such loans directly from mortgage lenders, but have instead relied on banks and non-bank aggregators such as us to acquire, aggregate and securitize or otherwise sell such loans to investors in the secondary market. Certain of the Agencies have approved new and smaller lenders that traditionally may not have qualified for such approvals. To the extent that these mortgage lenders choose to sell directly to the Agencies rather than through loan aggregators like us,

the number of loans available for purchase by aggregators is reduced, which could materially and adversely affect our business and results of operations. In addition, under certain Agency capital rules, loan aggregators such as PMT that we assist have higher capital requirements and may incur higher Agency fees for third party originated loans that PMT aggregates and delivers to the Agencies as compared to individual loans delivered by third party mortgage lenders directly to the Agencies' cash windows without the assistance of a loan aggregator. To the extent the Agencies increase the number of purchases and sales directly for their own accounts, our business and results of operations could be materially and adversely affected.

We are required to hold various Agency approvals in order to conduct our business and there is no assurance that we will be able to obtain or maintain those Agency approvals or that changes in Agency guidelines will not materially and adversely affect our business, financial condition, liquidity and results of operations.

We are required to hold certain Agency approvals in order to sell mortgage loans to the Agencies and service such mortgage loans on their behalf. Our failure to satisfy the various requirements necessary to obtain and maintain such Agency approvals over time would restrict our direct business activities and could materially and adversely impact our business, financial condition, liquidity and results of operations.

We are also required to follow specific guidelines that impact the way that we originate and service Agency loans. A significant change in these guidelines that has the effect of decreasing the fees we charge or requires us to expend additional resources in providing mortgage services could decrease our revenues or increase our costs, which would also adversely affect our business, financial condition, liquidity and results of operations. For example, the FHFA has directed the GSEs to align their guidelines for servicing delinquent mortgages and assess compensatory penalties against servicers in connection with the failure to meet specified timelines relating to delinquent loans and foreclosure proceedings, and other breaches of servicing obligations. Our failure to operate efficiently and effectively within the prevailing regulatory framework and in accordance with the applicable origination and servicing guidelines and/or the loss of our seller/servicer license approval or approved issuer status with the Agencies could result in our failure to benefit from available monetary incentives and/or expose us to monetary penalties and curtailments, all of which could materially and adversely affect our business, financial condition, liquidity and results of operations.

Our inability to meet certain net worth and liquidity requirements imposed by the Agencies could have a material adverse effect on our business, financial condition, liquidity and results of operation.

We are subject to minimum financial eligibility requirements established by the Agencies. These minimum financial requirements, which are described in the section entitled *Liquidity and Capital Resources* contained elsewhere in this Report, include net worth, capital ratio and/or liquidity criteria in order to set a minimum level of capital needed to adequately absorb potential losses and a minimum amount of liquidity needed to service Agency mortgage loans and MBS and cover the associated financial obligations and risks.

In order to meet these minimum financial requirements, we are required to maintain cash and cash equivalents in amounts that may impede us from growing our business and place us at a competitive disadvantage in relation to federally chartered banks and certain other financial institutions. To the extent that such minimum financial requirements are not met, the Agencies may suspend or terminate our Agency approvals or agreements, which could cause us to cross default under financing arrangements and/or have a material adverse effect on our business, financial condition liquidity and results of operations.

The failure of PennyMac Loan Services, LLC to avail itself of an appropriate exemption from registration as an investment company under the Investment Company Act of 1940 could have a material and adverse effect on our business.

We intend to operate so that we, and each of our subsidiaries, are not required to register as investment companies under the Investment Company Act of 1940, as amended, ("Investment Company Act"). We believe that our subsidiary, PLS, qualifies for one or more exemptions provided in the Investment Company Act because of the historical and current composition of its assets and income; however, there can be no assurances that the composition of PLS' assets and income will remain the same over time such that one or more exemptions will continue to be applicable.

If PLS is required to register as an investment company, we would be required to comply with a variety of substantive requirements under the Investment Company Act that impose, among other things: limitations on capital structure; restrictions on specified investments; prohibitions on transactions with affiliates; compliance with reporting, record keeping, voting and proxy disclosure; and, other rules and regulations that would significantly increase our operating expenses. Further, if PLS was or is required to register as an investment company, PLS would be in breach of various representations and warranties contained in its credit and other agreements resulting in a default as to certain of our contracts and obligations. This could also subject us to civil or criminal actions or regulatory proceedings, or result in a court appointed receiver to take control of us and liquidate our business, any or all of which could have a material adverse effect on our business, financial condition, liquidity and results of operations.

Market and Financial Risks

Our mortgage banking revenues are highly dependent on macroeconomic factors and real estate market, mortgage market and financial market conditions.

The success of our business strategies and our results of operations are materially affected by current or future conditions in the real estate market, mortgage markets, financial markets and the economy generally. Factors such as the COVID-19 pandemic, inflation, deflation, unemployment, personal and business income taxes, healthcare, energy costs, domestic political issues, government shutdowns, climate change and the availability and cost of credit may contribute to increased volatility and unclear expectations for the economy in general and the real estate, mortgage market and financial markets in particular going forward. A destabilization of the real estate market, mortgage market and financial markets or deterioration in these markets also could reduce our loan production volume, reduce the profitability of servicing mortgages or adversely affect our ability to sell mortgage loans that we originate or acquire, either at a profit or at all. In addition, inflation and future expectations of inflation could increase our operating expenses and may affect our profitability if the additional operating costs are not recoverable through increased revenues or profit margins. Any of the foregoing could materially and adversely affect our business, financial condition, liquidity and results of operations.

We may not be able to effectively manage significant increases or decreases in our loan production volume, which could negatively affect our business, financial condition, liquidity and results of operations.

We may experience significant growth in our loan production volumes. If we do not effectively manage our growth and are unable to consistently maintain quality of execution, our reputation and existing relationships with mortgage lenders and brokers could be damaged, we may not be able to maintain PMT's existing relationships or develop new relationships with mortgage lenders and brokers, our new mortgage products may not gain widespread acceptance and the quality of our correspondent production, consumer direct lending and broker direct lending operations could suffer, all of which could negatively affect our brand and operating results.

Our loan production segment is also subject to overall market factors that could adversely impact our ability to grow our loan production volume. For example, increased competition from new and existing market participants, reductions in the overall level of refinancing activity or slow growth in the level of new home purchase activity can impact our ability to continue to grow our loan production volumes, and we may be forced to accept lower margins in our respective businesses in order to continue to compete and keep our volume of activity consistent with past or projected levels or be forced to reduce our levels of production activity.

We have a substantial amount of indebtedness, which may limit our financial and operating activities, expose us to substantial increases in costs due to interest rate fluctuations, expose us to the risk of default under our debt obligations and may adversely affect our ability to incur additional debt to fund future needs.

As of December 31, 2021, we had $10.9 billion of total indebtedness outstanding (approximately $9.1billion of which was secured) and up to $8.7 billion of additional capacity under our secured borrowings and other secured debt financing arrangements. This substantial indebtedness and any future indebtedness we incur could have adverse consequences and, for example, could:

- require us to dedicate a substantial portion of cash flow from operations to the payment of principal and interest on indebtedness, including indebtedness we may incur in the future, thereby reducing the funds available for operations, capital expenditures and other general corporate purposes;
- make it more difficult for us to satisfy our obligations with respect to our indebtedness, and any failure to comply with the obligations of any of our debt instruments, including any restrictive covenants, could result in an event of default under the indentures governing the unsecured senior notes or under the agreements governing our other indebtedness which, if not cured or waived, could result in the acceleration of our indebtedness under our other debt instruments or the unsecured senior notes;
- subject us to increased sensitivity to interest rate increases;
- make us more vulnerable to economic downturns, adverse industry conditions or catastrophic external events, including the COVID-19 pandemic and climate change;
- reduce our flexibility in planning for or responding to changing business, industry and economic conditions or restrict our ability to carry on activities important to our growth; and/or
- place us at a competitive disadvantage to competitors that have relatively less debt than we have.

In addition, our substantial level of indebtedness could limit our ability to obtain additional financing on acceptable terms, or at all, for working capital and general corporate purposes. Our liquidity needs vary significantly from time to time and may be affected by general economic conditions, industry trends, performance and many other factors outside our control.

We rely on external financial arrangements to fund mortgage loans and operate our business and our inability to refinance or enter new financial arrangements could be detrimental to our business.

Our ability to finance our business operations and repay maturing obligations rests in large part on our ability to borrow money. Unlike some of our competitors who fund mortgage loans through bank deposits, we generally fund our mortgage loans through borrowings under warehouse facilities and other financial arrangements as well as funds from our operations. Our borrowings are generally repaid with the proceeds we receive from mortgage loan sales. We require new and continued financing to facilitate our anticipated growth. We are generally required to renew many of our financing arrangements on a regular basis, which exposes us to refinancing and interest rate risks. Our ability to refinance our existing financial obligations and borrow additional funds is affected by a variety of factors beyond our control including:

- limitations imposed on us under our financing agreements that contain restrictive covenants and borrowing conditions, which may limit our ability to raise additional debt;
- restrictions imposed upon us by regulatory agencies that mandate certain minimum capital and liquidity requirements and additional scrutiny from such regulatory agencies;
- liquidity in the credit markets;
- prevailing interest rates;
- the strength of the lenders from which we borrow, and the regulatory environment in which they operate, including proposed capital strengthening requirements;
- limitations on borrowings on credit facilities imposed by the amount of eligible collateral pledged, which may be less than the borrowing capacity of the credit facility; and
- accounting changes that may impact calculations of covenants in our debt agreements.

We are also dependent on a limited number of banking institutions that extend us credit on terms that we have determined to be commercially reasonable. These banking institutions are subject to their own regulatory supervision, liquidity and capital requirements, risk management frameworks, profitability and risk thresholds and tolerances, any of which may change materially and negatively impact their business strategies, including their extension of credit to us specifically or mortgage lenders and servicers generally. Certain banking institutions have already exited, and others may in the future decide to exit, the mortgage business. Such actions may increase our cost of capital and limit or otherwise eliminate our access to capital, in which case our business, financial condition, liquidity and results of operations would be materially and adversely affected.

In the event that any of our financial arrangements is terminated or is not renewed, or if the principal amount that may be drawn under our funding agreements that provide for immediate funding at closing were to significantly decrease, we may be unable to find replacement financing on commercially favorable terms, or at all, which could be detrimental to our business.

We leverage our assets under credit and other financing agreements and utilize various other sources of borrowings, which exposes us to significant risk and may materially and adversely affect our business, financial condition, liquidity and results of operations.

We currently leverage and, to the extent available, we intend to continue to leverage the mortgage loans produced through our consumer and broker direct lending business and the government-insured loans acquired through our correspondent production activities from PMT with borrowings under repurchase agreements. When we enter into repurchase agreements, we sell mortgage loans to lenders, which are the repurchase agreement counterparties, and receive cash from the lenders. The lenders are obligated to resell the same assets back to us at the end of the term of the transaction. Because the cash that we receive from a lender when we initially sell the assets to that lender is less than the fair value of those assets (this difference is referred to as the haircut), if the lender defaults on its obligation to resell the same assets back to us we could incur a loss on the transaction equal to the amount of the haircut (assuming that there was no change in the fair value of the assets). In addition, repurchase agreements generally allow the counterparties, to varying degrees, to determine a new fair value of the collateral to reflect current market conditions. If a counterparty lender determines that the fair value of the collateral has decreased, it may initiate a margin call and require us to either post additional collateral to cover such decrease or repay a portion of the outstanding borrowing. Should this occur, in order to obtain cash to satisfy a margin call, we may be required to liquidate assets at a disadvantageous time, which could cause us to incur further losses. If we are unable to satisfy a margin call, our counterparty may sell the collateral, which may result in significant losses to us.

In addition, we invest in certain assets, including MSRs and EBOs, for which financing has historically been difficult to obtain. We currently leverage certain of our MSRs and EBOs under secured financing arrangements. Freddie Mae MSRs are pledged through a special purpose entity to secure borrowings under a master repurchase agreement. Fannie Mac and Ginnie Mae MSRs are pledged to special purpose entities, each of which issues variable funding notes and term notes that are secured by such Fannie Mae or Ginnie Mae assets, as applicable, and repaid through the cash flows received by the special purpose entity as the lender under a repurchase agreement with PLS. Some of our EBOs are contributed to a special purpose entity, which issues participation certificates pledged to secure borrowings under a master repurchase agreement. In each case, similar to our repurchase agreements, the cash that we receive under these secured financing arrangements is less than the fair value of the assets and a decrease in the fair value of the pledged collateral can result in a margin call. Should a margin call occur, we may be required to liquidate assets at a disadvantageous time, which could cause us to incur further losses. If we are unable to satisfy a margin call, the secured parties may sell the collateral, which may result in significant losses to us.

Each of the secured financing arrangements pursuant to which we finance MSRs is further subject to the terms of an acknowledgement agreement with Fannie Mae, Freddie Mac or Ginnie Mae, as applicable, pursuant to which our and the secured parties' rights are subordinate in all respects to the rights of the applicable Agency. Accordingly, the exercise by any of Fannie Mae, Freddie Mac or Ginnie Mae of its rights under the applicable acknowledgment agreement could result in the extinguishment of our and the secured parties' rights in the related collateral and result in significant losses to us.

We may in the future utilize other sources of borrowings, including term loans, bank credit facilities and structured financing arrangements, among others. The amount of leverage we employ varies depending on the asset class being financed, our available capital, our ability to obtain and access financing arrangements with lenders and the lenders' and rating agencies' estimate of, among other things, the stability of our cash flows. We can provide no assurance that we will have access to any debt or equity capital on favorable terms or at the desired times, or at all. Our inability to raise such capital or obtain financing on favorable terms could materially and adversely impact our business, financial condition, liquidity and results of operations.

Our financing agreements contain financial and restrictive covenants that could adversely affect our business, financial condition, liquidity and results of operations.

Our various financing agreements require us and/or our subsidiaries to comply with various restrictive covenants, including those relating to tangible net worth, profitability and our ratio of total liabilities to tangible net worth. Incurring substantial debt subjects us to the risk that our cash flows from operations may be insufficient to repurchase the assets that we have sold under our repurchase agreements or otherwise service the debt incurred under our other financing agreements. Our lenders also require us to maintain minimum amounts of cash or cash equivalents sufficient to maintain a specified liquidity position. In addition, the repayment of the unsecured senior notes will depend in part on our restricted subsidiaries' generation of cash flow and our restricted subsidiaries' ability to make such cash available to us, by dividend, debt repayment or other means. The unsecured senior note indentures contain additional restrictive covenants that limit our and our restricted subsidiaries' ability to engage in specified types of transactions, including our ability and/or the ability of our restricted subsidiaries to:

- pay dividends or distributions, redeem or repurchase equity, prepay subordinated debt and make certain loans or investments;
- merge or consolidate with another person or sell all or substantially all of our assets to another person;
- transfer, sell or otherwise dispose of certain assets including capital stock of subsidiaries;
- enter into transactions with affiliates; and
- allow to exist certain restrictions on the ability of non-guarantor restricted subsidiaries to pay dividends or make other payments to us.

If we fail to comply with the restrictive covenants and are unable to obtain a waiver or amendment, an event of default would result under the terms of our financing arrangement or could limit our ability to obtain additional financing on acceptable terms, or at all, for working capital and general corporate purposes. If an event of default occurs, our financing arrangements could be immediately due and payable, requiring us to apply all available cash to repay our financing arrangements, and if we were unable to repay or refinance our financial arrangements then any collateral securing the financial arrangements may be sold by our lenders.

Our earnings may decrease because of changes in prevailing interest rates.

Our profitability is directly affected by changes in prevailing interest rates. An increase in prevailing interest rates could:

- adversely affect our loan production volume, as refinancing an existing loan would be less attractive and qualifying for a loan may be more difficult;
- adversely affect our Ginnie Mae early buyout program because loan modifications would become less economically feasible; and
- increase the cost of servicing our outstanding debt, including debt related to servicing assets and loan production;

A decrease in prevailing interest rates could:

- cause an increase in the expected volume of loan refinancings, which would require us to record decreases in fair value on our MSRs; and
- reduce our earnings from our custodial deposit accounts.

An event of default, a negative ratings agency action, the perception of financial weakness, an adverse action by a regulatory authority, a lengthening of foreclosure timelines or a general deterioration in the economy that constricts the availability of credit may increase our cost of funds and make it difficult for us to refinance existing debt and borrow additional funds. In addition, we may not be able to adjust our operational capacity in a timely manner, or at all, in response to increases or decreases in mortgage production volume resulting from changes in prevailing interest rates. In addition, while the Federal Reserve loosened monetary policies due to the ongoing COVID-19 pandemic by purchasing securities and MBS on the open market, future interest rates and the liquidity of the MBS market could be impacted as the Federal Reserve increases the federal funds rate and tapers future MBS purchases. Any of the increases or decreases discussed above could have a material adverse effect on our business, financial condition, liquidity and results of operations.

We are subject to risks associated with the discontinuation of LIBOR.

As of December 31, 2021, one-week and two-month United States Dollar LIBOR (and certain non-U.S. dollar LIBOR settings) were discontinued, while the remaining non-U.S. dollar LIBOR settings ceased to be representative and thereafter began to be published only on a "synthetic basis". In addition, the UK Financial Conduct Authority (the "FCA"), which is the regulator of the LIBOR administrator, has announced that the principal United States Dollar LIBOR tenors (overnight and one, three, six and 12 months) will cease to be published by any administrator or will no longer be representative as of June 30, 2023. In addition, despite the expected publication of the principal United States Dollar LIBOR settings through June 30, 2023, the FCA has prohibited the firms it regulates from using such settings in new contracts after December 31, 2021 (subject to limited exceptions), and certain United States (and other) regulators have stated that no new contracts using United States Dollar LIBOR should be entered into after that date.

Accordingly, many LIBOR obligations have transitioned to another benchmark or will soon do so. Different types of financial products have transitioned, or are expected to transition, to different alternative benchmarks; and there is no assurance that any alternative benchmark will be the economic equivalent of any LIBOR setting. For some existing LIBOR-based obligations, the contractual consequences of the discontinuation of LIBOR may not be clear. Although the foregoing reflects the timing (or expected timing) of LIBOR discontinuation and certain consequences, there is no assurance that LIBOR, of any particular currency or tenor, will continue to be published until any particular date or in any particular form, and there is no assurance regarding the consequences of LIBOR discontinuation. Uncertainty as to the foregoing and the nature of alternative reference rates may adversely impact the availability and costs of borrowings.

The discontinuation of LIBOR could have a significant impact on the financial markets and our business activities. We rely on financing arrangements and liabilities under which our cost of borrowing is based on LIBOR. We also hold assets and instruments used to hedge the value of certain assets that is measured by reference to LIBOR. We anticipate significant challenges as it relates to the transition away from LIBOR for all of our LIBOR based assets, financing arrangements, securities and liabilities, regardless of whether their maturity dates (as applicable) fall before or after the discontinuation date after June 30, 2023. These challenges include, but are not limited to, amending agreements or instruments underlying our existing and/or new LIBOR-based assets, financing arrangements, securities and liabilities with appropriate fallback language in such a way as to ensure economic equivalence with our LIBOR-based assets, financing arrangements and securities prior to the discontinuation of LIBOR, and the possibility that LIBOR may deteriorate as a viable benchmark to ensure a fair cost of funds for our LIBOR-linked liabilities, interest income for our LIBOR-linked assets, and/or the determination of fair value for certain of our assets and hedges using LIBOR as a benchmark rate or used to develop a market discount rate. In addition, the transition to using any new benchmark rate or other financial metric may require changes to existing transaction data, products, systems, models, operations and pricing processes.

We also anticipate additional risks to our current business activities as they relate to the discontinuation of LIBOR. We service LIBOR-based adjustable rate mortgages ("ARMs") for which the underlying mortgage notes incorporate fallback provisions, but we cannot anticipate the response of our borrowers or note holders to such risks. We may also incorporate LIBOR methodologies for financial planning and reporting in our financial models.

In the United States, there have been efforts to identify alternative reference interest rates to replace United States Dollar LIBOR. The Alternative Reference Rates Committee has recommended that U.S. dollar LIBOR be replaced by rates based on the Secured Overnight Financing Rate ("SOFR") plus, in the case of existing LIBOR contracts and obligations, a spread adjustment. The derivatives markets are also expected to use SOFR-based rates to replace U.S. dollar LIBOR. SOFR-based rates differ from LIBOR, and the differences may be material. SOFR is intended to be a broad measure of the cost of borrowing funds overnight in transactions that are collateralized by U.S. Treasury securities. LIBOR is intended to be an unsecured rate that represents interbank funding costs for different short-term tenors and, other than its overnight setting, reflects expectations regarding future interest rates. Thus, LIBOR is generally intended to be sensitive to bank credit risk and to short-term interest rate expectations and SOFR is intended to be insensitive to credit risk and to risks related to interest rates other than overnight rates. SOFR has also been more volatile than such benchmark rates as three-month LIBOR from time to time. These fundamental differences between LIBOR and SOFR mean we are unable to clearly assess the risk of transitioning from LIBOR to SOFR for any of our LIBOR-based liabilities or assets.

Due to these risks, we expect both the impending and actual discontinuation of LIBOR could materially affect our interest expense and earnings, our cost of capital, and the fair value of certain of our assets and the instruments we use to hedge their value. For the same reason, we also can provide no assurance that changes in the value of our hedge instruments will effectively offset changes in the value of the assets they are expected to hedge. Furthermore, the transition away from widely used benchmark rates like LIBOR could result in customers or other market participants challenging the determination of their interest or dividend payments, disputing the interpretations or implementation of contract or instrument "fallback" provisions and other transition related changes. Our inability to manage these risks effectively may materially and adversely affect our business, financial condition, liquidity and results of operations.

Hedging against interest rate exposure may materially and adversely affect our results of operations and cash flows.

We pursue hedging strategies primarily in an effort to mitigate the effect of changes in interest rates on the fair value of our assets. To manage this price risk, we use derivative financial instruments acquired with the intention of moderating the risk that changes in market interest rates will result in unfavorable changes in the fair value of our assets, primarily prepayment exposure on our MSR investments as well as interest rate lock commitments ("IRLCs") and our inventory of loans held for sale. For example, with respect to our IRLCs and inventory of loans held for sale, we may use MBS forward sale contracts to lock in the price at which we will sell the mortgage loans or resulting MBS, and MBS put options to mitigate the risk of our IRLCs not closing at the rate we expect. In addition, with respect to our MSRs, we may use MBS forward purchase and sale contracts to address exposures to smaller interest rate shifts with Treasury and interest rate swap futures, and use options and swaptions to achieve target coverage levels for larger interest rate shocks.

Our hedging activity will vary in scope based on the risks being mitigated, the level of interest rates, the type of investments held, and other changing market conditions such as those resulting from the ongoing COVID-19 pandemic. Hedging instruments involve risk because they often are not traded on regulated exchanges, guaranteed by an exchange or its clearing house, or regulated by any U.S. or foreign governmental authorities, and our interest rate hedging may fail to protect or could adversely affect us because, among other things:

- interest rate hedging can be expensive, particularly during periods of rising and volatile interest rates;
- available interest rate hedging may not correspond directly with the interest rate risk for which protection is sought;
- the duration of the hedge may not match the duration of the related liability or asset;
- the credit quality of the hedging counterparty owing money on the hedge may be downgraded to such an extent that it impairs our ability to sell or assign our side of the hedging transaction; and
- the hedging counterparty owing the money in the hedging transaction may default on its obligation to pay.

In addition, we may fail to recalculate, re-adjust and execute hedges in an efficient manner. Any hedging activity, which is intended to limit losses, may materially and adversely affect our results of operations and cash flows. Therefore, while we may enter into such transactions seeking to reduce interest rate risk, unanticipated changes in interest rates may result in worse overall investment performance than if we had not engaged in any such hedging transactions. A liquid secondary market may not exist for a hedging instrument purchased or sold, and we may be

required to maintain a position until exercise or expiration, which could result in significant losses. In addition, the degree of correlation between price movements of the instruments used in hedging strategies and price movements in the portfolio positions or liabilities being hedged may vary materially. Moreover, for a variety of reasons, we may not establish an effective correlation between such hedging instruments and the portfolio positions or liabilities being hedged. Any such ineffective correlation may prevent us from achieving the intended hedge and expose us to risk of loss. Numerous regulations currently apply to hedging and any new regulations or changes in existing regulations may significantly increase our administrative or compliance costs. Our derivative agreements generally provide for the daily mark to market of our hedge exposures. If a hedge counterparty determines that its exposure to us exceeds its exposure threshold, it may initiate a margin call and require us to post collateral. If we are unable to satisfy a margin call, we would be in default of our agreement, which could have a material adverse effect on our business, financial condition, liquidity and results of operations.

We utilize derivative financial instruments, which could subject us to risk of loss.

We utilize derivative financial instruments for hedging purposes, which may include swaps, options and futures. However, the prices of derivative financial instruments, including futures and options, are highly volatile, as are payments made pursuant to swap agreements. As a result, the cost of utilizing derivatives may reduce our income that would otherwise be available for distribution to stockholders or for other purposes, and the derivative instruments that we utilize may fail to effectively hedge our positions. We are also subject to credit risk with regard to the counterparties involved in the derivative transactions.

We are exposed to a number of risks relating to holding derivative instruments. A liquid secondary market may not exist for a hedging instrument purchased or sold, and we may be required to maintain a position until exercise or expiration, which could result in significant losses. In addition, the degree of correlation between price movements of the instruments used in hedging strategies and price movements in the portfolio positions or liabilities being hedged may vary materially. Moreover, for a variety of reasons, we may not establish an effective correlation between such hedging instruments and the portfolio positions or liabilities being hedged. Any such ineffective correlation may prevent us from achieving the intended hedge and expose us to risk of loss. Numerous regulations currently apply to hedging and any new regulations or changes in existing regulations may significantly increase our administrative or compliance costs. Our derivative agreements generally provide for the daily mark to market of our hedge exposures. If a hedge counterparty determines that its exposure to us exceeds its exposure threshold, it may initiate a margin call and require us to post collateral. If we are unable to satisfy a margin call, we would be in default of our agreement, which could have a material adverse effect on our business, financial condition, liquidity and results of operations.

The use of derivative instruments is also subject to an increasing number of laws and regulations, including the Dodd-Frank Act and other federal regulations. These laws and regulations are complex, compliance with them may be costly and time consuming, and our failure to comply with any of these laws and regulations could subject us to lawsuits or government actions and damage our reputation, which could materially and adversely affect our business, financial condition, liquidity, results of operations and ability to make distributions to our stockholders.

We use estimates in determining the fair value of our MSRs, which are highly volatile assets with continually changing fair values. If our estimates of their value prove to be inaccurate, we may be required to write down the fair values of the MSRs which could adversely affect our business, financial condition, liquidity and results of operations.

Our estimates of the fair value of our MSRs is based on the cash flows projected to result from the servicing of the related mortgage loans and continually fluctuates due to a number of factors. These factors include prepayment speeds, interest rate changes, the ongoing COVID-19 pandemic and other market conditions, which affect the number of loans that are repaid or refinanced and thus no longer result in cash flows, and the number of loans that become delinquent.

We use internal financial models that utilize our understanding of inputs and assumptions used by market participants to value our MSRs for purposes of financial reporting and for purposes of determining the price that we pay for portfolios of MSRs and to acquire loans for which we will retain MSRs. These models are complex and use asset-specific collateral data and market inputs for interest and discount rates. In addition, the modeling requirements of MSRs are complex because of the high number of variables that drive cash flows associated with MSRs. Even if the general accuracy of our valuation models is validated, valuations are highly dependent upon the reasonableness of our inputs and the results of the models.

If loan delinquencies or prepayment speeds are different than anticipated or other factors perform differently than modeled, the recorded value of certain of our MSRs may change. Significant differences in performance could increase the chance that we do not adequately estimate the impact of these factors on our valuations which could result in misstatements of our financial results, restatements of our financial statements, or otherwise materially and adversely affect our business, financial condition, liquidity and results of operations.

The geographic concentration of our servicing portfolio may be affected by weaker economic conditions or adverse events specific to certain regions which could decrease the fair value of our MSRs and adversely affect our business, financial condition, liquidity and results of operations.

A decline in the economy, the ongoing COVID-19 pandemic or other difficulties in certain real estate markets may cause a decline in the value of residential and commercial properties. To the extent that certain states in which we have greater concentrations of business in the future experience weaker economic conditions or greater rates of decline in real estate values than the United States generally, such concentration may disproportionately decrease the fair value of our MSRs and adversely affect our loan production businesses. The impact of property value declines may increase in magnitude and it may continue for a long period of time. Additionally, if states in which we have greater concentrations of business were to change their licensing or other regulatory requirements to make our business cost-prohibitive, we may be required to stop doing business in those states or may be subject to a higher cost of doing business in those states, which could have a material adverse effect on our business, financial condition, liquidity and results of operations.

Increases in delinquencies and defaults may adversely affect our business, financial condition, liquidity and results of operations.

Delinquencies can result from many factors including unemployment, weak economic conditions or real estate values, or catastrophic events such as man-made or natural disasters, pandemic, war or terrorist attacks. A decrease in home prices may result in higher loan-to-value ratios ("LTVs"), lower recoveries in foreclosure and an increase in loss severities above those that would have been realized had property values remained the same or continued to increase. Some borrowers do not have sufficient equity in their homes to permit them to refinance their existing loans, which may reduce the volume or growth of our loan production business. This may also provide borrowers with an incentive to default on their mortgage loans even if they have the ability to make principal and interest payments. Further, despite recent increases, interest rates have remained near historical lows for an extended period of time.

Increased mortgage delinquencies, defaults and foreclosures may result in lower revenue for loans that we service for the Agencies because we only collect servicing fees from the Agencies for performing loans, and our failure to service delinquent and defaulted loans in accordance with the applicable servicing guidelines could result in our failure to benefit from available monetary incentives and/or expose us to monetary penalties and curtailments. Additionally, while increased delinquencies generate higher ancillary fees, including late fees, these fees are not likely to be recoverable in the event that the related loan is liquidated or due to the CARES Act restrictions or other requirements as a result of the Covid-19 pandemic. In addition, an increase in delinquencies lowers the interest income that we receive on cash held in collection and other accounts because there is less cash in those accounts. Also, increased mortgage defaults may ultimately reduce the number of mortgages that we service.

Increased mortgage delinquencies, defaults and foreclosures will also result in a higher cost to service those loans due to the increased time and effort required to collect payments from delinquent borrowers and to acquire and liquidate the properties securing the loans or otherwise resolve loan defaults if payment collection is unsuccessful, and only a portion of these increased costs are recoverable under our servicing agreements. Increased mortgage delinquencies, defaults and foreclosures may also result in an increase in servicing advances we are obligated to make to fulfill our obligations to MBS holders and to protect our investors' interests in the properties securing the delinquent mortgage loans. An increase in required advances also may cause an increase in our interest expense and affect our liquidity as a result of increased borrowings under our financing agreements to fund any such increase in the advances.

A disruption in the MBS market could materially and adversely affect our business, financial condition, liquidity and results of operations.

Most of the loans that we produce are pooled into MBS issued by Fannie Mae or Freddie Mac or guaranteed by Ginnie Mae. In addition, while the Federal Reserve loosened monetary policies due to the ongoing COVID-19 pandemic by purchasing securities and MBS on the open market, future interest rates and the liquidity of the MBS market could be impacted as the Federal Reserve increases the federal funds rate and tapers future MBS purchases. Any significant disruption or period of illiquidity in the general MBS market would directly affect our own liquidity and the liquidity of PMT because no existing alternative secondary market would likely be willing and able to accommodate on a timely basis the volume of loans that we typically sell in any given period. Furthermore, we would remain contractually obligated to fund loans under our outstanding IRLCs without being able to sell our existing inventory of mortgage loans. Accordingly, if the MBS market experiences a period of illiquidity, we might be prevented from selling the loans that we produce into the secondary market in a timely manner or at favorable prices and we would be required to hold a larger inventory of loans than we have committed facilities to fund or we may be required to repay a portion of the debt secured by these assets, which could have a material adverse effect on our business, financial condition, liquidity and results of operations.

We may be required to indemnify the purchasers of loans that we originate, acquire or assist in the fulfillment of, or repurchase those loans, if those loans fail to meet certain criteria or characteristics or under other circumstances.

Our contracts with purchasers of newly originated loans that we fund through our consumer direct lending business or acquire from PMT through our correspondent production activities contain provisions that require us to indemnify the purchaser of the related loans or repurchase such loans under certain circumstances. Our loan sale agreements with purchasers, including the Agencies, contain provisions that generally require us to indemnify or repurchase these loans if our representations and warranties concerning loan quality and loan characteristics are inaccurate; or the loans fail to comply with the respective Agency's underwriting or regulatory requirements.

Repurchased loans typically can only be financed at a steep discount to their repurchase price, if at all. They are also typically valued and, therefore, can generally only be sold at a significant discount to the underlying UPBs. In certain cases involving mortgage lenders from whom loans were acquired through our correspondent production activities, we may have contractual rights to either recover some or all of our indemnification losses or otherwise demand repurchase of these loans. Depending on the volume of repurchase and indemnification requests, some of these mortgage lenders may not be able to financially fulfill their obligation to indemnify us or repurchase the affected loans. If a material amount of recovery cannot be obtained from these mortgage lenders, our business, financial condition, liquidity and results of operations could be materially and adversely affected.

Although our indemnification and repurchase exposure cannot be quantified with certainty, to recognize these potential indemnification and repurchase losses, we have recorded a liability of $43.5 million as of December 31, 2021. Because of the increase in our loan production over time, we expect that indemnification and repurchase requests are also likely to increase. Should home values decrease and negatively impact the related loan values, our realized loan losses from indemnifications and repurchases may increase as well. As such, our indemnification and repurchase costs may increase well beyond our current expectations. In addition, our mortgage banking services agreement with PMT requires us to indemnify it with respect to loans for which we provide fulfillment services in certain instances. If we are required to indemnify PMT or other purchasers against losses, or repurchase loans from PMT or other purchasers, that result in losses that exceed the recorded liability, this could have a material adverse effect on our business, financial condition, liquidity and results of operations.

We depend on the accuracy and completeness of information about borrowers and counterparties and any misrepresented information could adversely affect our business, financial condition, liquidity and results of operations.

In deciding whether to approve loans or to enter into other transactions across our businesses with borrowers and counterparties, including brokers, correspondent lenders and non-delegated correspondent lenders, we may rely on information furnished to us by or on behalf of borrowers and such counterparties, including financial statements and other financial information. We also may rely on representations of borrowers and such counterparties as to the accuracy and completeness of that information and, with respect to financial statements, on reports of independent auditors. If any of this information is intentionally or negligently misrepresented and such misrepresentation is not detected prior to loan funding, the fair value of the loan may be significantly lower than expected. Whether a misrepresentation is made by the loan applicant, another third party or one of our employees, we generally bear the risk of loss associated with the misrepresentation. Our controls and processes may not have detected or may not detect all misrepresented information in our loan originations or acquisitions. Any such misrepresented information could have a material adverse effect on our business, financial condition, liquidity and results of operations.

Our counterparties may terminate our MSRs, which could adversely affect our business, financial condition, liquidity and results of operations.

As is standard in the industry, under the terms of our master servicing agreements with the Agencies in respect of Agency MSRs that we retain in connection with our loan production, the Agencies have the right to terminate us as servicer of the loans we service on their behalf at any time (and, in certain instances, without the payment of any termination fee) and also have the right to cause us to sell the MSRs to a third party. In addition, our failure to comply with applicable servicing guidelines could result in our termination under such master servicing agreements by the Agencies with little or no notice and without any compensation. The owners of other non-Agency loans that we service may also terminate certain of our MSRs if we fail to comply with applicable servicing guidelines. If the MSRs are terminated on a material portion of our servicing portfolio, our business, financial condition, liquidity and results of operations could be adversely affected.

We are required to make servicing advances that can be subject to delays in recovery or may not be recoverable in certain circumstances, which could adversely affect our business, financial condition, liquidity and results of operations.

During any period in which a borrower is not making payments, we are required under most of our servicing agreements in respect of our MSRs to advance our own funds to pay property taxes and insurance premiums, legal expenses and other protective advances. We also advance funds under these agreements to maintain, repair and market real estate properties on behalf of investors. As home values change, we may have to reconsider certain of the assumptions underlying our decisions to make advances and, in certain situations, our contractual obligations may require us to make advances for which we may not be reimbursed. In addition, if a mortgage loan serviced by us is in default or becomes delinquent, the repayment to us of the advance may be delayed until the mortgage loan is repaid or refinanced or a liquidation occurs. Federal, state or local regulatory actions may increase the amount of servicing advances that we are required to make, lengthen the time it takes for us to be reimbursed for such advances and increase the costs incurred while the loan is delinquent.

With delinquent VA guaranteed loans, the VA guarantee may not make us whole on losses or advances we may have made on the loan. If the VA determines the amount of the guarantee payment will be less than the cost of acquiring the property, it may elect to pay the VA guarantee and leave the property securing the loan with us. Any significant increase in required servicing advances or delay in our ability to dispose of the underlying properties and recover our servicing advances may adversely affect our liquidity, and our inability to be reimbursed for advances could have a material adverse effect on our business, financial condition, liquidity and results of operations

We may not realize all of the anticipated benefits of potential future acquisitions of MSRs, which could adversely affect our business, financial condition, liquidity and results of operations.

Our ability to realize the anticipated benefits of potential future acquisitions of servicing portfolios will depend, in part, on our ability to appropriately service any such assets. The process of acquiring these assets may disrupt our business and may not result in the full benefits expected. The risks associated with these acquisitions include, among others, unanticipated issues in integrating information regarding the new loans to be serviced into our information technology systems, and the diversion of management's attention from other ongoing business concerns. Moreover, if we inappropriately value the assets that we acquire or the fair value of the assets that we acquire declines after we acquire them, the resulting charges may negatively affect both the carrying value of the assets on our balance sheet and our earnings. Furthermore, if we incur additional indebtedness to finance an acquisition, the acquired servicing portfolio may not be able to generate sufficient cash flows to service that additional indebtedness. Unsuitable or unsuccessful acquisitions could have a material adverse effect on our business, financial condition, liquidity and results of operations.

We are subject to significant financial and reputational risks from potential liability arising from lawsuits, and regulatory and government action.

We face significant legal risks in our business, and the volume of claims and amount of damages, penalties and fines claimed in litigation, and regulatory and government proceedings against us and other financial institutions remains high. For example, in 2019 Black Knight Servicing Technologies, LLC filed a legal claim against us for alleged breach of contract and misappropriation of trade secrets. Greater than expected investigation costs and litigation, including class action lawsuits associated with compliance related issues, substantial legal liability or significant regulatory or government action against us could have adverse effects on our financial condition and results of operations or cause significant reputational harm to us, which in turn could adversely impact our business results and prospects. We may experience a significant volume of litigation and other disputes, including claims for contractual indemnification, with counterparties regarding relative rights and responsibilities. Consumers, clients and other counterparties may also become increasingly litigious.

We also may be exposed to the risk of litigation by investors in clients that we manage from time to time if our management advice is alleged to constitute gross negligence or willful misconduct. Investors could sue us to recover amounts lost by those entities due to our alleged misconduct, up to the entire amount of loss. Further, we may be subject to litigation arising from investor dissatisfaction with the performance of any such entities that we manage or from allegations that we improperly exercised control or influence over those entities. In addition, we are exposed to risks of litigation or investigation relating to transactions which presented conflicts of interest that were not properly addressed. In such actions, we would be obligated to bear legal, settlement and other costs (which may be in excess of available insurance coverage). In addition, although we are generally indemnified by the entities that we manage, our rights to indemnification may be challenged. If we are required to incur all or a portion of the costs arising out of litigation or investigations as a result of inadequate insurance proceeds or failure to obtain indemnification from the entities that we manage, our business, financial condition, liquidity and results of operations would be materially and adversely affected.

We depend on counterparties and vendors to provide services that are critical to our business, which subjects us to a variety of risks.

We have a number of counterparties and vendors, who provide us with financial, technology and other services that are critical to support our businesses. If our current counterparties and vendors were to stop providing services to us on acceptable terms or if we had a disruption in service due to a vendor dispute, we may be unable to procure alternative services from other counterparties or vendors in a timely and efficient manner and on similarly acceptable terms, or at all. Some of these counterparties and vendors have significant operations outside of the United States. If we or our vendors had to curtail or cease operations in these countries due to political unrest or natural disasters and then transfer some or all of these operations to another geographic area, we could experience disruptions in service and incur significant transition costs as well as higher future overhead costs. We may also outsource certain services to vendors located in foreign countries such as India and the Philippines with emerging technology, political and regulatory infrastructures that could result in future business disruptions or reputational damages. With respect to vendors engaged to perform certain servicing activities, we are required to assess their compliance with various regulations and establish procedures to provide reasonable assurance that the vendor's activities comply in all material respects with such regulations. In the event that a vendor's activities are not in compliance, it could negatively impact our relationships with our regulators, as well as our business and operations. Further, we may incur significant costs to resolve any such disruptions in service which could have a material adverse effect on our business, financial condition, liquidity and results of operations.

Our failure to appropriately address various issues that may give rise to reputational risk could cause harm to our business and adversely affect our earnings.

Our business is subject to significant reputational risks. If we fail, or appear to fail, to address various issues that may give rise to reputational risk, we could significantly harm our business prospects and earnings. Such issues include, but are not limited to, actual or perceived conflicts of interest, violations of legal or regulatory requirements, and any of the other risks discussed in this Item 1A. Similarly, market rumors and actual or perceived association with counterparties whose own reputations are under question could harm our business.

Certain of our officers also serve as officers of PMT. As we expand the scope of our businesses, we increasingly confront potential conflicts of interest relating to investment activities that we manage for PMT. The SEC and certain regulators have increased their scrutiny of potential conflicts of interest, and as we experience growth in our businesses, we continue to monitor and mitigate or otherwise address any conflicts between our interests and those of PMT through the implementation of procedures and controls. Reputational risk incurred in connection with conflicts of interest could negatively affect our business, strain our working relationships with regulators and government agencies, expose us to litigation and regulatory action, impact our ability to attract and retain clients, customers, trading counterparties, investors and employees and adversely affect our results of operations.

Reputational damage can result from our actual or alleged conduct in any number of activities, including lending and debt collection practices, corporate governance, and actions taken by government regulators and community organizations in response to those activities. Negative public opinion can also result from social media and media coverage, whether accurate or not. Our reputation may also be negatively impacted by our environmental, social and governance ("ESG") practices and disclosures, including climate change practices and disclosures. In addition, various private third party organizations have developed ratings processes for evaluating companies on their approach to ESG matters. These third party ESG ratings may be used by some investors to assist with their investment and voting decisions. Any unfavorable ESG ratings may lead to reputational damage and negative sentiment among our investors and other stakeholders. These factors could impair our working relationships with government agencies and investors, expose us to litigation and regulatory action, negatively affect our ability to attract and retain customers, trading counterparties and employees, significantly harm our stock price and ability to raise capital, and adversely affect our results of operations.

Accounting rules for certain of our transactions are highly complex and involve significant judgment and assumptions. Changes in accounting interpretations or assumptions could impact our financial statements.

Accounting rules for mortgage loan sales and securitizations, valuations of financial instruments and MSRs, investment consolidations, income taxes and other aspects of our operations are highly complex and involve significant judgment and assumptions. These complexities could lead to a delay in preparation of financial information and the delivery of this information to our stockholders and also increase the risk of errors and restatements, as well as the cost of compliance. Changes in accounting interpretations or assumptions could impact our financial statements and our ability to timely prepare our financial statements. Our inability to timely prepare our financial statements in the future would likely be considered a breach of our financial covenants and adversely affect our share price significantly.

The success and growth of our business depends upon our ability to adapt to and implement technological changes and to successfully develop, implement and protect proprietary technology.

Our success in the mortgage industry is highly dependent upon our ability to adapt to constant technological changes, successfully enhance our current information technology solutions through the use of third-party and our proprietary technologies, and introduce new solutions and services that more efficiently address the needs of our customers.

Our mortgage loan production businesses are dependent upon our ability to effectively interface with our borrowers, mortgage lenders and other third parties and to efficiently process loan applications and closings. The direct lending processes are becoming more dependent upon technological advancement, such as our continued ability to process applications over the Internet, accept electronic signatures, provide process status updates instantly and other borrower- or counterparty-expected conveniences. In our correspondent production activities, our and PMT's correspondent sellers also expect and require certain conveniences and service levels that are dependent on technological advancement. We have developed a workflow-driven, cloud-based loan acquisition platform and while we anticipate that the cloud-based system will increase scalability and produce other efficiencies, there can be no assurance that the cloud-based system will prove to be effective or that such correspondent sellers will easily adapt to the cloud-based system. Any failure to effectively or timely transition to our new system and meet our expectations and the expectations of our correspondent sellers could have a material adverse effect on our business, financial condition and results of operations.

Similarly, our servicing business is dependent on our ability to effectively interface with our customers and investors, as well as service mortgage loans in compliance with applicable laws and regulations and the contractual requirements of such investors. For example, our proprietary workflow-driven, cloud-based servicing system provides for real-time processing and advanced workflow management thereby reducing servicing costs, increasing scalability and creating sustainable efficiencies.

We rely on a combination of trademarks, copyrights, and trade secrets, as well as confidentiality and contractual provisions to protect our intellectual property and proprietary technologies. In addition, we also license and utilize third party proprietary technologies and loss of rights to significant third party proprietary technologies may result in decreased product functionality. The development, implementation and protection of our intellectual property and proprietary technologies requires significant human resources and capital expenditures. As these technological advancements and investor and compliance requirements increase in the future, we will need to further develop these technological capabilities to remain competitive, and we will need to implement, execute and maintain them in an operating and regulatory environment that exposes us to significant risk. Moreover, litigation has become necessary to protect our intellectual property and proprietary technologies, and, such litigation is expected to be time consuming and result in substantial costs and diversion of resources.

There is no assurance that we will be able to successfully adopt new technologies as critical systems and applications become obsolete and better ones become available. Any failure by us to develop, implement, integrate, execute or maintain our technological capabilities and any litigation costs associated with protection of our technologies could have a material adverse effect on our business, financial condition and results of operations.

Our operations, businesses and customers could be materially adversely affected by the impacts related to climate change and related environmental sustainability matters.

There is an increasing concern over the risks of climate change and related environmental sustainability matters. The physical risks of climate change include rising average global temperatures, rising sea levels and an increase in the frequency and severity of extreme weather events and natural disasters, including floods, wildfires, hurricanes and tornados, and could impact our properties and the local economies of certain areas in which we operate. Although we believe our owned real estate and the properties collateralizing our loan assets or underlying our MSR assets are appropriately covered by insurance, we cannot predict at this time if we or our borrowers will be able to obtain appropriate coverage at a reasonable cost in the future, or if we will be able to continue to pass along all of the costs of insurance. There also is a risk that one or more of our property insurers may not be able to fulfill their obligations with respect to claims payments due to a deterioration in its financial condition or may even cancel policies due to increasing costs of providing insurance coverage in certain geographic areas. Additionally, climate change concerns could result in transition risk. Changes in consumer preferences and additional legislation and regulatory requirements, including those associated with the transition to a low-carbon economy, could increase expenses or otherwise adversely impact our operations, businesses or its customers.

Adverse weather conditions, climate change, man-made or natural disasters, pandemics, such as COVID-19, terrorist attacks, floods, droughts, fires and other environmental conditions could materially and adversely affect our business, financial condition, liquidity and results of operations.

Adverse weather conditions, climate change, man-made or natural disasters, pandemics, such as COVID-19, terrorist attacks, floods, droughts, fires and other environmental conditions could adversely impact properties that we own or that collateralize loans we own or service, as well as properties where we conduct business. In addition, such adverse conditions could impact the demand for, and value of, our assets, as well as the cost to service or manage such assets, directly impact the value of our assets through damage, destruction or loss, and thereafter materially impact the availability or cost of insurance to protect against these events. Terrorist attacks and other acts of violence may cause disruptions in U.S. financial markets and negatively impact the U.S. economy in general.

Our corporate headquarters is located in Westlake Village, California and we have additional locations around the greater Los Angeles metropolitan area and elsewhere in the State of California. Many areas of California, including the immediate area around our corporate headquarters, have experienced extensive damage and property loss due to a series of large wildfires in the past several years. California and the other states in which we operate are also prone to other types of natural disasters. In the event of a major earthquake, hurricane, or catastrophic event such as fire, flood, power loss, telecommunications failure, cyber attack, pandemic, war, or terrorist attack, we may be unable to continue our operations and may endure significant business interruptions, reputational harm, delays in servicing our customers and working with our partners, interruptions in the availability of our technology and systems, breaches of data security, and loss of critical data, all of which could have an adverse effect on our future operating results. Certain types of losses, generally of a catastrophic nature, that result from events described above such as earthquakes, floods, hurricanes, tornados, terrorism, acts of war and pandemics, such as COVID-19, may also be uninsurable or not economically insurable. Inflation, changes in building codes and ordinances, environmental considerations and other factors, including terrorism or acts of war, also might make the insurance proceeds insufficient to repair or replace a property if it is damaged or destroyed. Under these circumstances, the insurance proceeds received might not be adequate to restore our economic position with respect to the affected real property. Any uninsured loss could result in the loss of cash flow from, and the asset value of, the affected property, which could have an adverse effect on our business, financial condition, liquidity and results of operations.

Related Party Risks

We rely on PMT as a significant source of financing for, and revenue related to, our mortgage banking business, and the termination of, or material adverse change in, the terms of this relationship, or a material adverse change to PMT or its operations, could adversely affect our business, financial condition, liquidity and results of operations.

PMT is the counterparty that currently acquires all of the newly originated mortgage loans in connection with our correspondent production activities. A significant portion of our income is derived from a fulfillment fee earned in connection with PMT's acquisition of conventional loans. We are able to conduct our correspondent production activities without having to incur the significant additional debt financing that would be required for us to purchase those loans from the originating lender. In the case of government-insured loans, we purchase them from PMT at PMT's cost plus a sourcing fee and fulfill these loans for our own account and sell them, typically by pooling the federally insured or guaranteed loans together into an MBS which Ginnie Mae guarantees. We earn interest income and gains or losses during the holding period and upon the sale of these securities, and we retain the MSRs with respect to the loans. If this relationship with PMT is terminated by PMT or PMT reduces the volume of these loans that it acquires for any reason, we would have to acquire these loans from the correspondent sellers for our own account, something that we may be unable to do, or enter into another similar counterparty arrangement with a third party, which we may not be able to enter into on terms that are as favorable to us, or at all.

The management agreement, the mortgage banking services agreement and certain of the other agreements that we have entered into with PMT contain cross-termination provisions that allow PMT to terminate one or more of those agreements under certain circumstances where another one of such agreements is terminated. Accordingly, the termination of this relationship with PMT, or a material change in the terms thereof that is adverse to us, would likely have a material adverse effect our business, financial condition, liquidity and results of operations. The terms of these agreements extend until June 30, 2025, subject to automatic renewal for additional 18-month periods, but any of the agreements may be terminated earlier under certain circumstances or otherwise non-renewed. If any agreement is terminated or non-renewed and not replaced by a new agreement, it would materially and adversely affect our ability to continue to execute our business plan.

We expect that PMT will continue to qualify as a REIT for U.S. federal income tax purposes. However, it is possible that PMT may not meet the requirements for qualification as a REIT. If PMT were to lose its REIT status, corporate-level income taxes, would apply to all of PMT's taxable income at federal and state tax rates. Either of these scenarios would potentially impair PMT's financial position and its ability to raise capital, which could have a material adverse effect on our business, financial condition, liquidity and results of operations.

A significant portion of our loan servicing operations are conducted pursuant to subservicing contracts with PMT, and any termination by PMT of these contracts, or a material change in the terms thereof that is adverse to us, would adversely affect our business, financial condition, liquidity and results of operations.

PMT, as the owner of a substantial number of MSRs or mortgage loans that we subservice, may, under certain circumstances, terminate our subservicing contract with or without cause, in some instances with little notice and little to no compensation. Upon any such termination, it would be difficult to replace such a large volume of subservicing in a short period of time, or perhaps at all. Accordingly, we may not generate as much revenue from subservicing for other third parties. If we were to have our subservicing terminated by PMT, or if there was a change in the terms under which we perform subservicing for PMT that was material and adverse to us, this would have a material adverse effect on our business, financial condition, liquidity and results of operations.

PMT has an exclusive right to acquire the loans that are produced through our correspondent production activities, which may limit the revenues that we could otherwise earn in respect of those loans.

Our mortgage banking services agreement with PMT requires PLS to provide fulfillment services for correspondent production activities exclusively to PMT as long as PMT has the legal and financial capacity to purchase correspondent loans. As a result, the revenue that we earn with respect to these loans will be limited to the fulfillment fees that we earn in connection with the production of these loans, which may be less than the revenues that we might otherwise be able to realize by acquiring these loans ourselves and selling them in the secondary loan market.

Risks Related to Our Investment Management Segment

Market conditions could reduce the fair value of the assets that we manage, which would reduce our management and incentive fees.

A portion of the fees that we earn under our investment management agreement is based on the fair value of the assets that we manage. The fair values of the securities and other assets held in the portfolios that we manage and, therefore, our assets under management may decline due to any number of factors beyond our control, including, among others, a decline in housing demand or value, the ongoing impact of the COVID-19 pandemic, changes to interest rates, stock or bond market movements, a general economic downturn, inflation, political uncertainty or acts of terrorism. The economic outlook cannot be predicted with certainty and we continue to operate in a challenging business environment. If volatile market conditions cause a decline in the fair value of our assets under management, that decline in fair value could materially reduce our management fees and incentive fees under our management agreement with PMT and adversely affect our revenues. If our revenues decline without a commensurate reduction in our expenses, our net income will be reduced.

We currently manage assets for a single client, the loss of which would significantly reduce our management and incentive fees and have a material adverse effect on our results of operations.

Our management and incentive fees result from our management of PMT. The term of the management agreement that we have entered into with PMT, as amended, expires on June 30, 2025, subject to automatic renewal for additional 18-month periods, unless terminated earlier in accordance with the terms of the agreement. In the event of a termination of one or more related party agreements by PMT in certain circumstances, we may be entitled to a termination fee under our management agreement. However, the termination of such management agreement and the loss of PMT as a client would significantly affect our investment management segment and negatively impact our management fees and incentive fees.

The historical returns on the assets that we select and manage for PMT, and our resulting management and incentive fees, may not be indicative of future results.

The historical returns of the assets that we manage should not be considered indicative of the future returns on those assets or future returns on other assets that we may select for investment by PMT. The investment performance that is achieved for the assets that we manage varies over time, and the nature and mix of assets we manage has changed significantly over the past several years. As a result, the change and variance in investment performance can be significant. For example, in fiscal year 2020, we did not earn any performance incentive fees due to losses incurred by PMT during the quarter ended March 31, 2020. Accordingly, the management and incentive fees that we have earned in the past based on those returns should not be considered indicative of the management or incentive fees that we may earn in the future from managing those same assets or from managing other assets for PMT.

Changes in regulations applicable to our investment management segment could materially and adversely affect our business, financial condition, liquidity and results of operations.

The legislative and regulatory environment in which we operate is constantly evolving. New laws or regulations, or changes in the enforcement of existing laws or regulations, applicable to us and PMT, may adversely affect our business. Our ability to succeed in this environment will depend on our ability to monitor and comply with regulatory changes. Regulatory changes that will affect other market participants are likely to change the way in which we conduct business with our counterparties. The uncertainty regarding the continued implementation of laws and regulations and their impact on the investment management industry and us cannot be predicted with certainty at this time but will continue to be a risk for our business.

We may be adversely affected as a result of new or revised legislation or regulations imposed by the SEC, other U.S. or non-U.S. governmental regulatory authorities or self-regulatory organizations that supervise the financial markets. We also may be adversely affected by changes in the interpretation or enforcement of existing laws and rules by these governmental authorities and self-regulatory organizations, as well as by U.S. and non-U.S. courts. It is impossible to determine the extent of the impact of any new laws, regulations or initiatives that may be imposed on us or the markets in which we trade, or whether any of the proposals will become law. Compliance with any new laws or regulations could add to our compliance burden and costs and adversely affect the manner in which we conduct business, as well as our financial condition, liquidity and results of operations.

Our failure to comply with the extensive amount of regulation applicable to our investment management segment could materially and adversely affect our business, financial condition, liquidity and results of operations.

Our investment management segment is subject to extensive regulation in the United States. These regulations are designed primarily to ensure the integrity of the financial markets and to protect investors in any entity that we advise and are not designed to protect our stockholders. Consequently, these regulations may limit our activities. These requirements relate to, among other things, fiduciary duties to clients, solicitation agreements, conflicts of interest, recordkeeping and reporting requirements, disclosure requirements, limitations on cross trades and principal transactions between an adviser and an advisory clients and general anti-fraud prohibitions. We are required to maintain an effective compliance program, and are subject to inspection and examinations by the SEC and state regulators.

The failure by us or our service providers to comply with applicable laws or regulations, or our failure to design and successfully implement and administer our compliance program, could result in fines, suspensions of individual employees, limitations on engaging in other businesses and other sanctions, any of which could have a material adverse effect on our business, financial condition, liquidity and results of operations. Even if an investigation or proceeding did not result in a fine or sanction or the fine or sanction imposed against us or our employees by a regulator were small in monetary amount, the adverse publicity relating to an investigation, proceeding or imposition of these fines or sanctions could harm our reputation.

We may encounter conflicts of interest in trying to appropriately allocate our time and services between activities for our own account and for PMT, or in trying to appropriately allocate investment opportunities among ourselves and for PMT.

Pursuant to our management agreement with PMT, we are obligated to provide PMT with the services of our senior management team, and the members of that team are required to devote such time as is necessary and appropriate, commensurate with the level of activity of PMT. The members of our senior management team may have conflicts in allocating their time and services between our operations and the activities of PMT and any other entities or accounts that we may manage in the future.

In addition, we and the other entities or accounts that we may manage may participate in some of PMT’s investments now or in the future, which may not be the result of arm’s length negotiations and may involve or later result in potential conflicts between our interests in the investments and those of PMT or such other entities. Any such perceived or actual conflicts of interest could damage our reputation and materially and adversely affect our business, financial condition, liquidity and results of operations.

Risks Related to Our Organizational Structure

HC Partners may be able to significantly influence the outcome of votes of our common stock, or exercise certain other rights pursuant to a stockholder agreement we have entered into with it, and its interests may differ from those of our other public stockholders.

HC Partners, one of our largest investors, has the right under a stockholder agreement to nominate up to two individuals for election to our board of directors depending on the percentage of the voting power of our outstanding shares common stock that it holds, and we are obligated to use our best efforts to cause the election of those director nominees. In addition, the HC Partners' stockholder agreement requires that we obtain their consent with respect to amendments to our certificate of incorporation or bylaws. As a result, HC Partners may be able to significantly influence our management and affairs. In addition, as a result of the size of its individual equity holding it may be able to significantly influence the outcome of all matters requiring stockholder approval, including mergers and other material transactions, and may be able to cause or prevent a change in the composition of our board of directors or a change in control of our Company that could deprive our other public stockholders of an opportunity to receive a premium for their common stock as part of a sale of our company and might ultimately affect the market price of our common stock.

We have not established a minimum dividend payment level and no assurance can be given that we will be able to make dividends to our stockholders in the future at current levels or at all.

In October 2019, we announced the initiation of a quarterly dividend for our common stockholders. We have not established a minimum dividend payment level, and our ability to pay dividends to our stockholders may be materially and adversely affected by the risk factors discussed in our SEC periodic reports. Although we paid, and anticipate continuing to pay, quarterly dividends to our stockholders, our board of directors has the sole discretion to determine the timing, form and amount of any future dividends to our stockholders, and such determination will depend upon, among other factors, our historical and projected results of operations, financial condition, cash flows and liquidity, capital requirements and other expense obligations, debt covenants, contractual legal, tax, regulatory and other restrictions and such other factors as our board of directors may deem relevant from time to time.

As a result, no assurance can be given that we will be able to continue to pay dividends to our stockholders in the future or that the level of any future dividends will achieve a market yield or increase or even be maintained over time, any of which could materially and adversely affect the market price of our common stock.

Anti-takeover provisions in our charter documents and Delaware law might discourage or delay acquisition attempts for us that you might consider favorable.

Our certificate of incorporation and bylaws contain provisions that may make the acquisition of our company more difficult without the approval of our board of directors. Among other things, these provisions:

- authorize the issuance of undesignated preferred stock, the terms of which may be established and the shares of which may be issued without stockholder approval;
- prohibit stockholder action by written consent unless the matter as to which action is being taken has been approved by our board of directors;
- provide that our board of directors is expressly authorized to make, alter, or repeal our bylaws (provided that, if that action adversely affects HC Partners when that entity, together with its affiliates, holds at least 5% of the voting power of our outstanding shares of capital stock, our stockholder agreements provide that such action must be approved by that entity);
- establish advance notice requirements for nominations for elections to our board or for proposing matters that can be acted upon by stockholders at stockholder meetings; and
- prevent a sale of substantially all of our assets or completion of a merger or other business combination that constitutes a change of control without the approval of a majority of our independent directors.

These and other provisions under Delaware law could discourage, delay or prevent a transaction involving a change in control of our company or negatively affect the trading price of our common stock. These provisions could also discourage proxy contests and make it more difficult for you and other stockholders to elect directors of and take other corporate actions.

Our bylaws include an exclusive forum provision that could limit our stockholders' ability to obtain a judicial forum viewed by the stockholders as more favorable for disputes with us or our directors, officers or other employees.

Our bylaws provide that the state or federal court located within the State of Delaware is the exclusive forum for any derivative action or proceeding brought on our behalf; any action asserting a claim of breach of fiduciary duty; any action asserting a claim against us arising pursuant to the Delaware General Corporation Law, our certificate of incorporation or our bylaws; or any action asserting a claim against us that is governed by the internal affairs doctrine. This exclusive forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other associates, which may discourage such lawsuits against us and our directors, officers and other employees. Alternatively, if a court were to find the exclusive forum provision contained in our bylaws to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could adversely affect our business, financial condition, liquidity and results of operations.

Ownership of Our Common Stock

The market price and trading volume of our common stock may be volatile, which could result in rapid and substantial losses for our stockholders.

The market price and trading volume of our common stock has fluctuated significantly in the past and may be highly volatile in the future and could be subject to wide fluctuations. In addition, the trading volume in our common stock may fluctuate and cause significant price variations to occur. Further, if the market price of our common stock declines significantly, you may be unable to resell your shares at or above your purchase price, if at all. Some of the factors that could negatively affect the market price or trading volume of our common stock include:

- variations in our actual and anticipated financial and operating results and those expected by investors and analysts;
- changes in the manner that investors and securities analysts who provide research to the marketplace on us analyze the value of our common stock and similar companies;
- changes in recommendations or in estimated financial results published by securities analysts who provide research to the marketplace on us, our competitors or our industry;
- litigation and governmental investigations;
- increases in market interest rates that may lead purchasers of our shares to demand a higher yield;
- announcements by us or our competitors of significant contracts, acquisitions, dispositions, strategic relationships, joint ventures or capital commitments; and
- general market, political and economic conditions, including any such conditions and local conditions in the markets in which our customers are located.

These broad market and industry factors may decrease the market price and trading volume of our common stock, regardless of our actual operating performance.

The market price of our common stock could be negatively affected by sales of substantial amounts of our common stock into the public trading market.

We were founded in 2008 by members of our executive leadership team and strategic investors, including HC Partners. Sales of substantial numbers of shares of our common stock into the public trading market by HC Partners, or the perception that such sales could occur, could adversely affect the market price of our common stock and impede our ability to raise capital through the issuance of additional common stock or other equity securities.

The future issuance of additional common stock in connection with our incentive plans, acquisitions or otherwise will dilute all other stockholdings.

As of December 31, 2021, we have an aggregate of 4.8 million shares of common stock authorized and remaining available for future issuance under our 2013 Equity Incentive Plan. We may issue all of these shares of common stock without any action or approval by our stockholders, subject to certain exceptions. We also intend to continue to evaluate acquisition opportunities and may issue common stock in connection with these acquisitions. Any common stock issued in connection with our incentive plans, acquisitions, the exercise of outstanding stock options or otherwise would dilute the percentage ownership held by investors who purchase our common stock.

Future offerings of debt or equity securities by us may adversely affect the market price of our common stock.

In the future, we may attempt to obtain financing or further increase our capital resources by issuing additional shares of our common stock or offering debt or other equity securities, including commercial paper, medium-term notes, senior or subordinated notes, convertible debt securities or shares of preferred stock. The issuance of additional shares of our common stock or other equity securities or securities convertible into equity may dilute the economic and voting rights of our existing stockholders or reduce the market price of our common stock or both. Upon liquidation, holders of such debt securities and preferred stock, if issued, and lenders with respect to other borrowings would receive a distribution of our available assets prior to the holders of our common stock. Debt securities convertible into equity could be subject to adjustments in the conversion ratio pursuant to which certain events may increase the number of equity securities issuable upon conversion. Preferred stock, if issued, could have a preference with respect to liquidating distributions or a preference with respect to dividend payments that could limit our ability to pay dividends to the holders of our common stock. Any issuance of securities in future offerings may reduce the market price of our common stock and dilute existing stockholders' interests in us.

General Risks

Our risk management efforts may not be effective.

We could incur substantial losses and our business operations could be disrupted if we are unable to effectively identify, manage, monitor, and mitigate financial risks, such as credit risk, interest rate risk, prepayment risk, liquidity risk, climate risk and other market-related risks, as well as operational and legal risks related to our business, assets, and liabilities. We also are subject to various laws, regulations and rules that are not industry specific, including employment laws related to employee hiring and termination practices, health and safety laws, environmental laws and other federal, state and local laws, regulations and rules in the jurisdictions in which we operate. Our risk management policies, procedures, and techniques may not be sufficient to identify all of the risks to which we are exposed, mitigate the risks we have identified, or identify additional risks to which we may become subject in the future. Our risk management framework is designed to identify, monitor and mitigate risks that could have a negative impact on our financial condition or reputation. This framework includes divisions or groups dedicated to enterprise risk management, credit risk, climate risk, corporate sustainability and ESG, information security, disaster recovery and other information technology-related risks, business continuity, legal and compliance, compensation structures and other human resources matters, vendor management and internal audit, among others. Expansion of our business activities may also result in our being exposed to risks to which we have not previously been exposed or may increase our exposure to certain types of risks, and we may not effectively identify, manage, monitor, and mitigate these risks as our business activities change or increase.

Initiating new business activities, developing new products or significantly expanding existing business activities may expose us to new risks and increase our cost of doing business.

Initiating new business activities, developing new products, or significantly expanding existing business activities, such as our growth in broker direct and consumer direct lending and our recent significant increase in the number of employees, are ways to grow our businesses and respond to changing circumstances in our industry; however, they may expose us to new risks and regulatory compliance requirements. We cannot be certain that we will be able to manage these risks and compliance requirements effectively. Furthermore, our efforts may not succeed, and any revenues we earn from any new or expanded business initiative may not be sufficient to offset the initial and ongoing costs of that initiative, which would result in a loss with respect to that initiative.

We could be harmed by misconduct or fraud that is difficult to detect.

We are exposed to risks relating to misconduct by our employees, contractors we use, or other third parties with whom we have relationships. For example, our employees could execute unauthorized transactions, use our assets improperly or without authorization, perform improper activities, use confidential information for improper purposes, or misrecord or otherwise try to hide improper activities from us. This type of misconduct could also relate to assets we manage for others through our investment advisory subsidiary, and can be difficult to detect. If not prevented or detected, misconduct by employees, contractors, or others could result in losses, claims or enforcement actions against us, or could seriously harm our reputation. Our controls may not be effective in detecting this type of activity.

If we fail to maintain an effective system of internal controls, we may not be able to accurately determine our financial results or prevent fraud. As a result, our stockholders could lose confidence in our financial results, which could harm our business and the market value of our common stock.

Effective internal controls are necessary for us to provide reliable financial reports and effectively prevent fraud. We may in the future discover areas of our internal controls that need improvement. Section 404 of the Sarbanes-Oxley Act of 2002 (the "Sarbanes-Oxley Act") requires that we evaluate and report on our internal control over financial reporting. We cannot be certain that we will be successful in maintaining adequate control over our financial reporting and financial processes. In addition, the ongoing COVID-19 pandemic has created unique challenges resulting from employees working remotely. Furthermore, as we rapidly grow our businesses, our internal controls will become more complex, and we will require significantly more resources to ensure our internal controls remain effective. Section 404(b) of the Sarbanes-Oxley Act requires our auditors to formally attest to and report on the effectiveness of our internal control over financial reporting.

If we cannot maintain effective internal control over financial reporting, or our independent registered public accounting firm cannot provide an unqualified attestation report on the effectiveness of our internal control over financial reporting, investor confidence and, in turn, the market price of our common stock could decline. If we or our independent auditors discover a material weakness, the disclosure of that fact, even if quickly remedied, could result in an event of default under one or more of our lending arrangements and/or reduce the market value of shares of our common stock. Additionally, the existence of any material weakness or significant deficiency could require management to devote significant time and incur significant expense to remediate any such material weakness or significant deficiency, and management may not be able to remediate any such material weakness or significant deficiency in a timely manner, or at all. Accordingly, our failure to maintain effective internal control over financial reporting could result in misstatements of our financial results or restatements of our financial statements or otherwise have a material adverse effect on our business, financial condition, liquidity and results of operations.

Cybersecurity risks, cyber incidents and technology failures may adversely affect our business by causing a disruption to our operations, a compromise or corruption of our confidential information, and/or damage to our business relationships, all of which could negatively impact our financial results.

A cyber incident is considered to be any adverse event that threatens the confidentiality, integrity or availability of our information resources. These incidents may be an intentional attack or an unintentional event and could involve gaining unauthorized access to our information systems for purposes of theft of certain personally identifiable information of consumers, misappropriating assets, stealing confidential information, corrupting data or causing operational disruption. The result of these incidents may include disrupted operations, misstated or unreliable financial data, liability for stolen assets or information, increased cybersecurity protection and insurance costs, litigation and damage to our investor relationships.

As our reliance on rapidly changing technology has increased, so have the risks posed to our information systems, both proprietary and those provided to us by third-party service providers including cloud-based computing service providers. System disruptions and failures caused by fire, power loss, telecommunications outages, unauthorized intrusion, malware, natural disasters and other similar events may interrupt or delay our ability to provide services to our customers.

Despite our efforts to ensure the integrity of our systems and our investment in significant physical and technological security measures, employee training, contractual precautions, policies and procedures, board oversight and business continuity plans, there can be no assurance that any such cyber intrusions will not occur or, if they do occur, that they will be adequately addressed. We also may not be able to anticipate or implement effective preventive measures against all security breaches, especially because the methods of attack change frequently or may not be recognized until after such attack has been launched, and because security attacks can originate from a wide variety of sources, including third parties such as persons involved with organized crime or associated with external service providers. Our data security management program includes identity, trust, vulnerability and threat management business processes as well as the adoption of standard data protection policies. We are also held accountable for the actions and inactions of our third-party vendors regarding cybersecurity and other consumer-related matters.

Any of the foregoing events could result in violations of applicable privacy and other laws, financial loss to us or to our customers, loss of confidence in our security measures, customer dissatisfaction, additional regulatory scrutiny, significant litigation exposure and harm to our reputation, any of which could have a material adverse effect on our business, financial condition, liquidity and results of operations, any of which could have a material adverse effect on our business, financial condition, liquidity and results of operations.

We operate in a highly competitive market and decreased margins resulting from increased competition or our inability to compete successfully could adversely affect our business, financial condition, liquidity and results of operations.

We operate in a highly competitive industry that could become even more competitive as a result of economic, legislative, regulatory and technological changes. With respect to mortgage loan production, we face competition in such areas as mortgage loan offerings, rates, fees and customer service. With respect to servicing, we face competition in areas such as fees, cost to service and service levels, including our performance in reducing delinquencies and entering into successful modifications.

Large commercial banks and savings institutions and other non-bank mortgage originators and servicers are increasingly competitive in the origination or acquisition of newly originated mortgage loans and the servicing of mortgage loans. Many of these institutions have significantly greater resources and access to capital and financing arrangements than we do, which may give them the benefit of a lower cost of funds. Additionally, our existing and potential competitors may decide to modify their business models to compete more directly with our loan production and servicing models. As more non-bank entities enter these markets and as more commercial banks aggressively compete, our mortgage banking businesses may generate lower volumes and/or margins. If we are unable to grow our loan production volumes or if our margins become compressed, then our business, financial condition, liquidity and results of operations could be materially and adversely affected.

In recent years, we have significantly increased the number of employees to facilitate our business growth and our future success will depend on our ability to identify, hire, develop, motivate and retain highly qualified personnel. Trained and experienced personnel are in high demand by our competitors and may be in short supply in some areas. In addition, we invest significant time and expense in training our employees, which increases their value to competitors who may seek to recruit them. If we are unable to attract and retain such personnel, we may not be able to take advantage of future growth opportunities and this could materially affect our business, financial condition and results of operations.

In addition, technological advances and heightened e-commerce activities have increased consumers' access to products and services. This has intensified competition among banks and non-banks in offering and servicing mortgage loans. We may be unable to compete successfully in our mortgage banking businesses and this could materially and adversely affect our business, financial condition, liquidity and results of operations.

Item 1B. ***Unresolved Staff Comments***

None.

Item 2. ***Properties***

Our corporate offices are housed in 66,000 square feet of leased facilities, located at 3043 & 3059 Townsgate Road, Westlake Village, California 91361 where we conduct executive management for all of our businesses and investment management activities.

Our loan servicing operations are primarily housed in a 142,000 square foot leased facility located in Moorpark, CA, a 116,000 square foot facility in Fort Worth, TX and a 51,000 square foot facility in Summerlin, NV.

Our consumer direct lending business occupies a 36,000 square foot leased facility in Pasadena, CA. Much of our loan processing activity is performed in a leased 81,000 square foot facility in close proximity to our corporate offices. We lease an additional 102,000 square feet in Plano, TX, 90,000 square feet in Tampa, FL, 75,000 square feet in Phoenix AZ, 30,000 square feet in St. Louis, MO and 26,000 square feet in Cary, NC primarily for our correspondent production activities. We have four loan production centers located in Roseville, CA, Franklin, TN, Edina, MN, Honolulu, HI and one collocated in our Summerlin, NV office.

Our information technology division is housed in a 50,000 square foot facility in Agoura Hills, CA and we lease a few small locations throughout the country, generally housing loan production and servicing activities.

The financial commitments of our leases are disclosed in Note—10 *Leases* to our consolidated financial statements included in Item 8 of this Report.

Item 3. ***Legal Proceedings***

From time to time, we may be involved in various legal and regulatory proceedings, lawsuits and other claims arising in the ordinary course of business. The amount, if any, of ultimate liability with respect to such matters cannot be determined, but despite the inherent uncertainties of litigation, we currently believe that the ultimate disposition of any such proceedings and exposure will not have, individually or taken together, a material adverse effect on our financial condition, results of operations, or cash flows. See Note 16 — *Commitments and Contingencies*, to the financial statements contained in this report for a discussion of legal proceedings that are incorporated by reference into this Item 3.

Item 4. ***Mine Safety Disclosures***

Not applicable.

PART II

Item 5. ***Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities***

Our shares of common stock are listed on the New York Stock Exchange (Symbol: PFSI). As of February 21, 2022, our shares of common stock were held by 21 holders of record.

We initiated a quarterly dividend for common stockholders in October 2019. The dividend level is reviewed each quarter and determined based on a number of factors, including, among other things, our earnings, our financial condition, growth outlook, the capital required to support ongoing growth opportunities and compliance with other internal and external requirements. Payments of dividends are subject to approval by our board of directors. Our ability to pay dividends may be adversely affected for the reasons described in Item 1A of this Report in the section entitled *Risk Factors*.

Unregistered Sales of Equity Securities and Use of Proceeds

There were no sales of unregistered equity securities during the year ended December 31, 2021.

Repurchase of our Common Stock

The following table summarized the stock repurchase activity for the quarter ended December 31, 2021:

	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)
October 1, 2021 – October 31, 2021	1,393,812	$ 64.36	1,393,812	$ 857,079,004
November 1, 2021 – November 30, 2021	1,762,426	$ 64.75	1,762,426	$ 742,963,659
December 1, 2021 – December 31, 2021	789,637	$ 67.86	789,637	$ 689,379,006
Total	3,945,875	$ 65.23	3,945,875	$ 689,379,006

(1) In August 2021, our board of directors approved an increase to our common stock repurchase program from $1 billion to $2 billion. 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 6. ***Reserved***

Item 7. ***Management's Discussion and Analysis of Financial Condition and Results of Operations***

Critical Accounting Policies

Preparation of financial statements in compliance with accounting principles generally accepted in the United States ("GAAP") requires us to make 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. Certain of these estimates significantly influence the portrayal of our financial condition and results, and they require us to make difficult, subjective or complex judgments. Our critical accounting policies primarily relate to our fair value estimates.

Fair Value

We group assets measured at or based on fair value in three levels based on the markets in which the assets are traded and the observability of the inputs used to determine fair value. These levels are:

Level/Description	December 31, 2021 Carrying value of assets (in thousands)	Percentage of Total assets	Percentage of Total stockholders' equity
1: Prices determined using quoted prices in active markets for identical assets or liabilities.	$ 13,392	0%	0%
2: Prices determined 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 us.	8,618,610	46%	252%
3: Prices determined using significant unobservable inputs. Unobservable inputs reflect our judgements about the factors that market participants use in pricing an asset or liability, and are based on the best information available in the circumstances.	5,337,901	28%	156%
Total assets measured at or based on fair value (1)	$ 13,969,903	74%	408%
Total assets	$ 18,776,612		
Total stockholders' equity	$ 3,418,325		

(1) Includes assets measured on both a recurring and nonrecurring basis based on the accounting principles applicable to the specific asset or liability and whether we have elected to carry the asset or liability at its fair value.

At December 31, 2021, $14.0 billion or 74% of our total assets were carried at fair value on a recurring basis and $7.5 million (real estate acquired in settlement of loans (“REO”)), were carried based on fair value on a non-recurring basis when fair value indicates evidence of impairment of individual properties.

Changes in fair value of our holdings of assets carried at fair value have significant effects on our financial position and results of operations. As summarized above, changes in fair values of “Level 1” and “Level 2” fair value assets are determinable with reference to direct quotes in active markets on the measurement date in the case of “Level 1” assets, or reference to publicly available reference interest rates and credit spreads and prices of similar assets in the case of “Level 2” assets.

$5.3 billion or 28% of our total assets are measured using “Level 3” fair value inputs – significant inputs where there is difficulty observing the inputs used by market participants to establish fair value. Different approaches to valuing those assets or changes in inputs to measurement of these assets can have a significant effect on the amounts reported for these items including their reported balances and their effects on our income.

During the three years ended December 31, 2021, we recognized significant changes in the fair value of our holdings of "Level 3" fair value assets and liabilities as shown below:

Year ended December 31,	Interest rate lock commitments	Loans held for sale at fair value	Mortgage servicing rights (1)	Excess servicing spread financing	Mortgage servicing liabilities (1)	Total	Pre-tax Income
	(positive (negative) effects on net revenues in thousands)						
2021	$ 489,547	285,501	(136,350)	(1,037)	68,020	$ 705,681	$ 1,359,183
2020	$ 1,254,235	127,780	(1,078,084)	24,970	(31,757)	$ 297,144	$ 2,240,609
2019	$ 331,067	(6,332)	(550,666)	9,256	(8,377)	$ (225,052)	$ 529,444

(1) Excludes changes in fair value attributable to realization of cash flows.

The changes above primarily reflect changes attributable to our observations of changes in the markets for those assets and liabilities as opposed to changes in accounting policies or approaches to the valuation of those instruments.

As a result of the difficulty in observing certain significant valuation inputs affecting our "Level 3" fair value assets and liabilities, we are 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. Such differences may result in significantly different fair value measurements. Likewise, due to the general illiquidity of some of these assets, subsequent transactions may be at values significantly different from those reported.

Because the fair value of "Level 3" fair value assets and liabilities are difficult to estimate, our valuation process includes performance of these items' fair value estimation by specialized staff with significant senior management oversight. We have assigned the responsibility for estimating the fair values of non-interest rate lock commitment "Level 3" fair value assets and liabilities to our Financial Analysis and Valuation group (the "FAV group"), which is responsible for valuing and monitoring these items and maintenance of our valuation policies and procedures for non-IRLC assets and liabilities. The FAV group submits the results of its valuations to our senior management valuation committee, which oversees the valuations. Our senior management valuation committee includes the Company's chief financial, investment and credit officers as well as other senior members of the Company's finance, capital markets and risk management staffs.

The fair value of our interest rate lock commitments ("IRLCs") is developed by our Capital Markets Risk Management staff and is reviewed by our Capital Markets Operations group.

Following is a discussion of our approach to measuring the balance sheet items that are most affected by "Level 3" fair value estimates.

Interest Rate Lock Commitments

Our net gains on loans held for sale include our estimates of the gains or losses we expect to realize upon the sale of loans we have contractually committed to fund or purchase but have not yet funded, purchased or sold. We recognize a substantial portion of our net gains on loans held for sale at fair value before we fund or purchase the loans as the result of these commitments. We call these commitments interest rate lock commitments or IRLCs. We recognize the fair value of IRLCs at the time we make the commitment to the correspondent seller, broker or loan applicant and adjust the fair value of such IRLCs as the loan approaches the point of funding or purchase or the prospective transaction is canceled.

We carry IRLCs as either *Derivative assets* or *Derivative liabilities* on our consolidated balance sheet. The fair value of an IRLC is transferred to *Loans held for sale at fair value* when the loan is funded or purchased.

An active, observable market for IRLCs does not exist. Therefore, we measure the fair value of IRLCs using methods we believe that market participants use in pricing IRLCs. We estimate the fair value of an IRLC based on observable Agency MBS prices, our estimates of the fair value of the MSRs we expect to receive in the sale of the loans and the probability that we will fund or purchase the loan (the "pull-through rate").

Pull-through rates and MSR fair values are based on our estimates as these inputs are difficult to observe in the marketplace. Our estimate of the probability that a loan will be funded and market interest rates are updated as the loans move through the funding or purchase process and as market interest rates change and may result in significant changes in our estimates of the fair value of the IRLCs. Such changes are reflected in the change in fair value of IRLCs which is a component of our *Net gains on loans held for sale at fair value* in the period of the change. The financial effects of changes in these inputs are generally inversely correlated. 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 loan principal and interest payment cash flow component, which decreases in fair value.

A shift in our assessment of an input to the valuation of IRLCs can have a significant effect on the amount of *Net gains on loans held for sale at fair value* for the period. We believe that the most significant "Level 3" fair value input to the measurement of IRLCs is the pull-through rate. At December 31, 2021, we held $322.2 million of net IRLC assets at fair value. Following is a quantitative summary of the effect of changes in the pull-through rate input on the fair value of IRLCs at December 31, 2021:

Change in input (1)	**Effect on fair value of IRLC of a change in pull-through rate (in thousands)**	
(20)%	$	(85,761)
(10)%	$	(42,835)
(5)%	$	(21,372)
5 %	$	20,014
10 %	$	38,493
20 %	$	67,872

(1) The upward shift in input amount on a per-loan basis is limited to the amount of shift required to reach a 100% pull-through rate.

The preceding analysis holds constant all of the other inputs to show an estimate of the effect on fair value of a change in the pull-through rate. We expect that in a market shock event, multiple inputs would be affected and the effects of these changes may compound or counteract each other. Therefore the preceding analysis is not a projection of the effects of a shock event or a change in our estimate of an input and should not be relied upon as an earnings projection.

Loans Held for Sale

We carry loans at their fair values. We recognize changes in the fair value of loans in current period income as a component of *Net gains on loans held for sale at fair value*. How we estimate the fair value of loans is based on whether the loans are saleable into active markets with observable fair value inputs.

- We categorize loans that are saleable into active markets as "Level 2" fair value assets. We estimate the fair value of such loans using their quoted market price or market price equivalent. At December 31, 2021, we held $8.6 billion of such loans.

- We categorize loans that are not saleable into active markets as "Level 3" fair value assets. "Level 3" fair value loans arise primarily from two sources:

  - We may purchase certain delinquent government guaranteed or insured loans from Ginnie Mae guaranteed securitizations included in our loan servicing portfolio. Our right to purchase such loans arises as the result of the loan being at least three months delinquent when we buy the loan. Our ability to purchase delinquent loans provides us with an alternative to our obligation to continue advancing principal and interest at the coupon rate of the related Ginnie Mae security. Such repurchased EBO loans may be resold to investors and thereafter may be repurchased to the extent eligible for resale into a new Ginnie Mae guaranteed security. Such eligibility occurs when the repurchased loans become current either through completion of a modification of the loan's terms or after six months of timely payments following either the completion of certain types of payment deferral programs or borrower reperformance and when the issuance date of the new security is at least 210 days after the date the loan was last delinquent. At December 31, 2021, we held $1.1 billion of such loans.

  - Certain of our loans may become non-saleable into active markets due to our identification of one or more defects. At December 31 2021, we held $46.4 million of such loans.

We use a discounted cash flow model to estimate the fair value of "Level 3" fair value loans. The significant unobservable inputs used in the fair value measurement of our "Level 3" fair value loans held for sale are discount rates, home price projections and prepayment speeds. Significant changes in any of those inputs in isolation could result in a significant change to the loans' fair value measurement.

Mortgage Servicing Rights and Mortgage Servicing Liabilities

MSRs and MSLs represent the fair value assigned to contracts that obligate us to service the mortgage loans on behalf of the owners of the mortgage loans in exchange for servicing fees and the right to collect certain ancillary income from the borrower. We recognize MSRs and MSLs at our estimate of the fair value of the contract to service the loans.

We include changes in fair value of MSRs and MSLs in current period income as a component of *Net loan servicing fees—Change in fair value of mortgage servicing rights and mortgage servicing liabilities.* Both our estimate of the change in fair value attributable to realization of cash flows and of other changes in fair value are affected by changes in fair value inputs. During the year ended December 31, 2021, we recognized a $415.9 million net reduction in fair value of MSRs and MSLs: $347.6 million of the reduction was due to realization of cash flows underlying the fair value of MSRs and $68.3 million of the reduction was due to changes in fair value inputs.

We estimate fair value of MSRs and MSLs using a discounted cash flow approach. We believe the most significant "Level 3" fair value inputs to the valuation of MSRs and MSLs are the pricing spread (used to develop periodic discount rates), prepayment speed and annual per-loan cost of servicing.

A shift in the market for MSRs and MSLs or a change in our assessment of an input to the valuation of MSRs and MSLs can have a significant effect on their fair value and in our income for the period. The net fair value of MSRs and MSLs that we held at December 31, 2021 was $3.9 billion.

Following is a summary of the effect on fair value of MSRs of various changes to these key inputs at December 31, 2021:

	Effect on fair value of MSRs and MSLs of a change in input value		
Change in input	**Pricing spread**	**Prepayment speed**	**Servicing cost**
		(in thousands)	
(20)%	$ 257,988	$ 353,661	$ 131,916
(10)%	$ 124,883	$ 169,801	$ 65,958
(5)%	$ 61,459	$ 83,243	$ 32,979
5 %	$ (59,577)	$ (80,109)	$ (32,979)
10 %	$ (117,352)	$ (157,252)	$ (65,958)
20 %	$ (227,791)	$ (303,259)	$ (131,916)

The preceding analyses hold constant all of the inputs other than the input that is being changed to show an estimate of the effect on fair value of a change in a specific input. We expect that in a market shock event, multiple inputs would be affected and the effects of these changes may compound or counteract each other. Therefore the preceding analyses are not projections of the effects of a shock event or a change in our estimate of an input and should not be relied upon as earnings projections.

Results of Operations

Our results of operations are summarized below:

	Year ended December 31,		
	2021	2020	2019
	(dollars in thousands except per share amounts)		
Revenues:			
Net gains on loans held for sale at fair value	$ 2,464,401	$ 2,740,785	$ 725,528
Loan origination fees	384,154	285,551	174,156
Fulfillment fees from PennyMac Mortgage Investment Trust	178,927	222,200	160,610
Net loan servicing fees	182,954	439,448	293,665
Net interest (expense) income	(90,530)	(24,525)	76,721
Management fees	37,801	34,538	36,492
Other	9,654	7,600	10,232
Total net revenues	3,167,361	3,705,597	1,477,404
Expenses:			
Compensation	999,802	738,569	503,458
Loan origination	330,788	219,746	117,338
Technology	141,426	112,570	67,946
Servicing	109,835	256,934	164,697
Other	226,327	137,169	94,521
Total expenses	1,808,178	1,464,988	947,960
Income before provision for income taxes	1,359,183	2,240,609	529,444
Provision for income taxes	355,693	593,725	136,479
Net income	$ 1,003,490	$ 1,646,884	$ 392,965
Earnings per share			
Basic	$ 15.73	$ 21.91	$ 5.02
Diluted	$ 14.87	$ 20.92	$ 4.89
Return on average stockholders' equity	28.9%	61.4%	21.6%
Dividend declared per share	$ 0.80	$ 0.54	$ 0.12
Income before provision for income taxes by segment:			
Mortgage banking:			
Production	$ 1,044,411	$ 1,964,121	$ 527,834
Servicing	306,678	262,144	(14,751)
Total mortgage banking	1,351,089	2,226,265	513,083
Investment management	8,094	14,344	16,361
	$ 1,359,183	$ 2,240,609	$ 529,444
Adjusted Earnings Before Interest, Taxes, Depreciation and Amortization ("EBITDA") (1)	$ 2,040,581	$ 2,488,716	$ 726,140
During the year:			
Interest rate lock commitments issued	$ 141,433,359	$ 125,614,670	$ 72,698,014
Common stock closing prices:			
High	$ 70.57	$ 69.49	$ 34.45
Low	$ 56.53	$ 16.90	$ 20.34
At end of year	$ 70.57	$ 65.62	$ 34.04
At end of year:			
Interest rate lock commitments outstanding	$ 14,111,795	$ 20,624,535	$ 7,122,316
Unpaid principal balance of loan servicing portfolio:			
Owned:			
Mortgage servicing rights and liabilities	$ 278,385,373	$ 241,268,301	$ 228,545,558
Loans held for sale	9,430,766	11,063,938	4,724,006
	287,816,139	252,332,239	233,269,564
Subserviced for PMT	221,892,142	174,418,591	135,414,668
	$ 509,708,281	$ 426,750,830	$ 368,684,232
Net assets of PennyMac Mortgage Investment Trust	$ 2,367,518	$ 2,296,859	$ 2,450,916
Book value per share	$ 60.11	$ 47.80	$ 26.26

(1) To provide investors with information in addition to our results as determined by GAAP, we disclose Adjusted EBITDA as a non-GAAP measure. Adjusted EBITDA is a measure that is frequently used in our industry to measure performance and we believe that this measure provides supplemental information that is useful to investors. Adjusted EBITDA is not a financial measure calculated in accordance with GAAP and should not be considered as a substitute for net income, or any other performance measure calculated in accordance with GAAP.
We define "Adjusted EBITDA" as net income plus provision for income taxes, depreciation and amortization, excluding decrease (increase) in fair value of MSRs net of MSLs, due to changes in the valuation inputs we use in

our valuation models, increase (decrease) in fair value of excess servicing spread ("ESS") payable to PMT, hedging losses (gains) associated with MSRs, stock-based compensation and interest expense on corporate debt or corporate revolving credit facilities and capital lease.

We believe that the presentation of Adjusted EBITDA provides useful information to investors regarding our results of operations because each measure assists both investors and management in analyzing and benchmarking the performance and value of our business. However, other companies may define Adjusted EBITDA differently, and as a result, our measures of Adjusted EBITDA may not be directly comparable to those of other companies.

Adjusted EBITDA measures have limitations as analytical tools, and should not be considered in isolation or as a substitute for analysis of our results as reported under GAAP. Some of these limitations are:

a) they do not reflect every cash expenditure, future requirements for capital expenditures or contractual commitments;
b) they do not reflect the significant interest expense or the cash requirements necessary to service interest or principal payment on our debt; and
c) they are not adjusted for all non-cash income or expense items that are reflected in our consolidated statements of cash flows.

Because of these limitations, Adjusted EBITDA measures are not intended as alternatives to net income as an indicator of our operating performance and should not be considered as measures of discretionary cash available to us to invest in the growth of our business or as measures of cash that will be available to us to meet our obligations.

The following table presents a reconciliation of Adjusted EBITDA to our net income, the most directly comparable financial measure calculated and presented in accordance with GAAP, for each of the years indicated:

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
Net income	$ 1,003,490	$ 1,646,884	$ 392,965
Provision for income taxes	355,693	593,725	136,479
Income before provisions for income taxes	1,359,183	2,240,609	529,444
Depreciation and amortization	28,645	25,575	15,021
Decrease in fair value of MSRs net of MSLs due to changes in valuation inputs used in valuation models	68,330	1,109,841	559,043
Increase (decrease) in fair value of ESS payable to PennyMac Mortgage Investment Trust	1,037	(24,970)	(9,256)
Hedging losses (gains) associated with MSRs	475,215	(918,180)	(395,497)
Stock-based compensation	37,794	45,105	24,771
Interest expense on corporate debt or corporate revolving credit facilities and capital lease	70,377	10,736	2,614
Adjusted EBITDA	$ 2,040,581	$ 2,488,716	$ 726,140

Impact of COVID-19

The United States continues to be impacted by the COVID-19 pandemic and the effects of market and government responses to the COVID-19 pandemic. These developments have resulted in continued economic uncertainty, financial hardships and unemployment for many existing borrowers.

As part of its response to the COVID-19 pandemic, the federal government included requirements in the CARES Act that we provide borrowers with loans we service for the Agencies with substantial payment forbearance. As a result of the CARES Act and other regulatory requirements, our costs to service delinquent loans in our servicing portfolio have increased and may require us to finance advances of principal and interest payments to the investors holding these loans, as well as property taxes, insurance and other costs to protect investors' interest in the properties collateralizing the loans. As of December 31, 2021, 1.3% of loans in our predominately government-insured or guaranteed MSR portfolio were in forbearance plans and delinquent.

The COVID-19 Pandemic has had a mixed effect on the earnings of our servicing segment by reducing the amount of placement fees we earn on custodial deposits related to these loans and increasing our cost to service due to higher delinquency and default rates, offset by gains we recognize when we are able to modify and resell previously delinquent government loans. Over time, as borrowers exit forbearance and as delinquencies impacted by the COVID-19 pandemic are resolved, we expect these activities relating to delinquent government loans to trend towards more normalized levels. In order to mitigate the risks and costs of maintaining delinquent government loans in Ginnie Mae securities or in our loan inventory, we sell a portion of those loans to third-party investors. We increased the volume of our sales of these loans during the year ended December 31, 2021, and serviced $8.9 billion in UPB of these loans for third-party investors at the end of the year. As the impact of the COVID-19 pandemic lessens, we expect purchases of delinquent EBO loans to decrease and trend towards more normalized levels.

In our production segment, gain on sale margins reflect both the strong but moderating demand for loans due to historically low interest rates as well as growth in loan production from our consumer direct and broker direct channels from 2020. The mortgage origination market for 2020 was $4.1 trillion and for 2021 was estimated at $4.8 trillion. The increase in demand for mortgage loans in 2020, combined with constraints on mortgage industry origination capacity that existed before the COVID-19 pandemic, allowed us to realize higher gain-on sale margins in our production segment in 2020. As increasing interest rates have affected demand for loans during 2021 and industry capacity has increased to meet the previous growth in demand, our gain on sale margins have moderated from 2020 levels, and in certain channels reflect the effects of significant competitive pressures.

While the Federal Reserve increased the supply of money due to the ongoing COVID-19 pandemic by purchasing securities and MBS on the open market, future interest rates and the liquidity of the MBS market could be impacted as the Federal Reserve increases the federal funds rate and tapers future MBS purchases.

The current environment caused by the COVID-19 pandemic in the United States is historically unprecedented and the source of much uncertainty surrounding future economic and market prospects and the ongoing effects on our future prospects are difficult to anticipate.

Comparison of the years ended December 31, 2021, 2020 and 2019

Income Before Provisions for Income Taxes

For the year ended December 31, 2021, we recorded income before provision for income taxes of $1.4 billion, a decrease of $881.4 million or 39% from 2020. The decrease was primarily due to a $221.1 million decrease in production income (*Net gains on loans held for sale at fair value*, *Loan origination fees* and *Fulfillment fees from PennyMac Mortgage Investment Trust*) primarily due to lower gain on sale margins across all production channels and reduced fulfillment fee rates during the year ended December 31, 2021 compared to 2020, a $256.5 million decrease in *Net loan servicing fees* reflecting elevated prepayment speeds and a $343.2 million increase in total expenses. The increase in total expenses was mainly due to increases in compensation and origination expenses reflecting the growth of our direct lending production.

For the year ended December 31, 2020, we recorded income before provision for income taxes of $2.2 billion, an increase of $1.7 billion or 323% from 2019. The increase was primarily due to an increase in production income which reflects higher production volume and improved margins, and an increase in *Net loan servicing fees* primarily due to growth in our loan servicing portfolio and an increase in income from the re-performance of loans bought out of Ginnie Mae securities for potential resecuritization, partially offset by an increase in total expenses. The increase in total expenses was mainly due to increases in compensation, servicing and loan origination expenses reflecting the continuing growth of our mortgage banking activities and the impact of the COVID-19 pandemic on our servicing portfolio and operations.

Net gains on loans held for sale at fair value

During the year ended December 31, 2021, we recognized *Net gains on loans held for sale at fair value* totaling $2.5 billion, compared to $2.7 billion and $725.5 million during the years ended December 31, 2020 and 2019, respectively.

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

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
From non-affiliates:			
Cash gains:			
Loans	$ 600,840	$ 2,025,260	$ (190,853)
Hedging activities	443,341	(767,588)	(175,305)
Total cash gains	1,044,181	1,257,672	(366,158)
Non-cash gains:			
Change in fair value of loans and derivative financial instruments outstanding at end of year:			
Interest rate lock commitments	(354,833)	540,376	87,312
Loans	210,961	(326,986)	(42,878)
Hedging derivatives	(124,200)	116,690	17,499
	(268,072)	330,080	61,933
Mortgage servicing rights and mortgage servicing liabilities resulting from loan sales	1,755,318	1,114,720	846,888
Provisions for losses relating to representations and warranties:			
Pursuant to loan sales	(31,590)	(21,035)	(8,377)
Reductions in liability due to change in estimate	16,037	8,667	7,877
Total non-cash gains	1,471,693	1,432,432	908,321
Total gains on sale from non-affiliates	2,515,874	2,690,104	542,163
From PennyMac Mortgage Investment Trust (primarily cash)	(51,473)	50,681	183,365
	$ 2,464,401	$ 2,740,785	$ 725,528
During the year:			
Interest rate lock commitments issued:			
Government-insured or guaranteed mortgage loans	$ 95,070,027	$ 91,922,406	$ 62,772,725
Conventional mortgage loans	46,363,332	33,682,284	9,886,462
Jumbo mortgage loans	—	8,304	29,641
Home equity lines of credit	—	1,676	9,186
	$ 141,433,359	$ 125,614,670	$ 72,698,014
At end of year:			
Loans held for sale at fair value	$ 9,742,483	$ 11,616,400	$ 4,912,953
Commitments to fund and purchase loans	$ 14,111,795	$ 20,624,535	$ 7,122,316

Non-cash elements of gain on sale of loans

Our gains on loans held for sale include both cash and non-cash elements. We recognize a significant portion of our gains on loans held for sale when we make commitments to purchase or fund mortgage loans. We recognize this gain in the form of IRLCs. We adjust our initial gain amount as the loan purchase or origination process progresses until the loan is either funded or cancelled. We also receive non-cash proceeds on sale that include our estimate of the fair value of MSRs and we incur liabilities for MSLs (which represent the fair value of the costs we expect to incur in excess of the fees we receive to service the EBO loans we have resold to third party investors) and for the fair value of our estimate of the losses we expect to incur relating to the representations and warranties we provide in our loan sale transactions.

The MSRs, MSLs, and liability for representations and warranties we recognize represent our estimate of the fair value of future benefits and costs we will realize for years in the future. These estimates represented approximately 71% of our gain on sale of loans at fair value for the year ended December 31, 2021, as compared to 40% and 117% for the years ended December 31, 2020 and 2019, respectively. These estimates change as circumstances change and changes in these estimates are recognized in income in subsequent periods.

Interest Rate Lock Commitments, Mortgage Servicing Rights and Mortgage Servicing Liabilities

The methods and key inputs we use to measure and update our measurements of IRLCs, MSRs and MSLs is detailed in Note 6 – *Fair value – Valuation Techniques and Inputs* to the consolidated financial statements included in this Annual Report.

Representations and Warranties

Our agreements with the purchasers and insurers include representations and warranties related to the loans we sell. The representations and warranties require adherence to purchaser and insurer origination and underwriting guidelines, including but not limited to the validity of the lien securing the 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 loans with the identified defects or indemnify the purchaser or insurer. In such cases, we bear any subsequent credit loss on the loans. Our credit loss may be reduced by any recourse we have to correspondent originators that sold such 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.

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

The level of the liability for losses under representations and warranties is difficult to estimate and requires considerable judgment. The level of 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 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.

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

During the years ended December 31, 2021, 2020, and 2019 we recorded provisions for losses under representations and warranties relating to current loan sales as a component of *Net gains on loans held for sale at fair value* totaling $31.6 million, $21.0 million, and $8.4 million, respectively. The increase in provision relating to current loan sales reflects both the increase in our loan production between the years ended December 31, 2021 and 2020 and a change in the mix of loan deliveries between the years. We also recorded reductions in the liability relating to previously sold loans of $16.0 million, $8.7 million, and $7.9 million, for the years ended December 31, 2021, 2020 and 2019, respectively. The reductions in the liability relating to previously sold loans resulted from those loans meeting performance criteria established by the Agencies which significantly limits the likelihood of certain repurchase or indemnification claims.

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

	Year ended December 31,		
	2021	**2020**	**2019**
		(in thousands)	
During the year:			
Indemnification activity:			
Loans indemnified at beginning of year	$ 13,788	$ 15,366	$ 8,899
New indemnifications	9,544	4,544	11,629
Less indemnified loans sold, repaid or refinanced	8,253	6,122	5,162
Loans indemnified at end of year	$ 15,079	$ 13,788	$ 15,366
Repurchase activity:			
Total loans repurchased	$ 99,496	$ 58,410	$ 18,660
Less:			
Loans repurchased by correspondent lenders	37,280	28,658	12,396
Loans repaid by borrowers or resold with defects resolved	25,223	24,810	6,735
Net loans repurchased with losses chargeable to liability for representations and warranties	$ 36,993	$ 4,942	$ (471)
Net losses charged to liability for representations and warranties	$ 4,720	$ 1,126	$ 209
At end of year:			
Unpaid principal balance of loans subject to representations and warranties	$ 257,369,777	$ 210,222,447	
Liability for representations and warranties	$ 43,521	$ 32,688	

During the year ended December 31, 2021, we repurchased loans with unpaid principal balances totaling $99.5 million and charged $4.7 million in net incurred losses relating to repurchases against our liability for representations and warranties. If the outstanding balance of loans we purchase and sell subject to representations and warranties increases, the loans sold continue to season, economic conditions change, correspondent lenders become unwilling or unable to repurchase defective loans, or investor and insurer loss mitigation strategies are adjusted, the level of repurchase and loss activity may increase. Such increases may require us to adjust our estimate of future losses relating to loans previously sold. Such an increase, if recognized, would be reflected in *Net gains on loans held for sale at fair value* in the period we recognize the change.

Loan origination fees

Following is a summary of our loan origination fees:

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
Loan origination fee revenue	$ 384,154	$ 285,551	$ 174,156
Unpaid principal balance of loans purchased and originated for sale	$ 124,594,308	$ 96,200,101	$ 61,531,095

Loan origination fees increased $98.6 million and $111.4 million during the year ended December 31, 2021 and 2020, compared to the years ended December 31, 2020, and 2019, respectively, and the increases were primarily due to increases in the volume of loans we produced.

Fulfillment fees from PennyMac Mortgage Investment Trust

Following is a summary of our fulfillment fees:

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
Fulfillment fee revenue	$ 178,927	$ 222,200	$ 160,610
Unpaid principal balance of loans fulfilled subject to fulfillment fees	$ 110,003,574	$ 100,389,252	$ 56,033,704
Average fulfillment fee rate (in basis points)	16	22	29

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 loans. The fulfillment fees were calculated as a percentage of the UPB of the loans we fulfilled for PMT through June 30, 2020. Effective July 1, 2020, fulfillment fees are calculated based on the number of loans we lock and fulfill for PMT.

Fulfillment fees decreased $43.3 million during the year ended December 31, 2021 compared to the year ended December 31, 2020. The decrease was primarily due to the fulfillment fee calculation changes, which generally reduced the fulfillment fees collected per loan fulfilled, and an increase in discretionary reductions in the fulfillment fee rate during the year ended December 31, 2021 compared to the year ended December 31, 2020. Fulfillment fees increased $61.6 million during the year ended December 31, 2020 compared to the year ended December 31, 2019. The increases were primarily due to increased volume of loans we fulfilled for PMT, partially offset by a decrease in the fulfillment fee collected per loan.

Net loan servicing fees

Our net loan servicing fee income has two primary components: fees earned for servicing the loans and the effects of MSR and MSL valuation changes, net of hedging results as summarized below:

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
Loan servicing fees	$ 1,075,112	$ 998,291	$ 877,526
Effects of MSRs and MSLs	(892,158)	(558,843)	(583,861)
Net loan servicing fees	$ 182,954	$ 439,448	$ 293,665

Loan Servicing Fees

Following is a summary of our net loan servicing fees:

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
Loan servicing fees:			
From non-affiliates	$ 875,570	$ 814,646	$ 730,165
From PennyMac Mortgage Investment Trust	80,658	67,181	48,797
Other			
Late charges	34,957	41,100	48,877
Other	83,927	75,364	49,687
	118,884	116,464	98,564
	$ 1,075,112	$ 998,291	$ 877,526
Average loan servicing portfolio:			
MSRs and MSLs	$ 258,759,523	$ 235,567,838	$ 218,963,947
Subserviced for PMT	$ 202,047,495	$ 151,379,311	$ 111,888,543

Loan servicing fees from non-affiliates generally relate to our MSRs which are primarily related to servicing we provide for loans included in Agency securitizations. These fees are contractually established at an annualized percentage of the unpaid principal balance of the loan serviced and we collect these fees from borrower payments. Loan servicing fees from PMT are primarily related to PMT's MSRs and are established at monthly per-loan amounts based on whether the loan is a fixed-rate or adjustable-rate loan and the loan's delinquency or foreclosure status as detailed in Note 4 – *Transactions with Affiliates* to the consolidated financial statements included in this Annual Report. Other loan servicing fees are comprised primarily of borrower-contracted fees such as late charges and reconveyance fees.

The increases in loan servicing fees from non-affiliates and from PMT for the year ended December 31, 2021, compared to the years ended December 31, 2020 and 2019, were primarily due to growth of our loan servicing portfolio. The increases in other loan servicing fees for the year ended December 31, 2021 compared to the years ended December 31, 2020 and 2019 were primarily due to increases in fees charged to correspondent lenders related to borrower early loan payoffs resulting from the low interest rate environment.

Mortgage Servicing Rights and Mortgage Servicing Liabilities

We have elected to carry our servicing assets and liabilities at fair value. Changes in fair value have two components: changes due to realization of the contractual servicing fees and changes due to changes in market inputs used to estimate the fair value of MSRs and MSLs. We endeavor to moderate the effects of changes in fair value by entering into derivatives transactions and – through March of 2021 – by financing certain of our purchases of MSRs with the sale of a portion of the MSR assets' cash flows to PMT from an ESS financing.

Change in fair value of MSR, MSL and ESS and the related hedging results are summarized below:

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
MSR and MSL valuation changes:			
Realization of cash flows	$ (347,576)	$ (392,152)	$ (429,571)
Other changes in fair value of mortgage servicing rights and mortgage servicing liabilities	(68,330)	(1,109,841)	(559,043)
	(415,906)	(1,501,993)	(988,614)
Change in fair value of excess servicing spread	(1,037)	24,970	9,256
Hedging results	(475,215)	918,180	395,497
Total change in fair value of mortgage servicing rights, mortgage servicing liabilities and excess servicing spread financing net of hedging results	$ (892,158)	$ (558,843)	$ (583,861)
Average balances:			
Mortgage servicing rights	$ 3,347,980	$ 2,404,621	$ 2,764,105
Mortgage servicing liabilities	$ 55,623	$ 32,071	$ 18,718
Excess servicing spread financing	$ 21,563	$ 153,768	$ 195,461
At end of year:			
Mortgage servicing rights	$ 3,878,078	$ 2,581,174	$ 2,926,790
Mortgage servicing liabilities	$ 2,816	$ 45,324	$ 29,140
Excess servicing spread financing	$ —	$ 131,750	$ 178,586

Changes in realization of cash flows are influenced by changes in the level of servicing assets and liabilities and changes in estimates of the remaining cash flows to be realized. Realization of cash flows decreased during the year ended December 31, 2021, compared to the year ended December 31, 2020 primarily due to lower expected prepayments through 2021 compared to 2020. Realization of cash flows decreased during the year ended December 31, 2020, compared to the year ended December 31, 2019 primarily due to a lower average fair value of mortgage servicing rights in 2020 compared to 2019.

Other changes in fair value of MSRs also reflect reduced prepayment expectations as well as reduced pricing spread at December 31, 2021 as compared to December 31, 2020. These factors combined to reduce fair value losses resulting from changes in market inputs.

Hedging results reflect interest rate increases and elevated hedging costs during the year ended December 31, 2021 compared to the impact of interest rate declines in the years ended December 31, 2020 and 2019.

Following is a summary of our loan servicing portfolio:

	December 31,	
	2021	2020
	(in thousands)	
Loans serviced		
Prime servicing:		
Owned:		
Mortgage servicing rights and liabilities		
Originated	$ 254,524,015	$ 199,655,361
Acquired	23,861,358	41,612,940
	278,385,373	241,268,301
Loans held for sale	9,430,766	11,063,938
	287,816,139	252,332,239
Subserviced for PMT	221,864,120	174,360,317
Total prime servicing	509,680,259	426,692,556
Special servicing subserviced for PMT	28,022	58,274
Total loans serviced	$ 509,708,281	$ 426,750,830
Delinquencies:		
Owned servicing (1):		
30-89 days	$ 6,943,327	$ 7,611,216
90 days or more	9,838,648	22,545,750
	$ 16,781,975	$ 30,156,966
Delinquent loans in COVID-19 pandemic-related forbearance:		
30-89 days	$ 1,111,151	$ 3,225,010
90 days or more	2,732,089	14,904,052
	$ 3,843,240	$ 18,129,062
Subserviced for PMT (1):		
30-89 days	$ 1,164,782	$ 1,250,381
90 days or more	1,810,910	4,543,660
	$ 2,975,692	$ 5,794,041
Delinquent loans in COVID-19 pandemic-related forbearance:		
30-89 days	$ 171,114	$ 593,517
90 days or more	638,703	3,690,505
	$ 809,817	$ 4,284,022

(1) Includes delinquent loans in COVID-19 pandemic-related forbearance plans that were requested by borrowers seeking payment relief in accordance with the CARES Act.

Net Interest (Expense) Income

Net interest expense increased $66.0 million during the year ended December 31, 2021 compared to the year ended December 31, 2020. The increase was primarily due to:

- a decrease of $31.4 million in placement fees we received relating to custodial funds that we manage due to decreased earning rates; and
- an increase of $23.1 million in interest shortfall on repayments of loans serviced for Agency securitizations, reflecting increased loan payoffs as a result of increased borrower refinancing activity due to the lower interest rates. When a borrower repays a loan, we are responsible in many cases for paying the full month's interest to the holders of the Agency securities that are backed by the loan regardless of when in the month the borrower repays the loan. The increase in refinancing activity in our MSR portfolio caused the increase in the interest shortfall; and
- increased levels of unsecured borrowings due to issuance of unsecured senior notes, which generally bear higher rates of interest as compared to secured borrowings.

Net interest income decreased $101.2 million during the year ended December 31, 2020 compared to the year ended December 31, 2019. The decrease was primarily due to:

- a decrease of $81.7 million in placement fees we received relating to custodial funds that we manage due to decreased earning rates which reflect the lower interest rate environment; and
- an increase of $40.8 million in interest shortfall on repayments of loans serviced for Agency securitizations, reflecting increased loan payoffs as a result of increased borrower refinancing activity due to the lower interest rates in 2020 as compared to 2019; and
- an increase of $38.6 million in interest expense on repurchase agreements due to an increase in financing to fund the growth in our loan inventory and the expiration of a master repurchase agreement in August 2019. The master repurchase agreement provided us with incentives to finance mortgage loans approved for satisfying certain consumer relief characteristics. We recorded $14.7 million of such incentives as reductions in Interest expense during the year ended in December 31, 2019; partially offset by
- an increase of $46.7 million in interest income on loans held for sale due to larger average inventory balances during the year ended December 31, 2020 as compared to 2019.

Management fees

Management fees are summarized below:

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
Base management	$ 34,794	$ 34,538	$ 29,303
Performance incentive	3,007	—	7,189
	$ 37,801	$ 34,538	$ 36,492
Net assets of PMT at end of year	$ 2,367,518	$ 2,296,859	$ 2,450,916

Management fees increased $3.3 million during the year ended December 31, 2021 compared to the year ended December 31, 2020. The increase is primarily due to $3.0 million of performance incentive fees earned as a result of PMT's increased profitability during one of the twelve-month measurement periods used to measure PMT's profitability during 2021 compared to 2020.

Management fees decreased $2.0 million during the year ended December 31, 2020 compared to the year ended December 31, 2019. The decrease was due to a decrease of $7.2 million in incentive fees due to losses PMT incurred during the quarter ended March 31, 2020, partially offset by an increase of $5.2 million in base management fees reflecting the increase in PMT's average shareholders' equity upon which our base management fees are based, during the year ended December 31, 2020 compared to the year ended December 31, 2019.

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

The results of our holdings of common shares of PMT, which is included in *Changes in fair value of investment in, and dividends received from PMT* are summarized below:

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
Dividends from PennyMac Mortgage Investment Trust	$ 141	$ 114	$ 141
Change in fair value of investment in PennyMac Mortgage Investment Trust	195	(567)	275
Dividends received and change in fair value	$ 336	$ (453)	$ 416
Fair value of PennyMac Mortgage Investment Trust shares at end of year	$ 1,300	$ 1,105	$ 1,672

Change in fair value of investment in and dividends received from PMT increased $789,000 during the year ended December 31, 2021, compared to the year ended December 31, 2020, and decreased $869,000 during the year ended December 31, 2020, compared to the year ended December 31, 2019, due to changes in the fair value of our investment in PMT. We held 75,000 common shares of PMT during each of the three years ended December 31, 2021.

Expenses

Compensation

Our compensation expense is summarized below:

	Year ended December 31,		
	2021	2020	2019
	(dollars in thousands)		
Salaries and wages	$ 594,344	$ 437,344	$ 293,987
Incentive compensation	248,551	171,323	124,203
Taxes and benefits	119,113	84,797	60,497
Stock and unit-based compensation	37,794	45,105	24,771
	$ 999,802	$ 738,569	$ 503,458
Head count:			
Average	7,118	5,313	3,709
Year end	7,208	6,632	4,215

Compensation expense increased $261.2 million and $235.1 million, during the years ended December 31, 2021 and December 31, 2020, respectively, compared to the years ended December 31, 2020 and 2019, respectively. The increases were primarily due to growth in head count made to accommodate the growth in our loan production and servicing activities as well as to increases in incentive compensation primarily due to higher production volume. The decrease in stock based compensation during the year ended December 31, 2021 compared to the year ended December 31, 2020 was primarily due to a stock option grant that vested on its grant date.

Servicing

Servicing expense decreased $147.1 million in the year ended December 31, 2021 compared to the year ended December 31, 2020 and increased $92.2 million in the year ended December 31, 2020 compared to the year ended December 31, 2019. The decrease in 2021 compared to 2020 was primarily due to reversal of the provision for estimated servicing advance losses recorded in prior periods during the year ended December 31, 2021. The reduction reflects the recent improvements in the performance of our servicing portfolio resulting from successful resolution of COVID-19 related forbearances. The increase in 2020 compared to 2019 was primarily the result of the increase in delinquencies we experienced due to the effects of the COVID-19 pandemic on borrower delinquencies.

Technology

Technology expense increased $28.9 million and $44.6 million in the years ended December 31, 2021 and 2020, respectively, compared to the years ended December 31, 2020 and 2019, respectively. The increases were primarily due to growth in our direct lending and loan servicing operations and continued investment in our loan production and servicing infrastructure. We recorded $728,000 and $13.1 million of impairment of capitalized software during the years ended December 31, 2021 and 2020, respectively.

Marketing and advertising

Marketing and advertising expenses increased $36.2 million and $3.5 million, during the years ended December 31, 2021 and 2020, compared to the years ended December 31, 2020 and 2019, respectively. The increases are primarily attributable to our investment in new brand marketing and increased marketing expenses for consumer direct lending.

Occupancy and equipment

Occupancy and equipment expenses increased $2.5 million and $4.4 million during the years ended December 31, 2021 and 2020, compared to the years ended December 31, 2020 and 2019, respectively. The increases are primarily attributable to expansion of our facilities to accommodate our growth.

Provision for income taxes

For the years ended December 31, 2021, 2020 and 2019, our effective tax rates were 26.2%, 26.5%, and 25.8%, respectively.

Balance Sheet Analysis

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

	December 31,	
	2021	2020
	(in thousands)	
ASSETS		
Cash and short-term investments	$ 346,942	$ 547,933
Loans held for sale at fair value	9,742,483	11,616,400
Derivative assets	333,695	711,238
Servicing advances, net	702,160	579,528
Investments in and advances to affiliates	41,391	168,972
Mortgage servicing rights	3,878,078	2,581,174
Loans eligible for repurchase	3,026,207	14,625,447
Other	705,656	767,103
Total assets	$ 18,776,612	$ 31,597,795
LIABILITIES AND STOCKHOLDERS' EQUITY		
Short-term debt	$ 7,772,580	$ 10,176,274
Long-term debt	3,077,330	2,085,274
	10,849,910	12,261,548
Liability for loans eligible for repurchase	3,026,207	14,625,447
Income taxes payable	685,262	622,700
Other	796,908	698,712
Total liabilities	15,358,287	28,208,407
Stockholders' equity	3,418,325	3,389,388
Total liabilities and stockholders' equity	$ 18,776,612	$ 31,597,795
Leverage ratio:		
Total Debt / Stockholders' equity	3.2	3.6
Total Debt / Tangible stockholders' equity	3.3	3.7

Total assets decreased $12.8 billion from $31.6 billion at December 31, 2020 to $18.8 billion at December 31, 2021. The decrease was primarily due to an $11.6 billion decrease in loans eligible for repurchase and $1.9 billion in loans held for sale at fair value, partially offset by an increase of $1.3 billion in MSRs. The decrease in loans eligible for repurchase was primarily due to increased early buyout activity resulting in a decrease in delinquent loans underlying Ginnie Mae securities in our servicing portfolio during the year ended December 31, 2021.

Total liabilities decreased by $12.9 billion from $28.2 billion as of December 31, 2020 to $15.3 billion as of December 31, 2021. The decrease was primarily due to an $11.6 billion decrease in loans eligible for repurchase, and a $2.4 billion decrease in short-term debt, partially offset by a $1.0 billion increase in long-term debt.

Cash Flows

Our cash flows for the three years ended December 31, 2021 are summarized below:

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
Operating	$ 2,563,061	$ (6,198,938)	$ (2,245,123)
Investing	(304,369)	783,034	148,782
Financing	(2,451,380)	5,760,107	2,128,995
Net (decrease) increase in cash and restricted cash	$ (192,688)	$ 344,203	$ 32,654

Operating activities

Net cash provided by (used in) operating activities totaled $2.6 billion, $(6.2) billion, and $(2.2) billion during the years ended December 31, 2021, 2020, and 2019, respectively. Our cash flows from operating activities are primarily influenced by changes in the levels of our inventory of loans held for sale as shown below:

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
Cash flows from:			
Loans held for sale	$ 3,102,134	$ (5,326,837)	$ (2,487,105)
Other operating sources	(539,073)	(872,101)	241,982
	$ 2,563,061	$ (6,198,938)	$ (2,245,123)

Investing activities

Net cash used in investing activities was $304.4 million during the year ended December 31, 2021, primarily comprised of $434.4 million in net settlement of derivative financial instruments used to hedge our investment in MSRs, partially offset by a $97.7 million decrease in margin deposits.

Net cash provided by investing activities was $783.0 million during the year ended December 2020, primarily comprised of $913.1 million in net settlement of derivative financial instruments used to hedge our investment in MSRs, partially offset by $131.8 million increase in margin deposits.

Net cash provided by investing activities was $148.8 million during the year ended December 2019, primarily comprised of $366.1 million in net settlement of derivative financial instruments used to hedge our investment in MSRs, partially offset by $227.4 million used in purchase of MSRs.

Financing activities

Net cash used in financing activities was $2.5 billion during the year ended December 31, 2021, primarily due to a $2.4 billion decrease in short-term borrowings, which reflects decreased borrowing requirements relating to our inventory of loans held for sale, and a $958.2 million repurchase of common stock, partially offset by a $1.2 billion issuance of unsecured senior notes.

Net cash provided by financing activities totaled $5.8 billion during the year ended December 31, 2020, primarily due to an increase of $6.1 billion in borrowings to finance the growth in our inventory of loans held for sale, partially offset by a $337.5 million of repurchase of common stock and $30.9 million of dividends paid to our common stock holders.

Net cash provided by financing activities totaled $2.1 billion during the year ended December 31, 2019 which was primarily to finance the growth in our inventory of loans held for sale 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 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 purchase and sale certificates, notes payable, a capital lease and unsecured senior notes. A significant amount of our borrowings have short-term maturities and provide for advances with terms ranging from 30 days to 364 days. Because a significant portion of our current debt facilities consist 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.

The effect of the COVID-19 pandemic on our operations, liquidity and capital resources remains uncertain and difficult to predict. For further discussion of the potential impacts of the COVID-19 pandemic please also see “Risk Factors” in Part I, Item 1A.

The COVID-19 pandemic has significantly increased the number of loans that are delinquent in our Ginnie Mae MSR portfolio. The Ginnie Mae guidelines provide us with the option to purchase loans that are at least three months delinquent out of the underlying Ginnie Mae securities as an alternative to continuing to advance principal and interest payments to the holders of the Ginnie Mae securities. We refer to such loans as “early buyout” or EBO loans.

During the year ended December 31, 2021, we repurchased $20.1 billion in UPB of EBO loans from our Ginnie Mae MSR portfolio. Our objective is to work with the borrowers to cure the loan delinquency through either borrower reperformance or modification of the loans’ terms. When curing the delinquency is not feasible, we work to settle the loan and collect our claims from the applicable insurer or guarantor. When we are able to cure the delinquency, we are able to re-deliver the cured loan into another Ginnie Mae guaranteed security. Depending on the method used to cure a borrower delinquency, the Ginnie Mae program may require at least a six month period of timely borrower payments before we are able to re-deliver the loan into another Ginnie Mae guaranteed security. Therefore, regardless of whether we cure or settle the repurchased loan, our investment in the EBO loans may require a substantial holding period.

The CARES Act allows borrowers with federally-backed loans to request temporary payment forbearance in response to the increased borrower hardships resulting from the COVID-19 pandemic and may require us as the servicer to advance principal and interest, property taxes, insurance premiums and other expenses to the investors for up to four months on Fannie Mae and Freddie Mac loans and longer on Ginnie Mae and other government agency backed loans. In April 2020, the Company entered into a new Ginnie Mae servicing advance financing transaction allowing the Company to borrow $600 million against Ginnie Mae MSRs and servicing advances. The Ginnie Mae servicing advances eligible for financing include advances made to support regularly scheduled monthly principal and interest to mortgage-backed securities holders, taxes, homeowners insurance and escrowed items and other costs related to servicing delinquent loans. We are also in ongoing discussions with our lending partners to align our servicing advance assets and financing capacity, and to further diversify our financing alternatives.

In connection with the GNMA MSR Facility, PLS pledges and/or sells to the PNMAC GMSR ISSUER TRUST (the "Issuer Trust") participation certificates representing beneficial interests in MSRs and ESS pursuant to the terms of the master repurchase agreement by and among PLS, the Issuer Trust, and PNMAC, as guarantor (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, in each case secured on a pari passu basis by the participation certificates relating to the MSRs and ESS. The maximum principal balance of the VFN is $1 billion.

On July 30, 2021, the Company through two of its indirect, wholly owned subsidiaries, Issuer Trust and PLS, and its direct wholly owned subsidiary, PNMAC, entered into agreements to syndicate two existing variable funding note repurchase agreements, as part of the structured finance transaction that PLS uses to finance Ginnie Mae mortgage servicing rights and related excess servicing spread and servicing advance receivables. The Company entered into (i) an Amended and Restated Series 2016-MSRVF1 Master Repurchase Agreement by and among PLS, as seller, Credit Suisse First Boston Mortgage Capital LLC ("CSFB"), as administrative agent to the buyers, Credit Suisse AG, Cayman Islands Branch ("CSCIB"), as a buyer, Citibank, N.A., as a buyer, and PNMAC, as a guarantor (the "Syndicated GMSR Servicing Spread Agreement"), related to the servicing spread; and (ii) an Amended and Restated Series 2020-SPIADVF1 Master Repurchase Agreement by and among PLS, as seller, CSFB, as administrative agent to the buyers, CSCIB, as a buyer, Citibank, as a buyer, and PNMAC, as a guarantor (the "Syndicated GMSR SAR Agreement"), related to the servicing advance receivables.

The Syndicated GMSR Servicing Spread Agreement added Citibank as a syndicate buyer, and increased the maximum purchase price from $400 to $500 million, all of which is committed on a 50-50 pro rata basis between CSCIB and Citibank. The Syndicated GMSR SAR Agreement added Citibank as a syndicate buyer, with the maximum purchase price of $600 million unchanged, all of which is committed on a 50-50 pro rata basis between CSCIB and Citibank.

Our repurchase agreements represent the sales of assets together with agreements for us to buy back the assets at a later date. The table below presents the average outstanding, maximum and ending balances for each of the three years ended December 31, 2021, 2020 and 2019:

	Year ended December 31,		
	2021	**2020**	**2019**
Average balance	$ 6,911,843	$ 3,348,928	$ 2,185,830
Maximum daily balance	$ 10,969,029	$ 9,663,995	$ 4,141,680
Balance at year end	$ 7,297,360	$ 9,663,995	$ 4,141,680

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 and the fluctuation in our EBO inventory through the year.

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

- a minimum in unrestricted cash and cash equivalents of $100 million;
- a minimum tangible net worth of $1.25 billion;
- 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, the indenture governing our unsecured senior notes contains covenants that limit our and our restricted subsidiaries' ability to engage in specified types of transactions. These covenants limit our and our restricted subsidiaries' ability to, among other things:

- pay dividends or distributions, redeem or repurchase equity, prepay subordinated debt and make certain loans or investments;
- incur, assume or guarantee additional debt or issue preferred stock;
- incur liens on assets;
- merge or consolidate with another person or sell all or substantially all of our assets to another person;
- transfer, sell or otherwise dispose of certain assets including capital stock of subsidiaries;
- enter into transactions with affiliates; and
- allow to exist certain restrictions on the ability of our non-guarantor restricted subsidiaries to pay dividends or make other payments to us.

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 or issuers as summarized below:

- The 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 (reduced by 70% of the UPB of nonperforming Agency loans that are in pandemic-related payment forbearance and were current when they entered such forbearance) exceeds 6% of the applicable Agency servicing UPB; allowable assets to satisfy the 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;

- The FHFA net worth requirement is a minimum net worth of $2.5 million plus 0.25% (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%;

- The 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

- The 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 recorded amount of the ESS is its current fair value. During the quarter ended March 31, 2021, we repaid the outstanding ESS financing through the repurchase of the ESS from PMT.

On August 4, 2021, our Board of Directors increased our common stock repurchase program from $1 billion to $2 billion. Share repurchases may be effected through open market 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 common stock. From inception through December 31, 2021, we have repurchased approximately $1.3 billion of common shares under our stock repurchase program.

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

As of December 31, 2021, we have not entered into any off-balance sheet arrangements or guarantees.

Debt Obligations

As described further above in "Liquidity and Capital Resources," we currently finance certain of our assets through short-term borrowings with major financial institutions in the form of sales of assets under agreements to repurchase and mortgage loan participation purchase and sale agreements. We access the capital market for long-term debt through the issuance of secured term notes and unsecured senior notes and we have an outstanding long term capital lease. The issuer under our secured term note facilities is PLS or a wholly-owned issuer trust guaranteed by PNMAC. In addition, We have issued unsecured senior notes guaranteed by certain of our restricted wholly-owned subsidiaries.

Under the terms of these financing 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 December 31, 2021, we believe we were in compliance in all material respects with these covenants.

Many of our debt financing agreements contain a condition precedent to obtaining additional funding that requires PLS to maintain positive net income for at least one of the previous two consecutive quarters, or other similar measures. PLS is compliant with all such conditions.

The financing 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 financing 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 Company has issued unsecured senior notes (the "Unsecured Notes") to qualified institutional buyers under Rule 144A of the Securities Act of 1933, as amended. The Unsecured Notes are fully and unconditionally guaranteed, jointly and severally, on a senior unsecured basis by the Company's existing and future wholly-owned domestic subsidiaries (other than certain excluded subsidiaries defined in the indentures under which the Unsecured Notes were issued). The Company is required to maintain certain financial covenants under terms of the Unsecured Notes. We believe the Company was in compliance with all financial covenants in the Unsecured Notes as of December 31, 2021.

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	$ 1,919,670	$ 4,950,000	$ 1,950,000	March 31, 2023
Credit Suisse First Boston Mortgage Capital LLC and Citibank, N.A. (3)	$ 100,000	$ 100,000	$ 100,000	March 31, 2023
Bank of America, N.A.	$ 1,758,690	$ 1,800,000	$ 540,000	June 7, 2023
Goldman Sachs Bank USA	$ 850,918	$ 1,000,000	$ 500,000	December 23, 2022
Barclays Bank PLC	$ 676,685	$ 750,000	$ 375,000	November 3, 2022
Royal Bank of Canada	$ 496,064	$ 1,000,000	$ 450,000	December 14, 2022
Citibank, N.A.	$ 352,806	$ 950,000	$ 600,000	August 10, 2023
BNP Paribas	$ 349,172	$ 600,000	$ 300,000	July 31, 2023
Morgan Stanley Bank, N.A.	$ 292,105	$ 600,000	$ 300,000	January 3, 2024
Wells Fargo Bank, N.A.	$ 200,338	$ 500,000	$ 200,000	November 17, 2023
JPMorgan Chase Bank, N.A.	$ 190,365	$ 3,000,000	$ —	September 29, 2023
JPMorgan Chase Bank, N.A.	$ 110,547	$ 750,000	$ 50,000	June 6, 2023
Mortgage loan participation purchase and sale agreements				
Bank of America, N.A.	$ 479,845	$ 550,000	$ —	June 8, 2022
Notes payable				
GMSR 2018-GT1 Notes	$ 650,000	$ 650,000		February 25, 2023
GMSR 2018-GT2 Notes	$ 650,000	$ 650,000		August 25, 2023
Unsecured Senior Notes - 5.375%	$ 650,000	$ 650,000		October 15, 2025
Unsecured Senior Notes - 4.25%	$ 650,000	$ 650,000		February 15, 2029
Unsecured Senior Notes - 5.75%	$ 500,000	$ 500,000		September 15, 2031
Credit Suisse AG (3)	$ —	$ —	$ —	March 31, 2023
Obligations under capital lease				
Banc of America Leasing and Capital LLC	$ 3,489	$ 25,000	$ —	June 13, 2022

(1) Outstanding indebtedness as of December 31, 2021.

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

(3) The $100 million is borrowed from CSFB and Citibank, N.A. under the sale of a VFN under an agreement to repurchase up to a maximum of $500 million secured by Ginnie Mae MSRs. No borrowing is outstanding from CSFB and Citibank, N.A. under a sale of the GMSR Servicing Advance Notes under an agreement to repurchase up to a maximum of $600 million. Maximum amounts borrowed under both agreements to repurchase may be reduced by amounts utilized under other debt agreements with CSFB and Citibank N.A.

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 December 31, 2021:

Counterparty	Amount at risk (in thousands)	Weighted average maturity of advances under repurchase agreement	Facility maturity
Credit Suisse First Boston Mortgage Capital LLC and Citibank, N.A. (1)	$ 2,688,383	March 31, 2023	March 31, 2023
Credit Suisse First Boston Mortgage Capital LLC (2)	$ 137,054	February 18, 2022	March 31, 2023
Bank of America, N.A.	$ 674,074	March 20, 2022	June 7, 2023
JP Morgan Chase Bank, N.A.	$ 355,202	June 23, 2022	September 29, 2023
JP Morgan Chase Bank, N.A.	$ 9,914	March 3, 2022	June 6, 2023
Barclays Bank PLC	$ 74,455	February 25, 2022	November 3, 2022
Royal Bank of Canada	$ 68,643	March 12, 2022	December 14, 2022
Goldman Sachs	$ 48,483	January 5, 2022	December 23, 2022
Citibank, N.A. (2)	$ 20,948	March 7, 2022	August 10, 2023
BNP Paribas	$ 17,568	March 13, 2022	July 31, 2023
Morgan Stanley Bank, N.A.	$ 17,469	March 5, 2022	November 2, 2022
Wells Fargo Bank, N.A.	$ 12,395	March 17, 2022	November 17, 2023

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

(2) The borrowing facilities with Credit Suisse First Boston Mortgage Capital LLC and Citibank, N.A. are in the form of asset sales under agreements to repurchase.

All debt financing arrangements that matured between December 31, 2021 and the date of this Annual Report have been renewed or extended and are described in Note 12—*Short-Term Borrowings* to the accompanying consolidated financial statements.

Item 7A. ***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 fair value risk, interest rate and prepayment risk.

Fair Value Risk

Our IRLCs, mortgage loans held for sale, MSRs, MSLs and ESS financing are reported at their fair values. The fair value of these assets fluctuates primarily due to changes in interest rates. The fair value risk we face is primarily attributable to interest rate risk and prepayment risk.

Interest Rate Risk

Interest rate risk is highly sensitive to many factors, including governmental monetary and tax policies, domestic and international economic and political considerations, and other factors beyond our control. Changes in interest rates affect both the fair value of, and interest income we earn from, our mortgage-related investments and our derivative financial instruments. This effect is most pronounced with fixed-rate mortgage assets.

In general, rising interest rates negatively affect the fair value of our IRLCs, inventory of mortgage loans held for sale and the ESS financing and positively affect the fair value of our MSRs. Changes in interest rates significantly influence the prepayment speeds of the loans underlying our investments in MSRs and ESS, which can have a significant effect on their fair values. Changes in interest rate are most prominently reflected in the prepayment speeds of the loans underlying our investments in MSRs and ESS and the discount rate used in their valuation.

Our operating results will depend, in part, on differences between the income from our investments and our financing costs. Presently our debt financing is based on a floating rate of interest calculated on a fixed spread over the relevant index, as determined by the particular financing arrangement.

Prepayment Risk

To the extent that the actual prepayment rate on the mortgage loans underlying our MSRs differs from what we projected when we initially recognized these assets and liabilities when we measure fair value as of the end of each reporting period, the carrying value of these assets and liabilities will be affected. In general, a decrease in the principal balances of the mortgage loans underlying our MSRs or an increase in prepayment expectations will decrease our estimates of the fair value of the MSRs, thereby reducing net servicing income, partially offset by the beneficial effect on net servicing income of a corresponding reduction in the fair value of our MSLs and ESS.

Risk Management Activities

We engage in risk management activities primarily in an effort to mitigate the effect of changes in interest rates on the fair value of our assets. To manage this price risk, we use derivative financial instruments acquired with the intention of moderating the risk that changes in market interest rates will result in unfavorable changes in the fair value of our assets, primarily on our MSR investments as well as IRLCs and our inventory of loans held for sale. Our objective is to maintain our loss coverage levels within established thresholds while minimizing our hedging expense. We do not use derivative financial instruments other than IRLCs and repurchase agreement derivatives (both of which arise from our operations) for purposes other than in support of our risk management activities.

Our strategies are reviewed daily within a disciplined risk management framework. We use a variety of interest rate and spread shifts and scenarios while defining target limits for market value and liquidity loss in those scenarios. With respect to our IRLCs and inventory of loans held for sale, we use MBS forward sale contracts to lock in the price at which we will sell the mortgage loans or resulting MBS, and further use MBS put options to mitigate the risk of our IRLCs not closing at the rate we expect. With respect to our MSRs, we seek to mitigate mortgage-based loss exposure utilizing MBS forward purchase and sale contracts, address exposures to smaller interest rate shifts with Treasury and interest rate swap futures, and use options and swaptions to achieve target coverage levels for larger interest rate shocks.

Fair Value Sensitivities

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 inputs 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 MSRs as of December 31, 2021, given several shifts in pricing spreads, prepayment speed and annual per loan cost of servicing:

Change in fair value attributable to shift in:	**-20%**	**-10%**	**-5%**	**+5%**	**+10%**	**+20%**
			(in thousands)			
Pricing spread	$ 257,988	$ 124,883	$ 61,459	$ (59,577)	$ (117,352)	$ (227,791)
Prepayment speed	$ 353,661	$ 169,801	$ 83,243	$ (80,109)	$ (157,252)	$ (303,259)
Annual per-loan cost of servicing	$ 131,916	$ 65,958	$ 32,979	$ (32,979)	$ (65,958)	$ (131,916)

Item 8. ***Financial Statements and Supplementary Data***

The information called for by this Item 8 is hereby incorporated by reference from our Financial Statements and Auditors' Report in Part IV of this Report.

Item 9. ***Changes in and Disagreements with Accountants on Accounting and Financial Disclosure***

None.

Item 9A. ***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 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.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Exchange Act Rule 13a-15(f). Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. Management assessed the effectiveness of its internal control over financial reporting based on the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control—Integrated Framework (2013)*. Based on those criteria, management concluded that our internal control over financial reporting was effective as of December 31, 2021.

The effectiveness of our internal control over financial reporting as of December 31, 2021 has been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report which appears herein.

Changes in Internal Control over Financial Reporting

There have been no changes in internal control over financial reporting during the quarter ended December 31, 2021, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of
PennyMac Financial Services, Inc.

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of PennyMac Financial Services, Inc. and subsidiaries ("the Company") as of December 31, 2021, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2021, of the Company and our report dated February 23, 2022, expressed an unqualified opinion on those financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Deloitte & Touche LLP
Los Angeles, California
February 23, 2022

Item 9B. ***Other Information***

None.

Item 9C. ***Disclosure Regarding Foreign Jurisdictions that Prevent Inspections***

Not applicable.

PART III

Item 10. ***Directors, Executive Officers and Corporate Governance***

The information required by this Item 10 is hereby incorporated by reference from our definitive proxy statement, or will be contained in an amendment to this Report, in either case to be filed by April 30, 2022, which is within 120 days after the end of fiscal year 2021.

Item 11. ***Executive Compensation***

The information required by this Item 11 is hereby incorporated by reference from our definitive proxy statement, or will be contained in an amendment to this Report, in either case to be filed by April 30, 2022, which is within 120 days after the end of fiscal year 2021.

Item 12. ***Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters***

Equity Compensation Plan Information

We have adopted an equity incentive plan, the 2013 Equity Incentive Plan, which provides for the grant of incentive stock option and nonstatutory stock options, stock appreciation rights, restricted stock and stock unit awards, performance units, stock grants and qualified performance-based awards, which we collectively refer to as “awards.” Directors, officers and other employees of our Company and our subsidiaries, as well as others performing consulting or advisory services for us, are eligible for grants under the 2013 Equity Incentive Plan. The plan administrator of the equity incentive plan is the compensation committee of the board of directors. The board of directors itself may also exercise any of the powers and responsibilities under the 2013 Equity Incentive Plan. Subject to the terms of the 2013 Equity Incentive Plan, the plan administrator will select the recipients of awards and determine, among other things, the:

- number of shares of common stock covered by the awards and the dates upon which such awards become exercisable or any restrictions lapse, as applicable;
- type of award and the exercise or purchase price and method of payment for each such award;
- performance measures, if applicable, required to be satisfied prior to vesting;
- vesting period for awards, risks of forfeiture and any potential acceleration of vesting or lapses in risks of forfeiture; and
- duration of awards.

The following table provides information as of December 31, 2021 concerning our shares of common stock authorized for issuance under our equity incentive plan.

Plan category	(a) Number of securities to be issued upon exercise of outstanding options, warrants and rights	(b) Weighted average exercise price of outstanding options, warrants and rights (1)	(c) Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (2)
Equity compensation plans approved by security holders (3)	5,566,754	$ 28.43	4,838,970
Equity compensation plans not approved by security holders (4)	—	—	—
Total	5,566,754	$ 28.43	4,838,970

(1) The weighted average exercise price set forth in this column relates only to 3,906,290 shares of stock options outstanding under our 2013 Equity Incentive Plan. The remaining securities included in column (a) of this table are performance and time-based restricted stock units, for which no exercise price applies.

(2) This number includes a general pool of 4,838,970 shares of common stock authorized for future awards (excluding securities reflected in column (a)). This general pool initially consisted of 3,906,433 shares of common stock authorized under the 2013 Equity Incentive Plan for future awards, and has been, and will continue to be, increased pursuant to the terms of the 2013 Equity Incentive Plan on January 1st of each calendar year by an amount equal to the lesser of (i) 1.75% of our outstanding common stock on a fully diluted basis as of the end of our immediately preceding fiscal year, (ii) 1,322,024 shares, and (iii) any lower amount determined by our board of directors. The annual increase to this general pool on January 1, 2021 pursuant to the foregoing formula was 1,322,024.

(3) Represents our 2013 Equity Incentive Plan.

(4) We do not have any equity plans that have not been approved by our stockholders.

The other information required by this Item 12 is hereby incorporated by reference from our definitive proxy statement, or will be contained in an amendment to this Report, in either case to be filed by April 30, 2022, which is within 120 days after the end of fiscal year 2021.

Item 13. ***Certain Relationships and Related Transactions, and Director Independence***

The information required by this Item 13 is hereby incorporated by reference from our definitive proxy statement, or will be contained in an amendment to this Report, in either case to be filed by April 30, 2022, which is within 120 days after the end of fiscal year 2021.

Item 14. ***Principal Accounting Fees and Services***

Our independent public accounting firm is Deloitte & Touche LLP, Los Angeles, CA, PCAOB Auditor ID 34.

The information required by this Item 14 is hereby incorporated by reference from our definitive proxy statement, or will be contained in an amendment to this Report, in either case to be filed April 30, 2022, which is within 120 days after the end of fiscal year 2021.

PART IV

Item 15. *Exhibits and Financial Statement Schedules*

Exhibit No.	Exhibit Description	Incorporated by Reference from the Below-Listed Form (Each Filed under SEC File Number 15-68669 or 001-38727)	
		Form	**Filing Date**
2.1	Contribution Agreement and Plan of Merger, dated as of August 2, 2018, by and among PennyMac Financial Services, Inc., New PennyMac Financial Services, Inc., New PennyMac Merger Sub, LLC, Private National Mortgage Acceptance Company, LLC, and the Contributors.	8-K12B	November 1, 2018
3.1	Amended and Restated Certificate of Incorporation of New PennyMac Financial Services, Inc.	8-K12B	November 1, 2018
3.1.1	Certificate of Amendment to Amended and Restated Certificate of Incorporation of New PennyMac Financial Services, Inc.	8-K12B	November 1, 2018
3.2	Amended and Restated Bylaws of New PennyMac Financial Services, Inc.	8-K12B	November 1, 2018
3.2.1	Amendment to Amended and Restated Bylaws of PennyMac Financial Services, Inc. (formerly known as New PennyMac Financial Services, Inc.).	10-Q	November 4, 2019
4.1	Description of Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934.	10-K	February 25, 2021
4.2	Indenture, dated as of September 29, 2020, among PennyMac Financial Services, Inc., the guarantors party thereto and U.S. Bank, National Association, as trustee, relating to the 5.375% Senior Notes due 2025.	8-K	September 29, 2020
4.3	Form of Global Note for 5.375% Senior Notes due 2025 (Included in Exhibit 4.2).	8-K	September 29, 2020
4.4	First Supplemental Indenture, dated as of October 19, 2020, among PennyMac Financial Services, Inc., the guarantors party thereto and U.S. Bank, National Association, as trustee, relating to the 5.375% Senior Notes due 2025.	10-Q	November 6, 2020
4.5	Second Supplemental Indenture, dated as of October 7, 2021, among PennyMac Financial Services, Inc., the guarantors party thereto and U.S. Bank, National Association, as trustee, relating to the 5.375% Senior Notes due 2025.	8-K	October 8, 2021

Exhibit No.	Exhibit Description	Incorporated by Reference from the Below-Listed Form (Each Filed under SEC File Number 15-68669 or 001-38727)	
		Form	Filing Date
4.6	Indenture, dated as of February 11, 2021, among PennyMac Financial Services, Inc., the guarantors party thereto and U.S. Bank, National Association, as trustee, relating to the 4.25% Senior Notes due 2029.	8-K	February 11, 2021
4.7	Form of Global Note for 4.25% Senior Notes due 2029 (Included in Exhibit 4.6).	8-K	February 11, 2021
4.8	First Supplemental Indenture, dated as of October 7, 2021, among PennyMac Financial Services, Inc., the guarantors party thereto and U.S. Bank, National Association, as trustee, relating to the 4.250% Senior Notes due 2029.	8-K	October 8, 2021
4.9	Indenture, dated as of September 16, 2021, among PennyMac Financial Services, Inc., the guarantors party thereto and U.S. Bank, National Association, as trustee, relating to the 5.750% Senior Notes due 2031.	8-K	September 16, 2021
4.10	Form of Global Note for 5.750% Senior Notes due 2031 (included in Exhibit 4.9).	8-K	September 16, 2021
10.1	Fifth Amended and Restated Limited Liability Company Agreement of Private National Mortgage Acceptance Company, LLC, dated as of November 1, 2018.	8-K12B	November 1, 2018
10.2	Tax Receivable Agreement, dated as of May 8, 2013, between PennyMac Financial Services, Inc., Private National Mortgage Acceptance Company, LLC and each of the Members.	8-K	May 14, 2013
10.3	Amended and Restated Registration Rights Agreement, dated as of November 1, 2018, among PennyMac Financial Services, Inc., New PennyMac Financial Services, Inc. and the Holders.	8-K12B	November 1, 2018
10.4	Amended and Restated Stockholder Agreement, dated as of November 1, 2018, among PennyMac Financial Services, Inc., New PennyMac Financial Services, Inc. and HC Partners LLC.	8-K12B	November 1, 2018
10.5†	Employment Agreement, dated December 28, 2018, among David A. Spector, Private National Mortgage Acceptance Company, LLC and PennyMac Financial Services, Inc.	8-K	December 31, 2018
10.6†	Employment Agreement, dated December 28, 2018, among Doug Jones, Private National Mortgage Acceptance Company, LLC and PennyMac Financial Services, Inc.	8-K	December 31, 2018

Exhibit No.	Exhibit Description	Incorporated by Reference from the Below-Listed Form (Each Filed under SEC File Number 15-68669 or 001-38727)	
		Form	Filing Date
10.7†	Form of PennyMac Financial Services, Inc. Indemnification Agreement.	10-K	February 25, 2021
10.8†	PennyMac Financial Services, Inc. Change of Control Severance Plan.	8-K	September 28, 2021
10.9†	PennyMac Financial Services, Inc. 2013 Equity Incentive Plan.	8-K	May 14, 2013
10.10†	First Amendment to the PennyMac Financial Services, Inc. 2013 Equity Incentive Plan.	10-K	March 9, 2018
10.11†	Second Amendment to the PennyMac Financial Services, Inc. 2013 Equity Incentive Plan.	DEF14A	April 17, 2018
10.12†	Third Amendment to the PennyMac Financial Services, Inc. 2013 Equity Incentive Plan.	10-K	February 25, 2021
10.13†	PennyMac Financial Services, Inc. 2013 Equity Incentive Plan Form of Stock Option Award Agreement.	8-K	June 17, 2013
10.14†	PennyMac Financial Services, Inc. 2013 Equity Incentive Plan Form of Stock Option Award Agreement (2018).	10-Q	August 2, 2018
10.15†	Omnibus Amendment to PennyMac Financial Services, Inc. 2013 Equity Incentive Plan Restricted Stock Unit Award Agreements (2019).	10-K	March 5, 2019
10.16†	Omnibus Amendment to PennyMac Financial Services, Inc. 2013 Equity Incentive Plan Stock Option Award Agreement (2019).	10-K	March 5, 2019
10.17†	PennyMac Financial Services, Inc. 2013 Equity Incentive Plan Form of Restricted Stock Unit Award Agreement for Non-Employee Directors (2019).	10-Q	May 6, 2019
10.18†	PennyMac Financial Services, Inc. 2013 Equity Incentive Plan Form of Restricted Stock Unit Subject to Continued Service Award Agreement (Net Share Withholding) (2020).	10-Q	November 4, 2019
10.19†	PennyMac Financial Services, Inc. 2013 Equity Incentive Plan Form of Restricted Stock Unit Subject to Continued Service Award Agreement (Sale to Cover) (2020).	10-Q	November 4, 2019

Exhibit No.	Exhibit Description	Incorporated by Reference from the Below-Listed Form (Each Filed under SEC File Number 15-68669 or 001-38727)	
		Form	Filing Date
10.20†	PennyMac Financial Services, Inc. 2013 Equity Incentive Plan Form of Restricted Stock Unit Subject to Performance Components Award Agreement (Net Share Withholding) (2020).	10-Q	November 4, 2019
10.21†	PennyMac Financial Services, Inc. 2013 Equity Incentive Plan Form of Restricted Stock Unit Subject to Performance Components Award Agreement (Sale to Cover) (2020).	10-Q	November 4, 2019
10.22†	Omnibus Amendment to PennyMac Financial Services, Inc. 2013 Equity Incentive Plan Form of Restricted Stock Unit Award Agreements (Net Share Withholding) (2017-2019).	10-Q	November 4, 2019
10.23†	Omnibus Amendment to PennyMac Financial Services ,Inc. 2013 Equity Incentive Plan Restricted Stock Unit Award Agreements (Sale to Cover) (2017-2019).	10-Q	November 4, 2019
10.24†	PennyMac Financial Services, Inc. 2013 Equity Incentive Plan Form of Stock Option Award Agreement (2020).	10-Q	May 7, 2020
10.25†	PennyMac Financial Services, Inc. 2013 Equity Incentive Plan Form of Restricted Stock Unit Subject to Continued Service Award Agreement (Net Share Withholding) (2020).	10-Q	May 7, 2020
10.26†	PennyMac Financial Services, Inc. 2013 Equity Incentive Plan Form of Restricted Stock Unit Subject to Continued Service Award Agreement for Non Employee Directors (2020).	10-Q	May 7, 2020
10.27†	PennyMac Financial Services, Inc. 2013 Equity Incentive Plan Form of Restricted Stock Unit Subject to Performance Components Award Agreement (Sale to Cover) (2020).	10-Q	May 7, 2020
10.28†	PennyMac Financial Services, Inc. 2013 Equity Incentive Plan Form of Restricted Stock Unit Subject to Continued Service Award Agreement (Sale to Cover) (2020).	10-Q	May 7, 2020
10.29†	PennyMac Financial Services, Inc. 2013 Equity Incentive Plan Form of Restricted Stock Unit Subject to Performance Components Award Agreement (Net Share Withholding) (2020).	10-Q	May 7, 2020
10.30†	PennyMac Financial Services, Inc. 2013 Equity Incentive Plan Form of Stock Option Award Agreement (Special Option 2020).	10-K	February 25, 2021

Exhibit No.	Exhibit Description	Incorporated by Reference from the Below-Listed Form (Each Filed under SEC File Number 15-68669 or 001-38727)	
		Form	**Filing Date**
10.31†	PennyMac Financial Services, Inc. 2013 Equity Incentive Plan Form of Restricted Stock Unit Subject to Continued Service Award Agreement for Non Employee Directors.	10-K	February 25, 2021
10.32†	PennyMac Financial Services, Inc. 2013 Equity Incentive Plan Form of Stock Option Award Agreement (2021).	10-Q	May 6, 2021
10.33†	PennyMac Financial Services, Inc. 2013 Equity Incentive Plan Form of Stock Option Award Agreement.	10-Q	August 5, 2021
10.34†	PennyMac Financial Services, Inc. 2013 Equity Incentive Plan Form of Omnibus Amendment to Stock Option Award Agreements.	10-Q	August 5, 2021
10.35	Third Amended and Restated Management Agreement, dated as of June 30, 2020, by and among PennyMac Mortgage Investment Trust, PennyMac Operating Partnership, L.P. and PNMAC Capital Management, LLC.	8-K	July 2, 2020
10.36	Fourth Amended and Restated Flow Servicing Agreement, dated as of June 30, 2020, between PennyMac Operating Partnership, L.P. and PennyMac Loan Services, LLC.	8-K	July 2, 2020
10.37	Amendment No. 1 to the Fourth Amended and Restated Flow Servicing Agreement, dated as of March 9, 2021, by and between PennyMac Loan Services, LLC and PennyMac Operating Partnership, L.P.	10-Q	May 6, 2021
10.38	Amendment No. 2 to the Fourth Amended and Restated Flow Servicing Agreement, dated as of June 4, 2021, by and between PennyMac Loan Services, LLC and PennyMac Operating Partnership, L.P.	10-Q	August 5, 2021
10.39	Amendment No. 3 to Fourth Amended and Restated Flow Servicing Agreement, dated as of September 29, 2021, by and between PennyMac Loan Services, LLC and PennyMac Operating Partnership, L.P.	10-Q	November 4, 2021
10.40	Second Amended and Restated Mortgage Banking Services Agreement, dated as of June 30, 2020, between PennyMac Loan Services, LLC and PennyMac Corp.	8-K	July 2, 2020
10.41	Amendment No. 1 to Second Amended and Restated Mortgage Banking Services Agreement, dated as of December 8, 2020, by and between PennyMac Loan Services, LLC and PennyMac Corp.	10-K	February 25, 2021

Exhibit No.	Exhibit Description	Incorporated by Reference from the Below-Listed Form (Each Filed under SEC File Number 15-68669 or 001-38727)	
		Form	**Filing Date**
10.42	Second Amended and Restated MSR Recapture Agreement, dated as of June 30, 2020, between PennyMac Loan Services, LLC and PennyMac Corp.	8-K	July 2, 2020
10.43	Amendment No. 1 to Second Amended and Restated MSR Recapture Agreement, dated as of December 8, 2020, by and between PennyMac Loan Services, LLC and PennyMac Corp.	10-K	February 25, 2021
10.44	Mortgage Loan Purchase Agreement, dated as of September 25, 2012, by and between PennyMac Loan Services, LLC and PennyMac Corp.	10-K	March 10, 2016
10.45	Flow Sale Agreement, dated as of June 16, 2015, by and between PennyMac Corp. and PennyMac Loan Services, LLC.	10-Q	August 7, 2015
10.46	HELOC Flow Purchase and Servicing Agreement, dated as of February 25, 2019, by and between PennyMac Loan Services, LLC and PennyMac Corp.	10-Q	May 6, 2019
10.47	Third Amended and Restated Base Indenture, dated as of April 1, 2020, by and among PNMAC GMSR ISSUER TRUST, Citibank, N.A., PennyMac Loan Services, LLC, Credit Suisse First Boston Mortgage Capital LLC and Pentalpha Surveillance LLC.	8-K	April 7, 2020
10.48	Amended and Restated Series 2016-MSRVF1 Indenture Supplement to Indenture, dated as of February 28, 2018, by and among PNMAC GMSR ISSUER TRUST, Citibank, N.A., PennyMac Loan Services, LLC and Credit Suisse First Boston Mortgage Capital LLC.	8-K	March 6, 2018
10.49	Amendment No. 1 to Amended and Restated Series 2016-MSRVF1 Indenture Supplement, dated as of August 10, 2018, by and among PNMAC GMSR ISSUER TRUST, Citibank, N.A., PennyMac Loan Services, LLC and Credit Suisse First Boston Mortgage Capital LLC.	10-Q	November 2, 2018
10.50 ^	Amendment No. 2 to the Amended and Restated Series 2016-MSRVF1 Indenture Supplement, dated as of April 24, 2020, by and among PNMAC GMSR ISSUER TRUST, Citibank, N.A., PennyMac Loan Services, LLC, and Credit Suisse First Boston Mortgage Capital LLC.	10-Q	May 7, 2020
10.51 ^	Amendment No. 3 to the Amended and Restated Series 2016-MSRVF1 Indenture Supplement, dated as of August 25, 2020, among PNMAC GMSR ISSUER TRUST, Citibank, N.A., PennyMac Loan Services, LLC, and Credit Suisse First Boston Mortgage Capital LLC.	10-Q	November 6, 2020

Exhibit No.	Exhibit Description	Incorporated by Reference from the Below-Listed Form (Each Filed under SEC File Number 15-68669 or 001-38727)	
		Form	Filing Date
10.52	Amendment No. 4 to the Amended and Restated Series 2016-MSRVF1 Indenture Supplement, dated as of April 1, 2021, among PNMAC GMSR ISSUER TRUST, Citibank, N.A., PennyMac Loan Services, LLC and Credit Suisse First Boston Mortgage Capital LLC.	10-Q	May 6, 2021
10.53 ^	Amendment No. 5 to the Series 2016-MSRVF1 Indenture Supplement, dated as of July 30, 2021, by and among PNMAC GMSR ISSUER TRUST, Citibank, N.A., PennyMac Loan Services, LLC and Credit Suisse First Boston Mortgage Capital LLC.	8-K	August 5, 2021
10.54	Series 2018-GT1 Indenture Supplement, dated as of February 28, 2018, to Second Amended and Restated Base Indenture, dated as of August 10, 2017, by and among PNMAC GMSR ISSUER TRUST, Citibank, N.A., PennyMac Loan Services, LLC and Credit Suisse First Boston Mortgage Capital LLC.	8-K	March 6, 2018
10.55	Series 2018-GT2 Indenture Supplement, dated as of August 10, 2018, to Second Amended and Restated Base Indenture, dated as of August 10, 2017, by and among PNMAC GMSR ISSUER TRUST, Citibank, N.A., PennyMac Loan Services, LLC and Credit Suisse First Boston Mortgage Capital LLC.	8-K	August 15, 2018
10.56	Guaranty, dated as of December 19, 2016, made by Private National Mortgage Acceptance Company, LLC, in favor of PNMAC GMSR ISSUER TRUST.	8-K	December 21, 2016
10.57	Amendment No. 1 to Guaranty, dated as of February 16, 2017, by and between PNMAC GMSR ISSUER TRUST and Private National Mortgage Acceptance Company, LLC.	8-K	February 23, 2017
10.58	Amended and Restated Master Repurchase Agreement, dated as of April 1, 2020, by and among PNMAC GMSR ISSUER TRUST, PennyMac Loan Services, LLC and Private National Mortgage Acceptance Company, LLC.	8-K	April 7, 2020
10.59	Side Letter Agreement to Series 2016-MSRVF1 Amended and Restated Master Repurchase Agreement, dated as of July 30, 2021, by and among PennyMac Loan Services, LLC, Credit Suisse AG, Cayman Islands Branch, Citibank, N. A., and Credit Suisse First Boston Mortgage Capital, LLC.	*	

Exhibit No.	Exhibit Description	Incorporated by Reference from the Below-Listed Form (Each Filed under SEC File Number 15-68669 or 001-38727) Form	Filing Date
10.60 ^	Amended and Restated Master Repurchase Agreement, dated as of July 30, 2021, by and among PennyMac Loan Services, LLC, Credit Suisse AG, Cayman Islands Branch, Citibank, N. A., and Credit Suisse First Boston Mortgage Capital, LLC, MSR Collateralized Notes, SERIES 2016-MSRVF1.	8-K	August 5, 2021
10.61	Second Amended and Restated Guaranty, dated as of July 30, 2021, by Private National Mortgage Acceptance Company, LLC in favor of Credit Suisse First Boston Mortgage Capital LLC on behalf of Credit Suisse AG, Cayman Island Branch and Citibank, N.A..	8-K	August 5, 2021
10.62^	Amended and Restated Master Repurchase Agreement, dated as of July 30, 2021, by and among PennyMac Loan Services, LLC, Credit Suisse AG, Cayman Islands Branch, Citibank, N. A., and Credit Suisse First Boston Mortgage Capital, LLC, MSR Collateralized Notes, SERIES 2020-SPIADVF1.	8-K	August 5, 2021
10.63	Series 2020-SPIADVF1 Indenture Supplement, dated as of April 1, 2020, to Third Amended and Restated Base Indenture, dated as of April 1, 2020, by and among PNMAC GMSR ISSUER TRUST, Citibank, N.A., PennyMac Loan Services, LLC and Credit Suisse First Boston Mortgage Capital LLC.	8-K	April 7, 2020
10.64	Consent Letter regarding Series 2020-SPIADVF1 Indenture Supplement, dated as of April 24, 2020, by and among PennyMacLoan Services, LLC and Credit Suisse First Boston Mortgage Capital LLC.	10-Q	May 7, 2020
10.65	Amendment No. 1 to the Amended and Restated Series 2020-SPIADVF1 Indenture Supplement, dated as of August 25, 2020, among PNMAC GMSR ISSUER TRUST, Citibank, N.A., PennyMac Loan Services, LLC, and Credit Suisse First Boston Mortgage Capital LLC.	10-Q	November 6, 2020
10.66	Amendment No. 2 to the Amended and Restated Series 2020-SPIADVF1 Indenture Supplement, dated as of April 1, 2021, among PNMAC GMSR ISSUER TRUST, Citibank, N.A., PennyMac Loan Services, LLC and Credit Suisse First Boston Mortgage Capital LLC.	10-Q	May 6, 2021
10.67 ^	Amendment No. 3 to the Series 2020- SPIADVF1 Indenture Supplement, dated as of July 30, 2021, by and among PNMAC GMSR ISSUER TRUST, Citibank, N.A., PennyMac Loan Services, LLC, Credit Suisse First Boston Mortgage Capital LLC, and Credit Suisse AG, Cayman Islands Branch.	8-K	August 5, 2021

Exhibit No.	Exhibit Description	Incorporated by Reference from the Below-Listed Form (Each Filed under SEC File Number 15-68669 or 001-38727)	
		Form	**Filing Date**
10.68	Side Letter Agreement to Series 2020-SPIADVF1 Amended and Restated Master Repurchase Agreement, dated as of July 30, 2021, by and among PennyMac Loan Services, LLC, Credit Suisse AG, Cayman Islands Branch, Citibank, N. A., and Credit Suisse First Boston Mortgage Capital, LLC.	*	
10.69	Omnibus Amendment No. 1 to the Side Letter Agreements, dated December 7, 2021, by and among PennyMac Loan Services, LLC, Credit Suisse AG, Cayman Islands Branch, Citibank, N. A., and Credit Suisse First Boston Mortgage Capital, LLC.	*	
10.70	Base Indenture, dated as of April 28, 2021, by and among PFSI ISSUER TRUST - FMSR, as Issuer, Citibank, N.A., as Indenture Trustee, Calculation Agent, Paying Agent and Securities Intermediary, PennyMac Loan Services, LLC, as Servicer and Administrator, and Credit Suisse First Boston Mortgage Capital LLC, as Administrative Agent.	8-K	May 3, 2021
10.71	Master Repurchase Agreement, dated as of April 28, 2021, by and among PFSI ISSUER TRUST - FMSR, as Buyer, PennyMac Loan Services, LLC, as Seller, and Private National Mortgage Acceptance Company, LLC, as Guarantor.	8-K	May 3, 2021
10.72	Guaranty, dated as of April 28, 2021, made by Private National Mortgage Acceptance Company, LLC, in favor of PFSI ISSUER TRUST – FMSR.	8-K	May 3, 2021
10.73	Master Repurchase Agreement, dated as of April 28, 2021, by and among Credit Suisse First Boston Mortgage Capital LLC, as administrative agent, Credit Suisse AG, Cayman Islands Branch, as Buyer, and PennyMac Loan Services, LLC, as Seller.	8-K	May 3, 2021
10.74	Amendment No. 1 to the Series 2021-MSRVF1 Repurchase Agreement, dated as of September 8, 2021, by and among Credit Suisse First Boston Mortgage Capital LLC, Credit Suisse AG, Cayman Islands Branch, PennyMac Loan Services, LLC, and Private National Mortgage Acceptance Company, LLC.	*	
10.75	Amendment No. 2 to the Series 2021-MSRVF1 Repurchase Agreement, dated as of December 29, 2021 and effective as of January 1, 2022, by and among Credit Suisse First Boston Mortgage Capital LLC, Credit Suisse AG, Cayman Islands Branch, PennyMac Loan Services, LLC, and Private National Mortgage Acceptance Company, LLC.	*	

Exhibit No.	Exhibit Description	Incorporated by Reference from the Below-Listed Form (Each Filed under SEC File Number 15-68669 or 001-38727)	
		Form	Filing Date
10.76	Guaranty, dated as of April 28, 2021, by Private National Mortgage Acceptance Company, LLC, in favor of PennyMac Loan Services, LLC.	8-K	May 3, 2021
21.1	Subsidiaries of PennyMac Financial Services, Inc.	*	
23.1	Consent of Deloitte & Touche LLP.	*	
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 Daniel S. Perotti 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 Daniel S. Perotti 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, formatted in Inline XBRL: (i) the Consolidated Balance Sheets as of December 31, 2021 and December 31, 2020 (ii) the Consolidated Statements of Income for the years ended December 31, 2021 and December 31, 2020, (iii) the Consolidated Statements of Changes in Stockholders' Equity for the years ended December 31, 2021 and December 31, 2020, (iv) the Consolidated Statements of Cash Flows for the years ended December 31, 2021 and December 31, 2020 and (v) the Notes to the Consolidated Financial Statements.	*	
101.INS	XBRL Instance Document – the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document	*	
101.SCH	Inline XBRL Taxonomy Extension Schema Document	*	
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document	*	
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document	*	

Exhibit No.	Exhibit Description	Incorporated by Reference from the Below-Listed Form (Each Filed under SEC File Number 15-68669 or 001-38727)	
		Form	Filing Date
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document	*	
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document	*	
104	Cover Page Interactive Data File (embedded within the Inline XBRL document).		

^ Portions of the exhibit have been redacted.

* 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.

Item 16. *Form 10-K Summary*

None.

PENNYMAC FINANCIAL SERVICES, INC.
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December 31, 2021

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of
PennyMac Financial Services, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of PennyMac Financial Services, Inc. and subsidiaries (the ‘‘Company’’) as of December 31, 2021 and 2020, the related consolidated statements of income, changes in stockholders' equity, and cash flows, for each of the three years in the period ended December 31, 2021, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021 in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 23, 2022, expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Mortgage Servicing Rights ("MSRs") – Refer to Notes 3, 6 and 9 to the Financial Statements

Critical Audit Matter Description

The Company accounts for MSRs at fair value and categorizes its MSRs as "Level 3" fair value assets. The Company uses a discounted cash flow approach to estimate the fair value of MSRs. The key inputs used in the estimation of the fair value of MSRs include the applicable pricing spread (a component of the discount rate), the prepayment rates of the

underlying loans (“prepayment speed”) and the annual per-loan cost of servicing, all of which are unobservable. Significant changes to any of those inputs in isolation could result in a significant change in the MSRs’ fair value measurement.

We identified the pricing spread and prepayment speed assumptions used in the valuation of MSRs as a critical audit matter because of the significant judgments made by management in determining these assumptions. Auditing these assumptions required a high degree of auditor judgment and an increased extent of effort, including the need to involve our fair value specialists, to evaluate the reasonableness of management’s estimates and assumptions related to selection of the pricing spread and prepayment speed.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the pricing spread and prepayment speed assumptions used by the Company to estimate the fair value of MSRs included the following, among others:

- We tested the design and operating effectiveness of internal controls over determining the fair value of MSRs, including those over the determination of the pricing spread and prepayment speed assumptions
- With the assistance of our fair value specialists, we evaluated the reasonableness of management’s prepayment speed assumptions by preparing a value for comparison to the Company’s valuation
- We evaluated the reasonableness of management’s prepayment speed assumptions of the underlying mortgage loans, by comparing historical prepayment speed assumptions to actual results
- We tested management’s process for determining the pricing spread assumptions by comparing them to the implied spreads within market transactions and other third-party information used by management

/s/ Deloitte & Touche LLP
Los Angeles, California
February 23, 2022

We have served as the Company’s auditor since 2008.

PENNYMAC FINANCIAL SERVICES, INC.
CONSOLIDATED BALANCE SHEETS

	December 31, 2021	December 31, 2020
	(in thousands, except share amounts)	
ASSETS		
Cash	$ 340,069	$ 532,716
Short-term investment at fair value	6,873	15,217
Loans held for sale at fair value (includes $9,135,577 and $11,457,678 pledged to creditors)	9,742,483	11,616,400
Assets purchased from PennyMac Mortgage Investment Trust under agreements to resell pledged to creditors	—	80,862
Derivative assets	333,695	711,238
Servicing advances, net (includes valuation allowance of $120,940 and $181,433; $232,107 and $413,484 pledged to creditors)	702,160	579,528
Mortgage servicing rights at fair value (includes $3,856,791 and $2,577,964 pledged to creditors)	3,878,078	2,581,174
Operating lease right-of-use assets	89,040	74,934
Investment in PennyMac Mortgage Investment Trust at fair value	1,300	1,105
Receivable from PennyMac Mortgage Investment Trust	40,091	87,005
Loans eligible for repurchase	3,026,207	14,625,447
Other (includes $45,294 and $166,418 pledged to creditors)	616,616	692,169
Total assets	$ 18,776,612	$ 31,597,795
LIABILITIES		
Assets sold under agreements to repurchase	$ 7,292,735	$ 9,654,797
Mortgage loan participation purchase and sale agreements	479,845	521,477
Obligations under capital lease	3,489	11,864
Notes payable secured by mortgage servicing assets	1,297,622	1,295,840
Unsecured senior notes	1,776,219	645,820
Excess servicing spread financing payable to PennyMac Mortgage Investment Trust at fair value	—	131,750
Derivative liabilities	22,606	42,638
Mortgage servicing liabilities at fair value	2,816	45,324
Accounts payable and accrued expenses	359,413	308,398
Operating lease liabilities	110,003	94,193
Payable to PennyMac Mortgage Investment Trust	228,019	140,306
Payable to exchanged Private National Mortgage Acceptance Company, LLC unitholders under tax receivable agreement	30,530	35,165
Income taxes payable	685,262	622,700
Liability for loans eligible for repurchase	3,026,207	14,625,447
Liability for losses under representations and warranties	43,521	32,688
Total liabilities	15,358,287	28,208,407
Commitments and contingencies – Note 16		
STOCKHOLDERS' EQUITY		
Common stock—authorized 200,000,000 shares of $0.0001 par value; issued and outstanding, 56,867,202 and 70,905,532 shares, respectively	6	7
Additional paid-in capital	125,396	1,047,052
Retained earnings	3,292,923	2,342,329
Total stockholders' equity	3,418,325	3,389,388
Total liabilities and stockholders' equity	$ 18,776,612	$ 31,597,795

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

PENNYMAC FINANCIAL SERVICES, INC.
CONSOLIDATED STATEMENTS OF INCOME

	Year ended December 31,		
	2021	2020	2019
	(in thousands, except earnings per share)		
Revenues			
Net gains on loans held for sale at fair value:			
From non-affiliates	$ 2,515,874	$ 2,690,104	$ 542,163
From PennyMac Mortgage Investment Trust	(51,473)	50,681	183,365
	2,464,401	2,740,785	725,528
Loan origination fees:			
From non-affiliates	358,028	262,143	159,461
From PennyMac Mortgage Investment Trust	26,126	23,408	14,695
	384,154	285,551	174,156
Fulfillment fees from PennyMac Mortgage Investment Trust	178,927	222,200	160,610
Net loan servicing fees:			
Loan servicing fees:			
From non-affiliates	875,570	814,646	730,165
From PennyMac Mortgage Investment Trust	80,658	67,181	48,797
Other	118,884	116,464	98,564
	1,075,112	998,291	877,526
Change in fair value of mortgage servicing rights and mortgage servicing liabilities	(415,906)	(1,501,993)	(988,614)
Change in fair value of excess servicing spread financing payable to PennyMac Mortgage Investment Trust	(1,037)	24,970	9,256
Mortgage servicing rights hedging results	(475,215)	918,180	395,497
	(892,158)	(558,843)	(583,861)
Net loan servicing fees	182,954	439,448	293,665
Net interest (expense) income:			
Interest income:			
From non-affiliates	299,782	243,701	282,398
From PennyMac Mortgage Investment Trust	387	3,325	6,302
	300,169	247,026	288,700
Interest expense:			
To non-affiliates	389,419	263,133	201,688
To PennyMac Mortgage Investment Trust	1,280	8,418	10,291
	390,699	271,551	211,979
Net interest (expense) income	(90,530)	(24,525)	76,721
Management fees from PennyMac Mortgage Investment Trust	37,801	34,538	36,492
Change in fair value of investment in and dividends received from PennyMac Mortgage Investment Trust	336	(453)	416
Results of real estate acquired in settlement of loans	1,993	1,036	557
Repricing of payable to exchanged Private National Mortgage Acceptance Company, LLC unitholders under tax receivable agreement	—	280	379
Other	7,325	6,737	8,880
Total net revenues	3,167,361	3,705,597	1,477,404
Expenses			
Compensation	999,802	738,569	503,458
Loan origination	330,788	219,746	117,338
Technology	141,426	112,570	67,946
Servicing	109,835	256,934	164,697
Professional services	94,283	64,064	32,859
Marketing and advertising	44,806	8,658	5,165
Occupancy and equipment	35,810	33,357	28,916
Other	51,428	31,090	27,581
Total expenses	1,808,178	1,464,988	947,960
Income before provision for income taxes	1,359,183	2,240,609	529,444
Provision for income taxes	355,693	593,725	136,479
Net income	$ 1,003,490	$ 1,646,884	$ 392,965
Earnings per share			
Basic	$ 15.73	$ 21.91	$ 5.02
Diluted	$ 14.87	$ 20.92	$ 4.89
Weighted average shares outstanding			
Basic	63,799	75,161	78,206
Diluted	67,471	78,728	80,340

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

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

	Number of shares	Par value	Additional paid-in capital	Retained earnings	Total
			(in thousands)		
Balance at January 1, 2019	77,494	$ 8	$ 1,310,648	$ 343,135	$ 1,653,791
Net income	—	—	—	392,965	392,965
Stock based compensation	1,062	—	25,282	—	25,282
Issuance of common stock in settlement of directors' fees	10	—	233	—	233
Common stock dividends ($0.12 per share)	—	—	—	(9,708)	(9,708)
Repurchase of common stock	(51)	—	(1,056)	—	(1,056)
Balance at December 31, 2019	78,515	$ 8	$ 1,335,107	$ 726,392	$ 2,061,507
Net income	—	—	—	1,646,884	1,646,884
Stock based compensation	1,276	—	49,229	—	49,229
Issuance of common stock in settlement of directors' fees	5	—	194	—	194
Common stock dividends ($0.54 per share)	—	—	—	(30,947)	(30,947)
Repurchase of common stock	(8,890)	(1)	(337,478)	—	(337,479)
Balance at December 31, 2020	70,906	$ 7	$ 1,047,052	$ 2,342,329	$ 3,389,388
Net income	—	—	—	1,003,490	1,003,490
Stock based compensation	1,326	—	36,337	—	36,337
Issuance of common stock in settlement of directors' fees	3	—	200	—	200
Common stock dividends ($0.80 per share)	—	—	—	(52,896)	(52,896)
Repurchase of common stock	(15,368)	(1)	(958,193)	—	(958,194)
Balance at December 31, 2021	56,867	$ 6	$ 125,396	$ 3,292,923	$ 3,418,325

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

PENNYMAC FINANCIAL SERVICES, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
Cash flow from operating activities			
Net income	$ 1,003,490	$ 1,646,884	$ 392,965
Adjustments to reconcile net income to net cash used in operating activities:			
Net gains on loans held for sale at fair value	(2,464,401)	(2,740,785)	(725,528)
Change in fair value of mortgage servicing rights, mortgage servicing liabilities and excess servicing spread	416,943	1,477,023	979,358
Mortgage servicing rights hedging results	475,215	(918,180)	(395,497)
Capitalization of interest and advances on loans held for sale	(19,244)	(119,740)	(73,611)
Accrual of interest on excess servicing spread financing payable to PennyMac Mortgage Investment Trust	1,280	8,418	10,291
Amortization of debt issuance costs (premiums), net	24,321	19,048	(4,100)
Change in fair value of investment in common shares of PennyMac Mortgage Investment Trust	(195)	567	(275)
Results of real estate acquired in settlement in loans	(1,993)	(1,036)	(557)
Repricing of payable to exchanged Private National Mortgage Acceptance Company, LLC unitholders under tax receivable agreement	—	(280)	(379)
Stock-based compensation expense	37,794	45,105	24,771
(Reversal of) provision for servicing advance losses	(47,878)	125,898	36,149
Impairment of capitalized software	728	13,145	—
Depreciation and amortization	28,645	25,575	15,021
Amortization of right-of-use assets	14,295	12,284	10,158
Purchase of loans held for sale from PennyMac Mortgage Investment Trust	(67,851,634)	(63,618,185)	(50,110,085)
Origination of loans held for sale	(54,857,114)	(31,783,465)	(11,831,703)
Purchase of loans held for sale from non-affiliates	(4,896,527)	(3,799,336)	(1,725,227)
Purchase of loans from Ginnie Mae securities and early buyout investors	(23,644,025)	(11,156,684)	(6,271,447)
Sale to non-affiliates and principal payments of loans held for sale	154,450,942	102,840,312	61,214,102
Sale to PennyMac Mortgage Investment Trust of loans held for sale	—	2,248,896	6,255,915
Repurchase of loans subject to representations and warranties	(99,508)	(58,375)	(18,660)
Settlement of repurchase agreement derivatives	—	8,270	31,993
Increase in servicing advances	(232,574)	(391,440)	(98,121)
Decrease (increase) in receivable from PennyMac Mortgage Investment Trust	35,243	(48,320)	(20,257)
Sale of real estate acquired in settlement of loans	14,555	32,555	28,901
Decrease (increase) in other assets	61,871	(334,045)	(62,549)
Increase in accounts payable and accrued expenses	34,666	135,314	38,551
Decrease in operating lease liabilities	(16,310)	(13,421)	(12,680)
Increase (decrease) in payable to PennyMac Mortgage Investment Trust	36,549	37,642	(36,645)
Payments to exchanged Private National Mortgage Acceptance Company, LLC unitholders under tax receivable agreement	(4,635)	(10,713)	—
Increase in income taxes payable	62,562	118,131	104,023
Net cash provided by (used in) operating activities	2,563,061	(6,198,938)	(2,245,123)

Statement continues on the next page.

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

(Continued)

PENNYMAC FINANCIAL SERVICES, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
Cash flow from investing activities			
Decrease in short-term investments	8,344	59,394	43,213
Net change in assets purchased from PMT under agreement to resell	80,862	26,650	23,513
Net settlement of derivative financial instruments used for hedging of mortgage servicing rights	(434,397)	913,064	366,137
Purchase of mortgage servicing rights	—	(25,473)	(227,445)
Purchase of furniture, fixtures, equipment and leasehold improvements	(7,899)	(10,671)	(6,124)
Acquisition of capitalized software	(48,980)	(48,090)	(29,385)
Decrease (increase) in margin deposits	97,701	(131,840)	(21,127)
Net cash (used in) provided by investing activities	(304,369)	783,034	148,782
Cash flow from financing activities			
Sale of assets under agreements to repurchase	136,179,744	102,232,005	63,803,260
Repurchase of assets sold under agreements to repurchase	(138,546,379)	(96,709,690)	(61,596,780)
Issuance of mortgage loan participation purchase and sale certificates	23,784,510	23,607,079	23,451,400
Repayment of mortgage loan participation purchase and sale certificates	(23,826,142)	(23,583,550)	(23,485,918)
Advance of obligations under capital lease	—	—	25,123
Repayment of obligations under capital lease	(8,375)	(8,946)	(10,918)
Issuance of unsecured senior notes	1,150,000	650,000	—
Repayment of excess servicing spread financing	(134,624)	(32,377)	(40,316)
Payment of debt issuance costs	(37,567)	(30,112)	(6,603)
Issuance of common stock pursuant to exercise of stock options	7,536	9,389	5,145
Payment of withholding taxes relating to stock-based compensation	(8,993)	(5,265)	(4,634)
Payment of dividend to holders of common stock	(52,896)	(30,947)	(9,708)
Repurchase of common stock	(958,194)	(337,479)	(1,056)
Net cash (used in) provided by financing activities	(2,451,380)	5,760,107	2,128,995
Net (decrease) increase in cash and restricted cash	(192,688)	344,203	32,654
Cash and restricted cash at beginning of year	532,781	188,578	155,924
Cash and restricted cash at end of year	$ 340,093	$ 532,781	$ 188,578
Cash and restricted cash at end of year are comprised of the following:			
Cash	$ 340,069	$ 532,716	$ 188,291
Restricted cash included in *Other* assets	24	65	287
	$ 340,093	$ 532,781	$ 188,578

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

PENNYMAC FINANCIAL SERVICES, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1—Organization

PennyMac Financial Services, Inc. ("PFSI" or the "Company") is a holding corporation and its primary assets are direct and indirect equity interests in Private National Mortgage Acceptance Company, LLC ("PNMAC"). The Company is the managing member of PNMAC, and it operates and controls all of the businesses and consolidates the financial results of PNMAC and its subsidiaries.

PNMAC is a Delaware limited liability company which, through its subsidiaries, engages in mortgage banking and investment management activities. PNMAC's mortgage banking activities consist of residential mortgage loan production and loan servicing. PNMAC's investment management activities and a portion of its loan production and loan servicing activities are conducted on behalf of PennyMac Mortgage Investment Trust ("PMT"), a publicly held real estate investment trust, that invests in residential mortgage-related assets. PNMAC's primary wholly owned subsidiaries are:

- *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 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 United States Department of Housing and Urban Development ("HUD") and a lender/servicer with the Veterans Administration ("VA") and United States Department of Agriculture ("USDA") (each of the above an "Agency" and collectively the "Agencies").

- *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 has an investment management agreement with PMT.

Note 2—Concentration of Risk

A portion of the Company's activities relate to PMT. Revenues generated from PMT and its subsidiaries (generally comprised of gains on mortgage loans held for sale, loan origination fees, fulfillment fees, loan servicing fees, management fees and net interest paid to PMT) totaled 9%, 11%, and 31% of total net revenues for the years ended December 31, 2021, 2020 and 2019, respectively.

Note 3—Significant Accounting Policies

A description of the Company's significant accounting policies applied in the preparation of these consolidated financial statements follows.

Basis of Presentation

The Company's 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* (the "ASC" or the "Codification").

Principles of Consolidation

The consolidated financial statements include the accounts of PFSI and its wholly-owned subsidiaries. Intercompany accounts and transactions have been eliminated.

Use of Estimates

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

Cash Flows

For the purpose of presentation in the 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. Tenant security deposits are included in *Other* assets on the Company's consolidated balance sheets.

Fair Value

Most of the Company's assets and certain of its liabilities are measured at or based on their fair values. 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.

- 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. Such differences may result in significantly different fair value measurements. Likewise, due to the general illiquidity of some of these assets and liabilities, subsequent transactions may be at values significantly different from those reported.

Short-Term Investment

Short-term investment, which represents an investment in an account with a depository institution, is carried at fair value. Changes in fair value are recognized in current period income. The Company classifies its short-term investment as a "Level 1" fair value asset.

Loans Held for Sale at Fair Value

The Company has elected to account for loans held for sale at fair value, with changes in fair value recognized in current period income, to more timely reflect the Company's performance. All changes in fair value are recognized as a component of *Net gains on loans held for sale at fair value*. The Company classifies most of the loans held for sale at fair value as "Level 2" fair value assets. Certain of the Company's loans held for sale may not be saleable into active markets due to identified defects or delinquency. Such loans are classified as "Level 3" fair value assets.

Sale Recognition

The Company recognizes transfers of loans as sales when it surrenders control over the loans. Control over transferred loans is deemed to be surrendered when (i) the loans have been isolated from the Company, (ii) the transferee has the right (free of conditions that constrain it from taking advantage of that right) to pledge or exchange the transferred loans, and (iii) the Company does not maintain effective control over the transferred loans through either (a) an agreement that entitles and obligates the Company to repurchase or redeem them before their maturity or (b) the ability to unilaterally cause the holder to return specific loans.

Interest Income Recognition

Interest income on loans held for sale at fair value is recognized over the life of the loans using their contractual interest rates. Income recognition is suspended and the interest receivable is reversed against interest income when loans become 90 days delinquent. Income recognition is resumed when the loan becomes contractually current.

Derivative Financial Instruments

The Company holds and issues derivative financial instruments that are created as a result of certain of its operations. 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:

- Interest rate lock commitments ("IRLCs") that are created when the Company commits to purchase or originate a loan for sale at specified interest rates.

- Derivatives that were embedded in a master repurchase agreement with a non-affiliate that provided for the Company to receive incentives for financing loans that satisfied certain consumer relief characteristics as provided in the master repurchase agreement.

PFSI engages in interest rate risk management activities in an effort to moderate the effect of changes in market interest rates on the fair value of the Company's assets. The Company is exposed to price risk relative to:

- Its loans held for sale and IRLCs. The Company bears price risk from the time a commitment to fund a loan is made to a borrower or to purchase a loan from PMT or a non-affiliated entity, to the time either the prospective transaction is cancelled or the loan is sold. During this period, the Company is exposed to losses if market interest rates increase, because the fair value of the purchase commitment or prospective loan decreases.

- The fair value of its mortgage servicing rights ("MSRs"). MSRs are generally subject to reduction in fair value when mortgage interest rates decrease. Decreasing mortgage interest rates normally encourage increased mortgage refinancing activity. Increased refinancing activity reduces the expected life of the mortgage loans underlying the MSRs, thereby reducing their fair value. Reductions in the fair value of MSRs affect earnings primarily through recognition of the changes in fair value.

To manage the 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 loans held for sale and MSRs.

IRLCs are accounted for as derivative financial instruments. The Company manages the risk created by IRLCs by entering into forward sale agreements to sell the expected mortgage loans or mortgage-backed securities ("MBS") and by the purchase and sale of options on MBS. Such agreements are also accounted for as derivative financial instruments. These and other interest-rate derivatives are also used to manage the fair value risk created by changes in prepayment speeds on certain of the MSRs the Company holds.

The Company classifies its IRLCs as "Level 3" fair value assets and liabilities. Fair value of hedging derivative financial instruments that are actively traded on an exchange 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.

The Company does not designate its derivative financial instruments for hedge accounting. Therefore, the Company accounts for its derivative financial instruments as free-standing derivatives. All derivative financial instruments are recognized on the consolidated balance sheet at fair value with changes in the fair values being reported in current period income.

Changes in fair value of derivative financial instruments hedging IRLCs, loans held for sale at fair value and MSRs are included in *Net gains on loans held for sale at fair value* or in *Mortgage servicing rights hedging results,* as applicable, in the Company's consolidated statements of income. Changes in fair value of derivative assets relating to the master repurchase agreement that provided for the Company to receive incentives for loans that satisfied certain consumer relief characteristics are included in *Interest expense*.

Cash flows from derivative financial instruments relating to hedging of IRLCs and loans acquired for sale are included in *Cash flows from operating activities* in *Sale and repayment of loans acquired for sale at fair value to nonaffiliates*; cash flows from derivative financial instruments relating to hedging of MSRs is included in *Cash flows from investing activities*; and cash flows from repurchase agreement derivatives are included in *Cash flows from operating activities*.

When the Company has multiple derivative financial instruments with the same counterparty subject to a master netting arrangement, it offsets the amounts recorded as assets and liabilities and amounts recognized for the right to reclaim cash collateral it has deposited with the counterparty or the obligation to return cash collateral it has collected from the counterparty arising from that master netting arrangement. Such offset amounts are presented as either a net asset or liability by counterparty on the Company's consolidated balance sheets.

Servicing Advances

Servicing advances represent advances made on behalf of borrowers and the mortgage loans' investors to fund property taxes, insurance premiums and out-of-pocket collection costs (e.g., preservation and restoration of mortgaged property or real estate acquired in the settlement of loans ("REO"), legal fees, and appraisals). Servicing advances are made in accordance with the Company's servicing agreements. A valuation allowance is provided for amounts expected to become uncollectable. Servicing advances are written off when they are deemed uncollectable.

Mortgage Servicing Rights and Mortgage Servicing Liabilities

MSRs and mortgage servicing liabilities ("MSLs") arise from contractual agreements between the Company and investors (or their agents) in mortgage securities and mortgage loans. Under these contracts, the Company performs loan servicing functions in exchange for fees and other remuneration. The servicing functions typically performed include, among other responsibilities, collecting and remitting loan payments; responding to borrower inquiries; accounting for principal and interest; holding custodial (impound) funds for payment of property taxes and insurance premiums; counseling delinquent mortgagors; administering loss mitigation activities, including modification and forbearance programs; and supervising foreclosures and property dispositions.

The Company is contractually entitled to receive other remuneration including various mortgagor-contracted fees such as late charges and collateral reconveyance charges, and the Company is generally entitled to retain the placement fees earned on impounded funds and funds held pending remittance related to its collection of mortgagor payments. The Company also generally has the right to solicit the mortgagors for other products and services as well as for new mortgages for those considering refinancing their existing loan or purchasing a new home.

The Company recognizes MSRs and MSLs initially at fair value, either as proceeds from or liabilities incurred in, sales of mortgage loans where the Company assumes the obligation to service the mortgage loan in the sale transaction, or from the purchase of MSRs or receipt of cash for acceptance of MSLs.

The fair value of MSRs and MSLs is derived from the net positive or negative, respectively, cash flows associated with the servicing contracts. For loans subject to MSR and MSL contracts, the Company receives a servicing fee, net of related guarantee fees, based on the remaining outstanding principal balances of the mortgage loans subject to the servicing contracts. The servicing fees are collected from the monthly payments made by the mortgagors.

The fair value of MSRs and MSLs is difficult to determine because MSRs and MSLs are not actively traded in observable stand-alone markets. Considerable judgment is required to estimate the fair values of MSRs and MSLs and the exercise of such judgment can significantly affect the Company’s income. Therefore, the Company classifies its MSRs and MSLs as “Level 3” fair value assets and liabilities.

Changes in fair value of MSLs and MSRs are recognized in current period income in *Change in fair value of mortgage servicing rights and mortgage servicing liabilities* in the consolidated statements of income.

Leases

The Company determines if an arrangement is a lease at inception. If the arrangement is determined to be a lease, the Company recognizes both an *Operating lease right-of-use asset* and a corresponding *Operating lease liability* in its consolidated balance sheet, except leases with initial terms less than or equal to 12 months. Lease expense is recognized on the straight-line basis over the lease term and is recorded in *Occupancy and equipment* in the consolidated statements of income.

The Company’s lease agreements include both lease and non-lease components (such as common area maintenance), which are generally included in the lease and are accounted for together with the lease as a single lease component. As such, lease payments represent payments on both lease and non-lease components. At lease commencement, lease liabilities are recognized based on the present value of the remaining lease payments and discounted using the Company’s incremental borrowing rate. Right-of-use assets initially equal the lease liability, adjusted for any lease payments made before lease commencement and for any lease incentives.

Furniture, Fixtures, Equipment and Building Improvements

Furniture, fixtures, equipment and building improvements are stated at historical cost less accumulated depreciation and amortization. Depreciation and amortization are computed using the straight-line method over the estimated useful lives of the various classes of assets, which range from five to seven years for furniture and equipment and the lesser of the asset’s estimated useful life or the remaining lease term for fixtures and building improvements.

Capitalized Software

The Company capitalizes certain consulting, payroll, and payroll-related costs related to the development of computer software for internal use. Once development is complete and the software is placed in service, the Company amortizes the capitalized costs over three to seven years using the straight-line method.

The Company also periodically assesses capitalized software for recoverability when events or changes in circumstances indicate that its carrying amount may not be recoverable. If the Company identifies an indicator of impairment, it assesses recoverability by comparing the carrying amount of the asset to the sum of the undiscounted cash flows expected to result from the use and the eventual disposal of the asset. An impairment loss is recognized when the carrying amount is not recoverable and is measured as the excess of carrying value over fair value.

Investment in PennyMac Mortgage Investment Trust at Fair Value

Common shares of beneficial interest in PMT are carried at fair value with changes in fair value recognized in current period income. Fair value for purposes of the Company's holdings in PMT is based on the published closing price of the shares as of period end. The Company classifies its investment in common shares of PMT as a "Level 1" fair value asset.

Loans Eligible for Repurchase

The terms of the Ginnie Mae MBS program allow, but do not require, the Company to repurchase loans when the loan is at least three months delinquent. As a result of this right, the Company recognizes the loans in *Loans eligible for repurchase* at their unpaid principal balances and records a corresponding liability in *Liability for loans eligible for repurchase* on its consolidated balance sheets.

Borrowings

The carrying values of borrowings other than ESS are based on the accrued cost of the agreements. The costs of creating the facilities underlying the agreements (debt issuance costs) are included in the carrying value of the agreements and are charged to *Interest expense* over the terms of the respective borrowing facilities:

- Debt issuance costs relating to revolving facilities, such as repurchase agreement and mortgage loan participation purchase and sale facilities are amortized on the straight line basis over the term of the facility;

- Debt issuance cost relating to non-revolving debts, such as the Company's *Notes payable secured by mortgage servicing assets* and *Unsecured senior notes* are amortized over the contractual term of the non-revolving debt using the interest method;

- Debt issuance premiums recorded as the results of recognition of repurchase agreement derivatives are credited to *Interest expense* over the contractual term of the repurchase agreement. Unamortized premiums relating to repurchase agreements repaid before the transaction's contractual maturity are credited to *Interest expense*.

Excess Servicing Spread Financing at Fair Value

The Company finances certain of its purchases of Agency MSRs through the sale to PMT of the right to receive the excess of the servicing fee rate over a specified rate of the underlying MSRs. This excess is referred to as excess servicing spread ("ESS"). ESS is carried at its fair value. Changes in fair value of ESS are recognized in current period income in *Change in fair value of excess servicing spread payable to PennyMac Mortgage Investment Trust*.

Interest expense for ESS is accrued using the interest method based upon the expected cash flows from the ESS through the expected life of the underlying mortgage loans.

Liability for Losses Under Representations and Warranties

The Company's agreements with the Agencies and other investors include representations and warranties related to the loans the Company sells to the Agencies and other investors. The representations and warranties require adherence to Agency and other investor origination and underwriting guidelines, including but not limited to the validity of the lien securing the 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 its representations and warranties, the Company may be required to either repurchase the loans with the identified defects or indemnify the investor or insurer. In such cases, the Company bears any subsequent credit loss on the loans. The Company's credit loss may be reduced by any recourse it may have to correspondent loan sellers that, in turn, had sold such mortgage loans to PMT and breached similar or other representations and warranties. In such event, the Company has the right to seek a recovery of related repurchase losses from that correspondent loan seller, through PMT.

As a result of providing representations and warranties to investors and insurers, the Company records a provision for losses relating to representations and warranties as part of its loan sale transactions. The method used to estimate the liability for representations and warranties is a function of the representations and warranties given and considers a combination of factors, including, but not limited to, estimated future defaults and loan repurchase rates, the estimated severity of loss in the event of default and the probability of reimbursement by the correspondent loan seller. The Company establishes a liability at the time loans are sold and periodically updates its liability estimate. The level of the liability for representations and warranties is reviewed and approved by the Company's management credit committee comprised of senior management. Adjustments to the level of the liability for representations and warranties are recorded in *Net gains on loans held for sale at fair value*.

The level of the liability for representations and warranties is difficult to estimate and requires considerable judgment. The level of loan repurchase losses is dependent on economic factors, investor repurchase demand or insurer claim denial strategies, and other external conditions that may change over the lives of the underlying loans. The Company's representations and warranties are generally not subject to stated limits of exposure. However, the Company believes that the current unpaid principal balance of loans sold to date represents the maximum exposure to repurchases related to representations and warranties.

Loan Origination Fees

Loan origination fees represent compensation to the Company for the origination or purchase of loans. Loan origination fees are earned and recognized upon funding or purchase of the loan by the Company and are collected either at purchase from the correspondent seller, at funding when paid by the borrower or upon sale of the loan when the origination fees are financed by the borrower.

Loan Servicing Fees

Loan servicing fees are received by the Company for servicing loans. Loan servicing activities are described in *Mortgage Servicing Rights and Mortgage Servicing Liabilities* above. Loan servicing fee amounts are based upon fee schedules established by the applicable investor and depend on whether the Company holds the MSRs or is subservicing loans or MSRs held by PMT.

The Company's obligations under its loan servicing agreements are fulfilled as the Company services the loans. Fees are collected when the loan payments are received from the borrowers in the case of MSRs held by the Company or within 30 days of the applicable month-end for subserviced loans.

MSR loan servicing fees are recorded net of Agency guarantee fees paid by the Company and are recognized when the loan payments are received from the borrowers. Loan servicing fees relating to loans serviced for PMT are recognized in the month in which the loans are serviced.

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 loans. Fulfillment fee amounts are based upon a negotiated fee schedule. The Company's obligation under the agreement is fulfilled when PMT issues a loan commitment, when it purchases a loan and when it completes the sale or securitization of a loan it purchases to investors other than Fannie Mae or Freddie Mac. Fulfillment fee revenue is recognized in the month an interest rate lock commitment is issued, or the loan is purchased or sold by PMT. Fulfillment fees are generally collected within 30 days of the applicable activity by PMT.

Management Fees

Management fees represent compensation to the Company for management services it provides to PMT. Management fees are based on PMT's shareholders' equity amounts and profitability in excess of specified thresholds. Management fees 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.

Stock-Based Compensation

The Company establishes the cost of its share-based awards at the awards' fair values at the grant date of the awards. The Company estimates the fair value of time-based restricted stock units and performance-based restricted stock units awarded with reference to the fair value of its underlying common stock and expected forfeiture rates on the date of the award. The Company estimates the fair value of its stock option awards with reference to the expected price volatility of its shares of common stock, expected dividend yield, expected forfeiture rates, and risk-free interest rate for the period that exercisable stock options are expected to be outstanding.

Compensation costs are fixed, except for performance-based restricted stock units, as of the award date. The cost of performance-based restricted stock units is adjusted in each reporting period after the grant for changes in expected performance attainment until the performance share units vest. The Company amortizes the cost of stock based compensation awards to *Compensation* expense over the vesting period using the graded vesting method.

Income Taxes

The Company is subject to federal and state income taxes. Income taxes are provided using the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using the enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled.

The effect on deferred taxes of a change in tax rates is recognized in income in the period in which the change occurs. A valuation allowance is established if, in management's judgment, it is not more likely than not that a deferred tax asset will be realized.

The Company recognizes tax benefits relating to its tax positions only if, in the opinion of management, it is more likely than not that the tax position will be sustained upon examination by the appropriate taxing authority. A tax position that meets this standard is recognized as the largest amount that is greater than 50% likely to be realized upon ultimate settlement with the appropriate taxing authority. The Company will classify any penalties and interest as a component of provision for income taxes.

As a result of a recapitalization and reorganization of PNMAC in 2013, the Company expects to benefit from amortization and other tax deductions resulting from increases in the tax basis of PNMAC's assets from the exchange of Pennymac Class A units to the shares of the Company's common stock. Those deductions will be allocated to the Company and will be taken into account in reporting the Company's taxable income.

The Company assumed an agreement with certain of the former unitholders of PNMAC that provides for the additional payment by the Company to exchanging unitholders of PNMAC equal to 85% of the amount of cash savings, if any, in U.S. federal, state and local income tax that PFSI realizes due to (i) increases in tax basis resulting from exchanges of the then existing unitholders and (ii) certain other tax benefits related to PFSI entering into the tax receivable agreement, including tax benefits attributable to payments under the tax receivable agreement. Although a reorganization of the Company in 2018 eliminated the potential for unitholders to exchange any additional units subject to this tax receivable agreement, the Company continues to be subject to the agreement and provide payment when applicable for units exchanged before the reorganization.

Note 4—Transactions with Affiliates

Transactions with PMT

Operating Activities

Mortgage Loan Production Activities

The Company sells newly originated loans to PMT under a mortgage loan purchase agreement. The Company has typically utilized the mortgage loan purchase agreement for the purpose of selling to PMT conforming balance non-government insured or guaranteed loans, as well as prime jumbo residential mortgage loans.

MSR Recapture

Through June 30, 2020, pursuant to the terms of an MSR recapture agreement by and between the Company and PMT, if the Company refinanced mortgage loans for which PMT previously held the MSRs, the Company was generally required to transfer and convey to PMT cash in an amount equal to 30% of the fair market value of the MSRs related to all such mortgage loans. On June 30, 2020, the MSR recapture agreement was amended and restated for a term of five years (the "2020 MSR Recapture Agreement").

Effective July 1, 2020, the 2020 MSR Recapture agreement changes the recapture fee payable by the Company to a tiered amount equal to:

a) 40% of the fair market value of the MSRs relating to the recaptured loans subject to the first 15% of the "recapture rate";
b) 35% of the fair market value of the MSRs relating to the recaptured loans subject to the "recapture rate" in excess of 15% and up to 30%; and
c) 30% of the fair market value of the MSRs relating to the recaptured loans subject to the "recapture rate" in excess of 30%.

The "recapture rate" means, during each month, the ratio of (i) the aggregate unpaid principal balance of all recaptured loans, to (ii) the aggregate unpaid principal balance of all mortgage loans for which the Company held the MSRs and that were refinanced or otherwise paid off in such month. The Company has further agreed to allocate sufficient resources to target a recapture rate of 15%.

Fulfillment Services

The Company provides PMT with certain mortgage banking services, including fulfillment and disposition-related services, for which it receives a monthly fulfillment fee.

Through June 30, 2020, pursuant to the terms of a mortgage banking services agreement, the monthly fulfillment fee was an amount equal to:

a) no greater than the product of (i) 0.35% and (ii) the aggregate initial unpaid principal balance (the “Initial UPB”) of all mortgage loans purchased in such month, plus
b) in the case of all mortgage loans other than those 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 was due or payable to the Company with respect to any mortgage loans underwritten to the Ginnie Mae MBS Guide.

Effective July 1, 2020, the fulfillment fees were revised as follows:

Fulfillment fees shall not exceed the following:

a) the number of loan commitments multiplied by a pull-through factor of either .99 or .80 depending on whether the loan commitments are subject to a “mandatory trade confirmation” or a “best efforts lock confirmation”, respectively, and then multiplied by $585 for each pull-through adjusted loan commitment up to and including 16,500 per quarter and $355 for each pull-through adjusted loan commitment in excess of 16,500 per quarter, plus
b) $315 multiplied by the number of purchased loans up to and including 16,500 per quarter and $195 multiplied by the number of purchased loans in excess of 16,500 per quarter, plus
c) $750 multiplied by the number of all purchased loans that are sold or securitized to parties other than Fannie Mae and Freddie Mac; provided however, that no fulfillment fee shall be due or payable to PLS with respect to any Ginnie Mae loans.

Sourcing Fees

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 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, through June 30, 2020, 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. Effective July 1, 2020, sourcing fee rates were revised to range from one to two basis points, generally based on the average number of calendar days the loans are held by PMT before purchase by PLS.

While the Company purchases these mortgage loans “as is” and without recourse of any kind from PMT, where the Company has a claim for repurchase, indemnity or otherwise against a correspondent seller, it is entitled, at its sole expense, to pursue any such claim through or in the name of PMT.

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

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
Net gains on loans held for sale at fair value:			
Net gains on loans held for sale to PMT (primarily cash)	$ —	$ 81,295	$ 190,416
Mortgage servicing rights and excess servicing spread recapture incurred	(51,473)	(30,614)	(7,051)
	$ (51,473)	$ 50,681	$ 183,365
Sale of loans held for sale to PMT	$ —	$ 2,248,896	$ 6,255,915
Tax service fees earned from PMT included in *Loan origination fees*	$ 26,126	$ 23,408	$ 14,695
Fulfillment fee revenue	$ 178,927	$ 222,200	$ 160,610
Unpaid principal balance (“UPB”) of loans fulfilled for PMT subject to fulfillment fees	$ 110,003,574	$ 100,389,252	$ 56,033,704
Sourcing fees included in cost of loans purchased from PMT	$ 6,472	$ 11,037	$ 14,381
Unpaid principal balance of loans purchased from PMT	$ 64,774,728	$ 60,540,530	$ 47,937,306

Loan Servicing

The Company and PMT have entered into a loan servicing agreement (the “Servicing Agreement”), pursuant to which the Company provides subservicing for PMT’s portfolio of MSRs and loans held for sale (prime servicing) and its portfolio of residential mortgage loans purchased with credit deterioration (special servicing). The Servicing Agreement provides for servicing fees of per-loan monthly amounts based on the delinquency, bankruptcy and/or foreclosure status of the serviced loan or REO.

Prime Servicing

- The base servicing fees for non-distressed loans are calculated through a monthly per-loan dollar amount, with the actual dollar amount for each loan based on whether the loan is a fixed-rate or adjustable-rate loan. The base servicing fee rates are $7.50 per month for fixed-rate loans and $8.50 per month for adjustable-rate loans.
- To the extent that non-distressed loans become delinquent, the Company receives an additional servicing fee per loan ranging from $10 to $55 per month based on the delinquency, bankruptcy and foreclosure status of the loan or $75 per month if the underlying mortgaged property becomes REO. The Company is also entitled to customary ancillary income and certain market-based fees and charges, including boarding and deboarding fees, liquidation and disposition fees, assumption, modification, origination fees and a percentage of late charges.
- Effective July 1, 2020, the Company receives certain fees for COVID-19 pandemic-related forbearance and modification activities provided for under the Coronavirus Aid, Relief, and Economic Security Act (“CARES Act”).

Special Servicing (Distressed loans)

- The base servicing fee rates for distressed loans range from $30 per month for current loans up to $95 per month for loans in foreclosure proceedings. The base servicing fee rate for REO is $75 per month. The Company also receives a supplemental servicing fee of $25 per month for each distressed loan.

- The Company receives activity-based fees for modifications, foreclosures and liquidations that it facilitates with respect to distressed loans, as well as other market-based refinancing and loan disposition fees. The Company may also receive REO rental fees, property lease renewal fees, property management fees, tenant paid application fees, late rent fees, and third-party vendor fees associated with its management of REO.

Following is a summary of loan servicing and property management fees earned from PMT:

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
Loan type serviced:			
Loans acquired for sale	$ 2,363	$ 2,067	$ 1,772
Loans at fair value	505	807	2,207
Mortgage servicing rights	77,790	64,307	44,818
	$ 80,658	$ 67,181	$ 48,797
Property management fees received from PMT included in *Other* income	$ —	$ —	$ 314

The Servicing Agreement expires on June 30, 2025.

Investment Management Activities

The Company has a management agreement with PMT (“Management Agreement”), pursuant to which the Company oversees PMT’s business affairs in conformity with the investment policies that are approved and monitored by its board of trustees, for which PFSI collects a base management fee and may collect a performance incentive fee. 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 less than the Target Yield, the high watermark is increased by the difference. If the "net income" is more 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.

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:

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
Base management	$ 34,794	$ 34,538	$ 29,303
Performance incentive	3,007	—	7,189
	$ 37,801	$ 34,538	$ 36,492

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 compensation, the Company was reimbursed $120,000 per fiscal quarter through June 30, 2020.

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 are allocated based on the ratio of PMT's proportion of gross assets compared to all remaining gross assets managed or owned by the Company and/or its affiliates as calculated at each fiscal quarter end.

On June 30, 2020, the Management Agreement was amended and restated for a term of five years (the "2020 Management Agreement"). The terms of the 2020 Management Agreement are materially consistent with those of the prior management agreement, except that, effective July 1, 2020, PMT's reimbursement of PCM's and its affiliate's compensation expenses was increased from $120,000 to $165,000 per fiscal quarter, such amount to be reviewed annually and not preclude reimbursement for any other services performed by the Company or its affiliates.

The Company received reimbursements from PMT for expenses as follows:

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
Reimbursement of:			
Common overhead incurred by the Company	$ 4,906	$ 5,172	$ 5,340
Compensation	660	570	480
Expenses incurred on PMT's behalf, net	18,812	22,583	4,362
	$ 24,378	$ 28,325	$ 10,182
Payments and settlements during the period (1)	$ 284,381	$ 378,162	$ 177,116

(1) Payments and settlements include payments for the operating, investing and financing activities summarized in this note and netting settlements made pursuant to master netting agreements between the Company and PMT.

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 under the Spread Acquisition Agreement. PLS then re-pledges such participation certificates to PNMAC GMSR ISSUER TRUST (the "Issuer Trust") under a master repurchase agreement by and among PLS, the Issuer Trust and PNMAC, as guarantor (the "PC Repurchase Agreement"). The Issuer Trust was formed for the purpose of allowing PLS to finance MSRs and ESS relating to such MSRs (the "GNMA MSR Facility").

In the first quarter of 2021, PLS repurchased the ESS from PMH at fair market value, effectively terminating the borrowing arrangements allowing PMH to finance its participation certificates representing beneficial ownership in ESS. Such ESS is now included in PLS's participation certificates representing beneficial ownership in ESS and MSRs, which PLS pledges in connection with 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:

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
Assets purchased from PennyMac Mortgage Investment Trust under agreements to resell pledged to creditors:			
Activity during the year:			
Net repayments of assets purchased from PMT under agreement to resell	$ 80,862	$ 26,650	$ 23,513
Interest income	$ 387	$ 3,325	$ 6,302
Balance at end of year	$ —	$ 80,862	$ 107,512
Common shares of beneficial interest of PennyMac Mortgage Investment Trust:			
Activity during the year:			
Dividends earned from PennyMac Mortgage Investment Trust	$ 141	$ 114	$ 141
Change in fair value of investment in common shares of PennyMac Mortgage Investment Trust	195	(567)	275
	$ 336	$ (453)	$ 416
Balance at end of year:			
Fair value	$ 1,300	$ 1,105	
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, pay cash to PMT in an amount equal to such fair market value in lieu of transferring such ESS.

During the quarter ended March 31, 2021, the Company repaid its outstanding ESS financing through the repurchase of the ESS from PMT.

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

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
Excess servicing spread financing:			
Balance at beginning of year	$ 131,750	$ 178,586	$ 216,110
Issuance pursuant to recapture agreement	557	2,093	1,757
Accrual of interest	1,280	8,418	10,291
Change in fair value	1,037	(24,970)	(9,256)
Repayment	(134,624)	(32,377)	(40,316)
Balance at end of year	$ —	$ 131,750	$ 178,586
Recapture incurred pursuant to refinancings by the Company of mortgage loans subject to excess servicing spread financing included in *Net gains on loans held for sale at fair value*	$ 614	$ 2,241	$ 1,726

Receivable from and Payable to PMT

Amounts receivable from and payable to PMT are summarized below:

	December 31,	
	2021	2020
	(in thousands)	
Receivable from PMT:		
Allocated expenses and expenses incurred on PMT's behalf	$ 15,431	$ 38,142
Management fees	8,918	8,686
Correspondent production fees	8,894	13,065
Servicing fees	6,848	6,213
Fulfillment fees	—	20,873
Interest on assets purchased under agreements to resell	—	26
	$ 40,091	$ 87,005
Payable to PMT:		
Amounts advanced by PMT to fund its servicing advances	$ 212,066	$ 132,154
Other	15,953	8,152
	$ 228,019	$ 140,306

Exchanged Private National Mortgage Acceptance Company, LLC Unitholders

On May 8, 2013, as part of a reorganization of PNMAC, the Company entered into a tax receivable agreement with certain former owners of PNMAC that provides for the payment from time to time by the Company to PNMAC's exchanged unitholders of 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 PNMAC's assets resulting from exchanges of ownership interests in PNMAC 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.

Although a reorganization in November 2018 eliminated the potential for unitholders to exchange any additional units subject to this tax receivable agreement, the Company continues to be subject to the agreement and will be required to make payments, to the extent any of the tax benefits specified above are deemed to be realized, under the tax receivable agreement to those certain prior owners of PNMAC who effected exchanges of ownership interests in PNMAC for the Company's common stock before the closing of the reorganization.

Following is a summary of activity in *Payable to exchanged Private National Mortgage Acceptance Company, LLC unitholders under tax receivable agreement*:

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
Activity during the year:			
Payments under tax receivable agreement	$ 4,635	$ 10,713	$ —
Repricing of liability	$ —	$ (280)	$ (379)
Balance at end of year	$ 30,530	$ 35,165	$ 46,158

Donor Advised Fund

During the years ended December 31, 2021 and 2020, the Company contributed $5.8 million and $2.3 million, respectively, to a donor advised fund for the purpose of making charitable contributions.

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 loans in the form of servicing arrangements and the liability for representations and warranties it makes to purchasers and insurers of the loans.

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

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
Cash flows:			
Sales proceeds	$ 154,450,942	$ 102,840,312	$ 61,214,102
Servicing fees received (1)	$ 840,104	$ 678,142	$ 587,919

(1) Net of guarantee fees paid to the Agencies

The following table summarizes unpaid principal balance (the "UPB") of the loans sold by the Company in which it maintains continuing involvement:

	December 31,	
	2021	2020
	(in thousands)	
UPB of loans outstanding	$ 254,524,015	$ 199,655,361
Delinquencies (1):		
30-89 days	$ 6,129,597	$ 6,041,366
90 days or more:		
Not in foreclosure	$ 8,399,299	$ 17,799,621
In foreclosure	$ 715,016	$ 581,683
Foreclosed	$ 6,900	$ 10,893
Bankruptcy	$ 1,039,362	$ 1,230,696
Delinquent loans in COVID-19 pandemic-related forbearance plans:		
30-89 days	$ 1,020,290	$ 2,626,617
90 days or more	2,550,703	12,181,174
	$ 3,570,993	$ 14,807,791

(1) Includes delinquent loans in COVID-19 pandemic-related forbearance plans that were requested by borrowers seeking payment relief in accordance with the CARES Act.

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

	December 31, 2021		
	Servicing rights owned	Subservicing	Total loans serviced
		(in thousands)	
Investor:			
Non-affiliated entities:			
Originated	$ 254,524,015	$ —	$ 254,524,015
Purchased	23,861,358	—	23,861,358
	278,385,373	—	278,385,373
PennyMac Mortgage Investment Trust	—	221,892,142	221,892,142
Loans held for sale	9,430,766	—	9,430,766
	$ 287,816,139	$ 221,892,142	$ 509,708,281
Delinquent loans (1):			
30 days	$ 5,338,545	$ 974,055	$ 6,312,600
60 days	1,604,782	190,727	1,795,509
90 days or more:			
Not in foreclosure	9,001,137	1,750,628	10,751,765
In foreclosure	829,494	43,793	873,287
Foreclosed	8,017	16,489	24,506
	$ 16,781,975	$ 2,975,692	$ 19,757,667
Bankruptcy	$ 1,261,980	$ 133,655	$ 1,395,635
Delinquent loans in COVID-19 pandemic-related forbearance plans:			
30 days	$ 554,161	$ 81,580	$ 635,741
60 days	556,990	89,534	646,524
90 days or more	2,732,089	638,703	3,370,792
	$ 3,843,240	$ 809,817	$ 4,653,057
Custodial funds managed by the Company (2)	$ 8,485,081	$ 3,823,527	$ 12,308,608

(1) Includes delinquent loans in COVID-19 pandemic-related forbearance plans that were requested by borrowers seeking payment relief in accordance with the CARES Act.

(2) Custodial funds are cash accounts holding funds on behalf of borrowers and investors relating to 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 loans' borrowers and investors. Placement fees are included in *Interest income* in the Company's consolidated statements of income.

	December 31, 2020		
	Servicing rights owned	Subservicing	Total loans serviced
		(in thousands)	
Investor:			
Non-affiliated entities:			
Originated	$ 199,655,361	$ —	$ 199,655,361
Purchased	41,612,940	—	41,612,940
	241,268,301	—	241,268,301
PennyMac Mortgage Investment Trust	—	174,418,591	174,418,591
Loans held for sale	11,063,938	—	11,063,938
	$ 252,332,239	$ 174,418,591	$ 426,750,830
Delinquent loans (1):			
30 days	$ 5,217,949	$ 901,965	$ 6,119,914
60 days	2,393,267	348,416	2,741,683
90 days or more:			
Not in foreclosure	21,781,226	4,473,217	26,254,443
In foreclosure	751,586	33,312	784,898
Foreclosed	12,938	37,131	50,069
	$ 30,156,966	$ 5,794,041	$ 35,951,007
Bankruptcy	$ 1,698,418	$ 153,179	$ 1,851,597
Delinquent loans in COVID-19 pandemic-related forbearance plans:			
30 days	$ 1,745,257	$ 334,498	$ 2,079,755
60 days	1,479,753	259,019	1,738,772
90 days or more	14,904,052	3,690,505	18,594,557
	$ 18,129,062	$ 4,284,022	$ 22,413,084
Custodial funds managed by the Company (2)	$ 10,660,517	$ 6,086,725	$ 16,747,242

(1) Includes delinquent loans in COVID-19 pandemic-related forbearance plans that were requested by borrowers seeking payment relief in accordance with the CARES Act.

(2) Custodial funds are cash accounts holding funds on behalf of borrowers and investors relating to 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 loans’ borrowers and investors. Placement fees are included in *Interest income* in the Company’s consolidated statements of income.

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

State	December 31, 2021	December 31, 2020
	(in thousands)	
California	$ 67,317,935	$ 60,591,363
Florida	45,222,233	35,360,190
Texas	42,064,686	34,591,419
Virginia	31,442,370	26,209,701
Maryland	23,922,075	19,974,809
All other states	299,738,982	250,023,348
	$ 509,708,281	$ 426,750,830

Note 6—Fair Value

Most of the Company's assets and certain of its liabilities are measured at or 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 the Company has elected to carry the item at its fair value as discussed in the following paragraphs.

Fair Value Accounting Elections

The Company identified its MSRs, its MSLs and all of its non-cash financial assets other than *Assets purchased from PennyMac Mortgage Investment Trust under agreements to resell pledged to creditors*, 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. The Company has also identified its ESS financing to be accounted for at fair value as a means of hedging the related MSRs' fair value risk.

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:

	December 31, 2021			
	Level 1	Level 2	Level 3	Total
	(in thousands)			
Assets:				
Short-term investment	$ 6,873	$ —	$ —	$ 6,873
Loans held for sale at fair value	—	8,613,607	1,128,876	9,742,483
Derivative assets:				
Interest rate lock commitments	—	—	323,473	323,473
Forward purchase contracts	—	20,485	—	20,485
Forward sales contracts	—	40,215	—	40,215
MBS put options	—	7,655	—	7,655
Swaption purchase contracts	—	1,625	—	1,625
Put options on interest rate futures purchase contracts	3,141	—	—	3,141
Call options on interest rate futures purchase contracts	2,078	—	—	2,078
Total derivative assets before netting	5,219	69,980	323,473	398,672
Netting	—	—	—	(64,977)
Total derivative assets	5,219	69,980	323,473	333,695
Mortgage servicing rights at fair value	—	—	3,878,078	3,878,078
Investment in PennyMac Mortgage Investment Trust	1,300	—	—	1,300
	$ 13,392	$ 8,683,587	$ 5,330,427	$ 13,962,429
Liabilities:				
Derivative liabilities:				
Interest rate lock commitments	$ —	$ —	$ 1,280	$ 1,280
Forward purchase contracts	—	18,007	—	18,007
Forward sales contracts	—	35,415	—	35,415
Total derivative liabilities before netting	—	53,422	1,280	54,702
Netting	—	—	—	(32,096)
Total derivative liabilities	—	53,422	1,280	22,606
Mortgage servicing liabilities at fair value	—	—	2,816	2,816
	$ —	$ 53,422	$ 4,096	$ 25,422

	December 31, 2020			
	Level 1	Level 2	Level 3	Total
	(in thousands)			
Assets:				
Short-term investments	$ 15,217	$ —	$ —	$ 15,217
Loans held for sale at fair value	—	6,941,231	4,675,169	11,616,400
Derivative assets:				
Interest rate lock commitments	—	—	679,961	679,961
Forward purchase contracts	—	133,267	—	133,267
Forward sales contracts	—	1,451	—	1,451
MBS put options	—	14,302	—	14,302
Swaption purchase contracts	—	11,939	—	11,939
Put options on interest rate futures purchase contracts	5,520	—	—	5,520
Call options on interest rate futures purchase contracts	1,391	—	—	1,391
Total derivative assets before netting	6,911	160,959	679,961	847,831
Netting	—	—	—	(136,593)
Total derivative assets	6,911	160,959	679,961	711,238
Mortgage servicing rights at fair value	—	—	2,581,174	2,581,174
Investment in PennyMac Mortgage Investment Trust	1,105	—	—	1,105
	$ 23,233	$ 7,102,190	$ 7,936,304	$ 14,925,134
Liabilities:				
Excess servicing spread financing payable to PennyMac Mortgage Investment Trust at fair value	$ —	$ —	$ 131,750	$ 131,750
Derivative liabilities:				
Interest rate lock commitments	—	—	2,935	2,935
Forward purchase contracts	—	1,276	—	1,276
Forward sales contracts	—	251,149	—	251,149
Total derivative liabilities before netting	—	252,425	2,935	255,360
Netting	—	—	—	(212,722)
Total derivative liabilities	—	252,425	2,935	42,638
Mortgage servicing liabilities at fair value	—	—	45,324	45,324
	$ —	$ 252,425	$ 180,009	$ 219,712

As shown above, certain of the Company's loans held for sale, IRLCs, repurchase agreement derivatives, MSRs, ESS and MSLs are measured using Level 3 fair value inputs. Following are roll forwards of assets and liabilities measured at fair value using "Level 3" fair value inputs at either the beginning or the end of the year presented for each of the three years ended December 31, 2021:

	Year ended December 31, 2021			
Assets	**Loans held for sale**	**Net interest rate lock commitments (1)**	**Mortgage servicing rights**	**Total**
	(in thousands)			
Balance, December 31, 2020	$ 4,675,169	$ 677,026	$ 2,581,174	$ 7,933,369
Purchases and issuances, net	20,330,785	1,654,476	—	21,985,261
Capitalization of interest and advances	169,053	—	—	169,053
Sales and repayments	(11,783,818)	—	—	(11,783,818)
Mortgage servicing rights resulting from loan sales	—	—	1,861,949	1,861,949
Changes in fair value included in income arising from:				
Changes in instrument-specific credit risk	285,501	—	—	285,501
Other factors	—	489,547	(565,045)	(75,498)
	285,501	489,547	(565,045)	210,003
Transfers from Level 3 to Level 2	(12,547,732)	—	—	(12,547,732)
Transfers to real estate acquired in settlement of loans	(82)	—	—	(82)
Transfers to loans held for sale	—	(2,498,856)	—	(2,498,856)
Balance, December 31, 2021	$ 1,128,876	$ 322,193	$ 3,878,078	$ 5,329,147
Changes in fair value recognized during the period relating to assets still held at December 31, 2021	$ 22,516	$ 322,193	$ (565,045)	$ (220,336)

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

	Year ended December 31, 2021		
Liabilities	**Excess servicing spread financing**	**Mortgage servicing liabilities**	**Total**
	(in thousands)		
Balance, December 31, 2020	$ 131,750	$ 45,324	$ 177,074
Issuance of excess servicing spread financing pursuant to a recapture agreement with PennyMac Mortgage Investment Trust	557	—	557
Accrual of interest	1,280	—	1,280
Mortgage servicing liabilities resulting from loan sales	—	106,631	106,631
Changes in fair value included in income	1,037	(149,139)	(148,102)
Repayments	(134,624)	—	(134,624)
Balance, December 31, 2021	$ —	$ 2,816	$ 2,816
Changes in fair value recognized during the period relating to liabilities still outstanding at December 31, 2021	$ —	$ (3,156)	$ (3,156)

Assets	Year ended December 31, 2020				
	Loans held for sale	Net interest rate lock commitments (1)	Repurchase agreement derivatives	Mortgage servicing rights	Total
			(in thousands)		
Balance, December 31, 2019	$ 383,878	$ 136,650	$ 8,187	$ 2,926,790	$ 3,455,505
Purchases and issuances, net	9,672,322	2,028,957	—	25,473	11,726,752
Capitalization of interest and advances	119,037	—	—	—	119,037
Sales and repayments	(2,381,493)	—	(8,270)	—	(2,389,763)
Mortgage servicing rights resulting from loan sales	—	—	—	1,138,045	1,138,045
Changes in fair value included in income arising from:					
Changes in instrument-specific credit risk	127,780	—	—	—	127,780
Other factors	—	1,254,235	83	(1,509,134)	(254,816)
	127,780	1,254,235	83	(1,509,134)	(127,036)
Transfers from Level 3 to Level 2	(3,246,282)	—	—	—	(3,246,282)
Transfers to real estate acquired in settlement of loans	(73)	—	—	—	(73)
Transfers of interest rate lock commitments to loans held for sale	—	(2,742,816)	—	—	(2,742,816)
Balance, December 31, 2020	$ 4,675,169	$ 677,026	$ —	$ 2,581,174	$ 7,933,369
Changes in fair value recognized during the year relating to assets still held at December 31, 2020	$ 153,474	$ 677,026	$ —	$ (1,509,134)	$ (678,634)

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

Liabilities	Year ended December 31, 2020		
	Excess servicing spread financing	Mortgage servicing liabilities	Total
		(in thousands)	
Balance, December 31, 2019	$ 178,586	$ 29,140	$ 207,726
Issuance of excess servicing spread financing pursuant to a recapture agreement with PennyMac Mortgage Investment Trust	2,093	—	2,093
Accrual of interest	8,418	—	8,418
Mortgage servicing liabilities resulting from loan sales	—	23,325	23,325
Changes in fair value included in income	(24,970)	(7,141)	(32,111)
Repayments	(32,377)	—	(32,377)
Balance, December 31, 2020	$ 131,750	$ 45,324	$ 177,074
Changes in fair value recognized during the year relating to liabilities still outstanding at December 31, 2020	$ (24,970)	$ (7,141)	$ (32,111)

Assets	Year ended December 31, 2019				
	Loans held for sale	Net interest rate lock commitments (1)	Repurchase agreement derivatives	Mortgage servicing rights	Total
			(in thousands)		
Balance, December 31, 2018	$ 260,008	$ 49,338	$ 26,770	$ 2,820,612	$ 3,156,728
Purchases and issuances, net	5,163,730	570,072	15,019	227,445	5,976,266
Capitalization of interest and advances	72,302	—	—	—	72,302
Sales and repayments	(3,456,856)	—	(31,993)	—	(3,488,849)
Mortgage servicing rights resulting from loan sales	—	—	—	884,876	884,876
Changes in fair value included in income arising from:					
Changes in instrument-specific credit risk	(6,332)	—	—	—	(6,332)
Other factors	—	331,067	(1,609)	(1,006,143)	(676,685)
	(6,332)	331,067	(1,609)	(1,006,143)	(683,017)
Transfers from Level 3 to Level 2	(1,646,554)	—	—	—	(1,646,554)
Transfer to real estate acquired in settlement of loans	(2,420)	—	—	—	(2,420)
Transfers to loans held for sale	—	(813,827)	—	—	(813,827)
Balance, December 31, 2019	$ 383,878	$ 136,650	$ 8,187	$ 2,926,790	$ 3,455,505
Changes in fair value recognized during the year relating to assets still held at December 31, 2019	$ (5,755)	$ 136,650	$ 165	$ (1,006,143)	$ (875,083)

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

Liabilities	Year ended December 31, 2019		
	Excess servicing spread financing	Mortgage servicing liabilities	Total
		(in thousands)	
Balance, December 31, 2018	$ 216,110	$ 8,681	$ 224,791
Issuance of excess servicing spread financing pursuant to a recapture agreement with PennyMac Mortgage Investment Trust	1,757	—	1,757
Accrual of interest	10,291	—	10,291
Mortgage servicing liabilities resulting from loan sales	—	37,988	37,988
Changes in fair value included in income	(9,256)	(17,529)	(26,785)
Repayments	(40,316)	—	(40,316)
Balance, December 31, 2019	$ 178,586	$ 29,140	$ 207,726
Changes in fair value recognized during the year relating to liabilities still outstanding at December 31, 2019	$ (9,256)	$ (17,529)	$ (26,785)

The Company had transfers among the fair value levels arising from the return to salability in the active secondary market of certain loans held for sale and from transfers of IRLCs to loans held for sale at fair value upon purchase or funding.

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 the Company's election of the fair value option by income statement line item are summarized below:

	Year ended December 31,								
	2021			2020			2019		
	Net gains on loans held for sale at fair value	Net loan servicing fees	Total	Net gains on loans held for sale at fair value	Net loan servicing fees	Total	Net gains on loans held for sale at fair value	Net loan servicing fees	Total
	(in thousands)								
Assets:									
Loans held for sale	$ 2,568,318	$ —	$ 2,568,318	$ 2,899,314	$ —	$ 2,899,314	$ 811,895	$ —	$ 811,895
Mortgage servicing rights	—	(565,045)	(565,045)	—	(1,509,134)	(1,509,134)	—	(1,006,143)	(1,006,143)
	$ 2,568,318	$ (565,045)	$ 2,003,273	$ 2,899,314	$ (1,509,134)	$ 1,390,180	$ 811,895	$ (1,006,143)	$ (194,248)
Liabilities:									
Excess servicing spread financing payable to PennyMac Mortgage Investment Trust	$ —	$ (1,037)	$ (1,037)	$ —	$ 24,970	$ 24,970	$ —	$ 9,256	$ 9,256
Mortgage servicing liabilities	—	149,139	149,139	—	7,141	7,141	—	17,529	17,529
	$ —	$ 148,102	$ 148,102	$ —	$ 32,111	$ 32,111	$ —	$ 26,785	$ 26,785

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

	December 31, 2021			December 31, 2020		
Loans held for sale	Fair value	Principal amount due upon maturity	Difference	Fair value	Principal amount due upon maturity	Difference
	(in thousands)					
Current through 89 days delinquent	$ 9,577,398	$ 9,263,242	$ 314,156	$ 11,304,308	$ 10,743,814	$ 560,494
90 days or more delinquent:						
Not in foreclosure	153,162	153,875	(713)	275,419	280,595	(5,176)
In foreclosure	11,923	13,649	(1,726)	36,673	39,529	(2,856)
	$ 9,742,483	$ 9,430,766	$ 311,717	$ 11,616,400	$ 11,063,938	$ 552,462

Assets Measured at Fair Value on a Nonrecurring Basis

Following is a summary of assets held at year end that were measured based on fair value on a nonrecurring basis during the year:

Real estate acquired in settlement of loans	Level 1	Level 2	Level 3	Total
	(in thousands)			
December 31, 2021	$ —	$ —	$ 2,588	$ 2,588
December 31, 2020	$ —	$ —	$ 1,450	$ 1,450

The following table summarizes the total net losses recognized on assets measured based on fair values on a nonrecurring basis during the year:

	Year ended December 31,		
	2021	2020	2019
	(in thousands)		
Real estate acquired in settlement of loans	$ 799	$ 814	$ 1,913

Fair Value of Financial Instruments Carried at Amortized Cost

The Company's *Assets purchased from PennyMac Mortgage Investment Trust under agreements to resell pledged to creditors*, *Assets sold under agreements to repurchase*, *Mortgage loan participation purchase and sale agreements*, *Obligations under capital lease, Notes payable secured by mortgage servicing assets* and *Unsecured senior notes* are carried at amortized cost.

These assets and liabilities are classified as "Level 3" fair value items due to the Company's reliance on unobservable inputs to estimate their fair values. The Company has concluded that the fair values of these assets and liabilities other than the *Notes payable secured by mortgage servicing assets* and the *Unsecured senior notes* approximate their carrying values due to their short terms and/or variable interest rates.

The Company estimates the fair value of the *Notes payable secured by mortgage servicing assets* and the *Unsecured senior notes* based on non-affiliate broker indications of fair value. The fair value and carrying value of these notes are summarized below:

	December 31, 2021		December 31, 2020	
	Fair value	Carrying value	Fair value	Carrying value
	(in thousands)			
Notes payable secured by mortgage servicing assets	$ 1,302,640	$ 1,297,622	$ 1,268,304	$ 1,295,840
Unsecured senior notes	$ 1,790,375	$ 1,776,219	$ 685,750	$ 645,820

Valuation Governance

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, derivative liabilities and all of its MSRs, ESS, and MSLs are "Level 3" fair value assets and liabilities which require 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, the Company 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 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 valuation committee. The Company's valuation committee includes the Company's chief financial, investment and credit officers as well as other senior members of the Company's finance, capital markets and risk management staffs.

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

The Company has assigned responsibility for developing the fair values of IRLCs 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.

Valuation Techniques and Inputs

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:

Loans Held for Sale

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

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

- Government guaranteed or insured loans purchased by the Company from Ginnie Mae guaranteed pools in its loan servicing portfolio. The Company's right to purchase government guaranteed or insured loans arises as the result of the loan being at least three months delinquent on the date of purchase 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 loans may be resold to investors and thereafter may be repurchased to the extent eligible for resale into a new Ginnie Mae guaranteed security.

  Loans become eligible for resale into a new Ginnie Mae security when the loans become current either through completion of a modification of the loan's terms or after six months of timely payments following either the completion of certain types of payment deferral programs or borrower reperformance and when the issuance date of the new security is at least 210 days after the date the loan was last delinquent.

- Loans that are not saleable into active markets due to identification of a defect by the Company or to the repurchase by the Company of a loan with an identified defect.

The Company uses a discounted cash flow model to estimate the fair value of its "Level 3" fair value loans held for sale. The significant unobservable inputs used in the fair value measurement of the Company's "Level 3" fair value loans held for sale are discount rates, home price projections, voluntary and total prepayment/resale speeds. Significant changes in any of those inputs in isolation could result in a significant change to the 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 loans held for sale at fair value:

	December 31,	
	2021	2020
Fair value (in thousands)	$ 1,128,876	$ 4,675,169
Key inputs (1):		
Discount rate:		
Range	2.2% – 9.2%	2.8% – 9.2%
Weighted average	2.3%	2.8%
Twelve-month projected housing price index change:		
Range	6.1% – 6.5%	2.7% – 3.5%
Weighted average	6.2%	3.0%
Voluntary prepayment/resale speed (2):		
Range	0.4% – 30.3%	0.4% – 31.3%
Weighted average	22.0%	21.9%
Total prepayment speed (3):		
Range	0.4% – 39.3%	0.5% – 42.9%
Weighted average	28.2%	29.2%

(1) Weighted average inputs are based on fair value of the "Level 3" loans.

(2) Voluntary prepayment/resale speed is measured using Life Voluntary Conditional Prepayment Rate ("CPR").

(3) Total prepayment speed is measured using Life Total CPR, which includes both voluntary and involuntary prepayment and resale rates.

Changes in fair value relating to loans held for sale as the result of changes in the loan's instrument specific credit risk are indicated by successful modifications of the loan's terms or changes in the respective loan's delinquency status and performance history at year end from the later of the beginning of the year or acquisition date. Changes in fair value of loans held for sale are included in *Net gains on loans held for sale at fair value* in the Company's consolidated statements of income.

Derivative Financial Instruments

Interest Rate Lock Commitments

IRLCs are categorized as "Level 3" fair value assets or liabilities. The Company estimates the fair value of IRLCs based on quoted Agency MBS prices, its estimate of the fair value of the MSRs it expects to receive in the sale of the loans and the probability that the loans 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 MSR component of IRLC fair value, but increase the pull-through rate for the 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 loans acquired for sale at fair value* in the consolidated statements of income.

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

	December 31,	
	2021	2020
Fair value (in thousands) (1)	$ 322,193	$ 677,026
Key inputs (2):		
Pull-through rate:		
Range	8.0% – 100%	10.1% – 100%
Weighted average	78.4%	82.7%
Mortgage servicing rights fair value expressed as:		
Servicing fee multiple:		
Range	(8.5) – 6.7	0.7 – 5.3
Weighted average	3.8	3.6
Percentage of loan commitment amount		
Range	(1.6)% – 3.6%	0.1% – 2.6%
Weighted average	1.5%	1.2%

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

(2) Weighted average inputs are based on the committed amounts.

Hedging Derivatives

Fair value of hedging derivative financial instruments that are actively traded on exchanges 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 loans acquired for sale at fair value,* or *Net loan servicing fees – Mortgage servicing rights hedging results*, as applicable, in the consolidated statements of income.

Repurchase Agreement Derivatives

Through August 21, 2019, the Company had a master repurchase agreement that included incentives for financing loans approved for satisfying certain consumer relief characteristics. These incentives are classified for financial reporting purposes as embedded derivatives and are separated for reporting purposes from the master repurchase agreement. The Company classifies repurchase agreement derivatives as “Level 3” fair value assets. The significant unobservable inputs into the valuation of repurchase agreement derivative assets are the discount rate and the Company’s expected approval rate of the loans financed under the master repurchase agreement. Changes in fair value of repurchase agreement derivatives are included in *Interest expense* in the consolidated statements of income.

Mortgage Servicing Rights

MSRs are categorized as “Level 3” fair value assets. The Company uses a discounted cash flow approach to estimate the fair value of MSRs. The key inputs used in the estimation of the fair value of MSRs include the applicable pricing spread (discount rate), prepayment speed of the underlying mortgage loans, and annual per-loan cost to service loans, all of which are unobservable. Significant changes to any of those inputs in isolation could result in a significant change in the MSR fair value measurement. Changes in these key inputs are not necessarily directly related. Changes in the fair value of MSRs are included in *Net loan servicing fees—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 MSRs at the time of initial recognition, excluding MSR purchases:

	Year ended December 31,		
	2021	2020	2019
	(Amount recognized and unpaid principal balance of underlying mortgage loans amounts in thousands)		
Amount recognized	$1,861,949	$1,138,045	$884,876
Pool characteristics:			
Unpaid principal balance of underlying mortgage loans	$138,319,425	$96,571,835	$56,038,354
Weighted average servicing fee rate (in basis points)	34	35	41
Key inputs (1):			
Pricing spread (2):			
Range	6.0% – 16.9%	6.8% – 18.1%	5.5% – 16.2%
Weighted average	8.8%	9.4%	8.5%
Annual total prepayment speed (3):			
Range	6.1% – 31.4%	7.2% – 49.8%	7.7% – 32.8%
Weighted average	8.6%	11.9%	13.5%
Equivalent average life (in years):			
Range	3.0 – 9.2	1.5 – 9.1	2.6 – 8.2
Weighted average	8.1	6.7	6.2
Annual per-loan cost of servicing:			
Range	$80 – $117	$77 – $117	$78 – $100
Weighted average	$103	$102	$97

(1) Weighted average inputs are based on UPB of the underlying mortgage loans.

(2) 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")/swap curve for purposes of discounting cash flows relating to MSRs.

(3) Annual total prepayment speed is measured using Life Total CPR, which includes both voluntary and involuntary prepayments. Equivalent average life is provided as supplementary information.

Following is a quantitative summary of key inputs used in the valuation of the Company's MSRs at year end and the effect on the fair value from adverse changes in those inputs:

	December 31,	
	2021	2020
	(Fair value, unpaid principal balance of underlying mortgage loans and effect on fair value amounts in thousands)	
Fair value	$ 3,878,078	$ 2,581,174
Pool characteristics:		
Unpaid principal balance of underlying mortgage loans	$ 278,324,780	$ 238,410,809
Weighted average note interest rate	3.2%	3.6%
Weighted average servicing fee rate (in basis points)	34	35
Key inputs (1):		
Pricing spread (2):		
Range	5.3% – 15.5%	8.0% – 17.6%
Weighted average	7.7%	10.1%
Effect on fair value of:		
5% adverse change	($59,577)	($46,356)
10% adverse change	($117,352)	($90,936)
20% adverse change	($227,791)	($175,137)
Annual total prepayment speed (3):		
Range	7.9% – 26.7%	10.1% – 32.9%
Weighted average	10.7%	13.7%
Equivalent average life (in years):		
Range	3.1 – 7.7	2.3 – 7.7
Weighted average	6.8	6.0
Effect on fair value of:		
5% adverse change	($80,109)	($66,536)
10% adverse change	($157,252)	($130,253)
20% adverse change	($303,259)	($249,843)
Per-loan annual cost of servicing:		
Range	$79 – $197	$79 – $117
Weighted average	$108	$107
Effect on fair value of:		
5% adverse change	($32,979)	($25,482)
10% adverse change	($65,958)	($50,964)
20% adverse change	($131,916)	($101,929)

(1) Weighted average inputs are based on UPB of the underlying mortgage loans.

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

(3) Annual total prepayment speed is measured using Life Total CPR, which includes both voluntary and involuntary prepayments. Equivalent average life is provided as supplementary information.

The preceding sensitivity analyses are limited in that they were performed as of a particular date; only contemplate the movements in the indicated inputs; do not incorporate changes to other inputs; are subject to the accuracy of the 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 analyses should not be viewed as earnings forecasts.

Excess Servicing Spread Financing at Fair Value

ESS is categorized as a "Level 3" fair value liability. Because the ESS is a claim to a portion of the cash flows from MSRs, the Company's approach to 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 MSRs 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 discourage 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 loan servicing fees—Change in fair value of excess servicing spread payable to PennyMac Mortgage Investment Trust.* During the quarter ended March 31, 2021, the Company repaid its outstanding ESS financing payable to PMT.

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

	December 31, 2020
Fair value (in thousands)	$ 131,750
Pool characteristics:	
Unpaid principal balance of underlying loans (in thousands)	$ 15,833,050
Average servicing fee rate (in basis points)	34
Average excess servicing spread (in basis points)	19
Key inputs (1):	
Pricing spread (2):	
Range	4.9% – 5.3%
Weighted average	5.1%
Annual total prepayment speed (3):	
Range	9.6% – 18.3%
Weighted average	11.7%
Equivalent average life (in years):	
Range	2.3 – 6.6
Weighted average	5.8

(1) Weighted average inputs are based on UPB of the underlying mortgage loans.

(2) The Company applies a pricing spread to the United States Dollar LIBOR/swap curve for purposes of discounting cash flows relating to ESS.

(3) Annual total prepayment speed is measured using Life Total CPR, which includes both voluntary and involuntary prepayments. Equivalent average life is provided as supplementary information.

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. The key inputs used in the estimation of the fair value of MSLs include the applicable pricing spread, annual total prepayment speed, and the per-loan annual cost of servicing the underlying loans. Changes in the fair value of MSLs are included in *Net servicing fees—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:

	December 31, 2021	December 31, 2020
Fair value (in thousands)	$ 2,816	$ 45,324
Pool characteristics (1):		
Unpaid principal balance of underlying mortgage loans (in thousands)	$ 60,593	$ 2,857,492
Servicing fee rate (in basis points)	25	25
Key inputs (1) (2):		
Pricing spread (3)	6.9%	7.6%
Annual total prepayment speed (4)	19.8%	33.3%
Equivalent average life (in years)	4.1	3.2
Per-loan annual cost of servicing	$ 1,406	$ 305

(1) During the year ended December 31, 2021, significant changes were made to valuation inputs used to estimate the fair value of MSLs in recognition of the observed increase in the proportion of performing government guaranteed or insured mortgage loans and reduced expected costs and losses from defaulted government-insured or guaranteed mortgage loans underlying the Company's MSLs. As a result of this improved performance, a significant portion of the servicing relating to these loans became servicing assets and are classified as MSRs at December 31, 2021.

(2) Weighted average inputs are based on UPB of the underlying mortgage loans.

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

(4) Annual total prepayment speed is measured using Life Total CPR, which includes both voluntary and involuntary prepayments. Equivalent average life is provided as supplementary information.

Note 7—Loans Held for Sale at Fair Value

Loans held for sale at fair value are summarized below:

Loan type	December 31, 2021	December 31, 2020
	(in thousands)	
Government-insured or guaranteed	$ 6,030,518	$ 5,683,786
Conventional conforming	2,583,089	1,257,445
Purchased from Ginnie Mae pools serviced by the Company	1,082,444	4,661,378
Repurchased pursuant to representations and warranties	46,432	13,791
	$ 9,742,483	$ 11,616,400
Fair value of loans pledged to secure:		
Assets sold under agreements to repurchase	$ 8,629,861	$ 10,912,178
Mortgage loan participation purchase and sale agreements	505,716	545,500
	$ 9,135,577	$ 11,457,678

Note 8—Derivative Activities

Derivative Notional Amounts and Fair Value of Derivatives

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

	December 31, 2021			December 31, 2020		
		Fair value			Fair value	
Instrument	Notional amount (1)	Derivative assets	Derivative liabilities	Notional amount (1)	Derivative assets	Derivative liabilities
			(in thousands)			
Not subject to master netting arrangements:						
Interest rate lock commitments	14,111,795	$ 323,473	$ 1,280	20,624,535	$ 679,961	$ 2,935
Derivatives subject to master netting arrangements (2):						
Forward purchase contracts	22,007,383	20,485	18,007	31,689,543	133,267	1,276
Forward sales contracts	34,429,676	40,215	35,415	50,438,967	1,451	251,149
MBS put options	9,550,000	7,655	—	12,025,000	14,302	—
Swaption purchase contracts	5,375,000	1,625	—	3,375,000	11,939	—
Put options on interest rate futures purchase contracts	2,450,000	3,141	—	4,750,000	5,520	—
Call options on interest rate futures purchase contracts	1,250,000	2,078	—	850,000	1,391	—
Treasury futures purchase contracts	1,544,800	—	—	1,065,000	—	—
Treasury futures sale contracts	1,925,000	—	—	1,555,000	—	—
Interest rate swap futures purchase contracts	3,010,600	—	—	4,801,700	—	—
Interest rate swap futures sale contracts	2,187,200	—	—	711,700	—	—
Total derivatives before netting		398,672	54,702		847,831	255,360
Netting		(64,977)	(32,096)		(136,593)	(212,722)
		$ 333,695	$ 22,606		$ 711,238	$ 42,638
Deposits (received from) placed with derivative counterparties, net		$ (32,881)			$ 76,129	

(1) Notional amounts provide an indication of the volume of the Company's derivative activity.

(2) All of the derivatives used for hedging purposes are interest rate derivatives and are used as economic hedges.

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.

	December 31, 2021			December 31, 2020		
	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 - IRLCs	$ 323,473	$ —	$ 323,473	$ 679,961	$ —	$ 679,961
Derivatives subject to master netting arrangements:						
Forward purchase contracts	20,485	—	20,485	133,267	—	133,267
Forward sale contracts	40,215	—	40,215	1,451	—	1,451
MBS put options	7,655	—	7,655	14,302	—	14,302
Swaption purchase contracts	1,625	—	1,625	11,939	—	11,939
Put options on interest rate futures purchase contracts	3,141	—	3,141	5,520	—	5,520
Call options on interest rate futures purchase contracts	2,078	—	2,078	1,391	—	1,391
Netting	—	(64,977)	(64,977)	—	(136,593)	(136,593)
	75,199	(64,977)	10,222	167,870	(136,593)	31,277
	$ 398,672	$ (64,977)	$ 333,695	$ 847,831	$ (136,593)	$ 711,238

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.

	December 31, 2021				December 31, 2020			
		Gross amount not offset in the consolidated balance sheet				Gross amount not offset in the consolidated balance sheet		
	Net amount of assets in the consolidated balance sheet	Financial instruments	Cash collateral received	Net amount	Net amount of assets in the consolidated balance sheet	Financial instruments	Cash collateral received	Net amount
	(in thousands)							
Interest rate lock commitments	$ 323,473	$ —	$ —	$ 323,473	$ 679,961	$ —	$ —	$ 679,961
RJ O'Brien	5,219	—	—	5,219	6,910	—	—	6,910
Bank of America, N.A.	3,005	—	—	3,005	—	—	—	—
JPMorgan Chase Bank, N.A.	1,744	—	—	1,744	17,149	—	—	17,149
Morgan Stanley Bank, N.A.	—	—	—	—	2,443	—	—	2,443
Citibank, N.A.	—	—	—	—	2,026	—	—	2,026
Others	254	—	—	254	2,749	—	—	2,749
	$ 333,695	$ —	$ —	$ 333,695	$ 711,238	$ —	$ —	$ 711,238

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.

	December 31, 2021			December 31, 2020		
	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	$ 1,280	$ —	$ 1,280	$ 2,935	$ —	$ 2,935
Derivatives subject to a master netting arrangement:						
Forward purchase contracts	18,007	—	18,007	1,276	—	1,276
Forward sale contracts	35,415	—	35,415	251,149	—	251,149
Netting	—	(32,096)	(32,096)	—	(212,722)	(212,722)
	53,422	(32,096)	21,326	252,425	(212,722)	39,703
Total derivatives	54,702	(32,096)	22,606	255,360	(212,722)	42,638
Assets sold under agreements to repurchase:						
Amount outstanding	7,297,360	—	7,297,360	9,663,995	—	9,663,995
Unamortized debt issuance cost	(4,625)	—	(4,625)	(9,198)	—	(9,198)
	7,292,735	—	7,292,735	9,654,797	—	9,654,797
	$ 7,347,437	$ (32,096)	$ 7,315,341	$ 9,910,157	$ (212,722)	$ 9,697,435

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.

	December 31, 2021				December 31, 2020			
		Gross amounts not offset in the consolidated balance sheet				Gross amounts not offset in the consolidated balance sheet		
	Net amount of liabilities in the consolidated balance sheet	Financial instruments	Cash collateral pledged	Net amount	Net amount of liabilities in the consolidated balance sheet	Financial instruments	Cash collateral pledged	Net amount
	(in thousands)							
Interest rate lock commitments	$ 1,280	$ —	$ —	$ 1,280	$ 2,935	$ —	$ —	$ 2,935
Credit Suisse First Boston Mortgage Capital LLC	1,974,278	(1,969,670)	—	4,608	3,947,752	(3,943,149)	—	4,603
Bank of America, N.A.	1,758,690	(1,758,690)	—	—	634,523	(626,550)	—	7,973
Goldman Sachs	853,147	(850,918)	—	2,229	—	—	—	—
Barclays Capital	677,419	(676,685)	—	734	596,729	(596,729)	—	—
Royal Bank of Canada	496,064	(496,064)	—	—	406,348	(406,348)	—	—
Citibank, N.A.	403,003	(402,806)	—	197	505,625	(505,625)	—	—
BNP Paribas	349,172	(349,172)	—	—	337,823	(336,545)	—	1,278
JPMorgan Chase Bank, N.A.	300,912	(300,912)	—	—	2,752,279	(2,752,279)	—	—
Morgan Stanley Bank, N.A.	299,580	(292,105)	—	7,475	331,546	(331,546)	—	—
Wells Fargo Bank, N.A.	203,779	(200,338)	—	3,441	169,085	(165,224)	—	3,861
Others	2,642	—	—	2,642	21,988	—	—	21,988
	$ 7,319,966	$ (7,297,360)	$ —	$ 22,606	$ 9,706,633	$ (9,663,995)	$ —	$ 42,638

Following are the gains (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	Year ended December 31, 2021	2020	2019
		(in thousands)		
Interest rate lock commitments	Net gains on loans held for sale at fair value (1)	$ (354,833)	$ 540,376	$ 87,312
Repurchase agreement derivatives	Interest expense	$ —	$ 83	$ (1,609)
Hedged item:				
Interest rate lock commitments and loans held for sale	Net gains on loans held for sale at fair value	$ 319,141	$ (650,898)	$ (157,806)
Mortgage servicing rights	Net loan servicing fees–Mortgage servicing rights hedging results	$ (475,215)	$ 918,180	$ 395,497

(1) Represents net increase in fair value of IRLCs from the beginning to the end of the year. Amounts recognized at the date of commitment and fair value changes recognized during the period until purchase of the underlying loans are shown in the rollforward of IRLCs for the period in Note 6 – *Fair Value – Assets and Liabilities Measured at Fair Value on a Recurring Basis.*

Note 9—Mortgage Servicing Rights and Mortgage Servicing Liabilities

Mortgage Servicing Rights Carried at Fair Value:

The activity in MSRs carried at fair value is as follows:

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
Balance at beginning of year	$ 2,581,174	$ 2,926,790	$ 2,820,612
Additions:			
Resulting from loan sales	1,861,949	1,138,045	884,876
Purchases	—	25,473	227,445
	1,861,949	1,163,518	1,112,321
Change in fair value due to:			
Changes in valuation inputs used in valuation model (1)	(136,350)	(1,078,084)	(550,666)
Other changes in fair value (2)	(428,695)	(431,050)	(455,477)
Total change in fair value	(565,045)	(1,509,134)	(1,006,143)
Balance at end of year	$ 3,878,078	$ 2,581,174	$ 2,926,790
UPB of underlying loans at end of year	$ 278,324,780	$ 238,410,809	$ 225,787,104

	December 31,	
	2021	2020
	(in thousands)	
Fair value of mortgage servicing rights pledged to secure *Assets sold under agreements to repurchase* and *Notes payable secured by mortgage servicing assets*	$ 3,856,791	$ 2,577,964

(1) Principally reflects changes in pricing spread, annual total prepayment speed, per loan annual cost of servicing and UPB of underlying loan inputs.

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

Mortgage Servicing Liabilities Carried at Fair Value:

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

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
Balance at beginning of year	$ 45,324	$ 29,140	$ 8,681
Mortgage servicing liabilities resulting from loan sales	106,631	23,325	37,988
Changes in fair value due to (1):			
Changes in valuation inputs used in valuation model	(68,020)	31,757	8,377
Other changes in fair value (2)	(81,119)	(38,898)	(25,906)
Total change in fair value	(149,139)	(7,141)	(17,529)
Balance at end of year	$ 2,816	$ 45,324	$ 29,140
UPB of underlying loans at end of year	$ 60,593	$ 2,857,492	$ 2,758,454

(1) During the year ended December 31, 2021, significant changes were made to valuation inputs used to estimate the fair value of MSLs in recognition of the observed increase in the proportion of performing government-insured or guaranteed mortgage loans and reduced expected costs and losses from defaulted government-insured or guaranteed mortgage loans underlying the Company's MSLs. As a result of this improved performance, a significant portion of the servicing relating to these loans became servicing assets and are classified as MSRs at December 31, 2021.

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

Contractual servicing fees relating to MSRs and MSLs are recorded in *Net 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 loan servicing fees—Loan servicing fees—Other* on the Company's consolidated statements of income. Such amounts are summarized below:

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
Contractual servicing fees	$ 875,570	$ 814,646	$ 730,165
Other fees:			
Late charges	29,848	36,339	43,350
Other	29,505	25,543	14,258
	$ 934,923	$ 876,528	$ 787,773

Note 10—Leases

Substantially all of the Company's lease agreements are operating leases and relate to its office facilities. The Company's operating lease agreements have remaining terms ranging from less than one year to ten years; some of these operating lease agreements include options to extend their terms for up to five years. None of the Company's operating lease agreements require the Company to make variable lease payments.

The Company's leases are summarized below:

	Year ended December 31,		
	2021	2020	2019
	(dollars in thousands)		
Lease expense:			
Operating leases	$ 18,363	$ 16,223	$ 13,644
Short-term leases	904	1,153	821
Sublease income	—	—	(94)
Net lease expense included in *Occupancy and equipment*	$ 19,267	$ 17,376	$ 14,371
Other information:			
Payments for operating leases	$ 20,145	$ 16,524	$ 16,167
Operating lease right-of-use assets recognized			
Upon adoption Accounting Standards Update 2016-02, *Leases (Topic 842)*	$ —	$ —	$ 58,713
New leases	28,401	14,128	24,535
	$ 28,401	$ 14,128	$ 83,248
Period end weighted averages:			
Remaining lease term (in years)	5.7	6.3	7.1
Discount rate	4.0%	4.1%	4.3%

The maturities of the Company's operating lease liabilities are summarized below:

Year ended December 31,	Operating leases
	(in thousands)
2022	$ 20,500
2023	21,869
2024	21,900
2025	21,385
2026	16,644
Thereafter	19,536
Total lease payments	121,834
Less imputed interest	(11,831)
Operating lease liability	$ 110,003

Note 11—Other Assets

Other assets are summarized below:

	December 31,	
	2021	2020
	(in thousands)	
Capitalized software, net	$ 109,480	$ 81,434
Margin deposits	100,482	116,881
Prepaid expenses	64,924	53,975
Deposits securing *Assets sold under agreements to repurchase* and *Notes payable secured by mortgage servicing assets*	36,632	153,054
Furniture, fixtures, equipment and building improvements, net	31,677	32,217
Servicing fees receivable, net	23,672	54,679
Real estate acquired in settlement of loans	7,474	12,158
Other	242,275	187,771
	$ 616,616	$ 692,169
Deposits pledged to secure *Assets sold under agreements to repurchase* and *Notes payable secured by mortgage servicing assets*	$ 36,632	$ 153,054
Assets pledged to secure *Obligations under capital lease*:		
Capitalized software, net	4,546	7,675
Furniture, fixture, equipment and building improvements, net	4,116	5,689
	$ 45,294	$ 166,418

Capitalized software is summarized below:

	December 31,	
	2021	2020
	(in thousands)	
Cost	$ 159,407	$ 111,156
Less: Accumulated amortization	(49,927)	(29,722)
	$ 109,480	$ 81,434

Software amortization expense totaled $20.2 million, $16.6 million and $6.0 million for the years ended December 31, 2021, 2020 and 2019, respectively. The Company recorded $728,000 and $13.1 million of impairment of capitalized software during the years ended December 31, 2021, and 2020, respectively, which are included in *Technology* expense. No impairment was recorded during the year ended December 31, 2019.

Furniture, fixtures, equipment and building improvements are summarized below:

	December 31,	
	2021	2020
	(in thousands)	
Furniture, fixtures, equipment and building improvements	$ 75,562	$ 67,700
Less: Accumulated depreciation and amortization	(43,885)	(35,483)
	$ 31,677	$ 32,217

Depreciation and amortization expenses are summarized below:

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
Depreciation and amortization expenses included in *Occupancy and equipment*	$ 8,439	$ 8,934	$ 9,018

Note 12—Short-Term Borrowings

The borrowing facilities described throughout these Notes 12 and 13 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 December 31, 2021.

Assets Sold Under Agreements to Repurchase

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

Fannie Mae MSR Facility

On April 28, 2021, the Company, through PLS, PNMAC, and PFSI Issuer Trust - FMSR, entered into a structured finance transaction, allowing PLS to finance Fannie Mae MSRs and ESS (the "Fannie Mae MSR Facility"). In connection with the Fannie Mae MSR Facility, PLS pledges and/or sells to PFSI Issuer Trust - FMSR participation certificates representing beneficial interests in MSRs and ESS pursuant to the terms of a master repurchase agreement, dated as of April 28, 2021, by and between PLS, PFSI Issuer Trust - FMSR and PNMAC (the " FMSR PC Repurchase Agreement"). In return, PFSI Issuer Trust - FMSR (a) has issued to PLS the Series 2021-MSRVF1 Note, dated April 28, 2021, known as the "PFSI ISSUER TRUST - FMSR Collateralized Notes, Series 2021-MSRVF1" (the "FMSR VFN"), and (b) may, from time to time, issue to institutional investors term notes, in each case secured on a pari passu basis by the participation certificates relating to the MSRs and ESS. The maximum principal balance of the FMSR VFN is $1 billion.

Under the FMSR PC Repurchase Agreement, PLS grants to PFSI Issuer Trust – FMSR a security interest in all of its right, title and interest in, to and under participation certificates representing beneficial interests in MSRs and ESS, including all of its rights and interests in any MSRs and ESS it thereafter owns or acquires. The principal amount paid by PFSI Issuer Trust - FMSR for the participation certificates under the FMSR PC Repurchase Agreement is based upon a percentage of the market value of the underlying MSRs (inclusive of the ESS). Upon PLS's repurchase of the participation certificates, PLS is required to repay PFSI Issuer Trust - FMSR 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 FMSR VFN and any outstanding term notes) to the date of such repurchase.

PLS also entered into a master repurchase agreement on April 28, 2021 (the "FMSR VFN Repurchase Agreement") with Credit Cuisse First Boston Mortgage Capital LLC ("CSFB"), as administrative agent, and Credit Suisse AG, Cayman Islands Branch ("CSCIB"), as purchaser, pursuant to which PLS sold the FMSR VFN to CSCIB with an agreement to repurchase such FMSR VFN at a later date. The FMSR VFN Repurchase Agreement has an initial term extending through March 31, 2023. The FMSR VFN Repurchase Agreement provides for a maximum purchase price of $250 million, all of which is committed.

The principal amount paid by CSCIB for the FMSR VFN is based upon a percentage of the market value of such FMSR VFN. Upon PLS's repurchase of the FMSR VFN, PLS is required to repay CSCIB the principal amount relating thereto plus accrued interest (at a rate reflective of the current market based on a spread above LIBOR with index replacement provisions related to the transition from LIBOR) to the date of such repurchase.

Under the FMSR VFN Repurchase Agreement, in the event any such transactions are deemed to be loans and not sales and purchases, PLS granted to CSCIB a security interest in all of its right, title and interest in, to and under the FMSR VFN and all rights to reimbursement or payment of the FMSR VFN and/or amounts due in respect thereof.

Ginnie Mae MSR Facility

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

On July 30, 2021, the Company through two of its indirect, wholly owned subsidiaries, Issuer Trust and PLS, and its direct wholly owned subsidiary, PNMAC, entered into agreements to syndicate two existing variable funding note repurchase agreements, as part of the structured finance transaction that PLS uses to finance Ginnie Mae mortgage servicing rights and related excess servicing spread and servicing advance receivables. The Company entered into (i) an Amended and Restated Series 2016-MSRVF1 Master Repurchase Agreement by and among PLS, as seller, CSFB, as administrative agent to the buyers, CSCIB, as a buyer, Citibank, N.A., as a buyer, and PNMAC, as a guarantor (the "Syndicated GMSR Servicing Spread Agreement"), related to the servicing spread; and (ii) an Amended and Restated Series 2020-SPIADVF1 Master Repurchase Agreement by and among PLS, as seller, CSFB, as administrative agent to the buyers, CSCIB, as a buyer, Citibank, as a buyer, and PNMAC, as a guarantor (the "Syndicated GMSR SAR Agreement"), related to the servicing advance receivables.

The purposes of the Syndicated GMSR Servicing Spread Agreement are to (1) add Citibank as a syndicate buyer, and (2) increase the maximum purchase price from $400 to $500 million, all of which is committed on a 50-50 *pro rata* basis between CSCIB and Citibank. The purpose of the Syndicated GMSR SAR Agreement is to add Citibank as a syndicate buyer, with the maximum purchase price of $600 million unchanged, all of which is committed on a 50-50 *pro rata* basis between CSCIB and Citibank.

Ginnie Mae Servicing Advances

On April 1, 2020, the Company issued a series of variable funding notes, the Series 2020-SPIADVF1 Notes ("GMSR Servicing Advance Notes"), to be sold under agreement to repurchase pursuant to a Master Repurchase Agreement, dated as of April 1, 2020, with Credit Suisse First Boston Mortgage Capital LLC ("CSFB"), acting as administrative agent on behalf of Credit Suisse AG, Cayman Islands Branch ("CSCIB"), as buyer (the "GMSR Servicing Advances Repurchase Agreement").

The GMSR Servicing Advance Notes leverage the Company's GNMA MSR Facility to support a separately defined servicing advance facility within the existing structure and provide the Company enhanced ability to finance its servicing advance obligations to Ginnie Mae and its security holders as necessary. Specifically, the GMSR Servicing Advances Repurchase Agreement provides the Company with financing secured by its servicing advances to pay, in accordance with the Ginnie Mae requirements, in the event borrowers are delinquent: (i) regularly scheduled monthly principal and interest to mortgage-backed securities holders; (ii) taxes, homeowner's insurance, and other escrowed items; and (iii) other expenses related to servicing delinquent loans as specified by (A) state and federal laws and (B) government agencies, including the FHA, the VA, and the USDA.

The borrowing capacity under the GMSR Servicing Advances Repurchase Agreement, shared with VFN financing capacity, is $600 million, all of which is committed and may be used to finance the servicing advances related to delinquent FHA, VA, and USDA loans, including delinquencies caused by forbearance in accordance with the CARES Act.

Assets sold under agreements to repurchase are summarized below:

	Year ended December 31,		
	2021	2020	2019
	(dollars in thousands)		
Average balance of assets sold under agreements to repurchase	$ 6,911,843	$ 3,348,928	$ 2,185,830
Weighted average interest rate (1)	2.09 %	2.91 %	3.74 %
Total interest expense	$ 164,132	$ 112,778	$ 74,215
Maximum daily amount outstanding	$ 10,969,029	$ 9,663,995	$ 4,141,680

	December 31,	
	2021	2020
	(dollars in thousands)	
Carrying value:		
Unpaid principal balance	$ 7,297,360	$ 9,663,995
Unamortized debt issuance costs	(4,625)	(9,198)
	$ 7,292,735	$ 9,654,797
Weighted average interest rate	1.83 %	1.90 %
Available borrowing capacity (2):		
Committed	$ 285,419	$ 372,803
Uncommitted	8,417,221	2,163,202
	$ 8,702,640	$ 2,536,005
Fair value of assets securing repurchase agreements:		
Loans held for sale	$ 8,629,861	$ 10,912,178
Assets purchased from PennyMac Mortgage Investment Trust under agreements to resell pledged to creditors	$ —	$ 80,862
Servicing advances (3)	$ 232,107	$ 413,484
Mortgage servicing rights (3)	$ 3,552,812	$ 2,490,267
Deposits (3)	$ 36,632	$ 153,054
Margin deposits (4)	$ 10,875	$ 5,625

(1) Excludes the effect of amortization of net issuance costs totaling $19.4 million and $15.3 million for the years ended December 31, 2021 and 2020, respectively, and the effect of amortization of net debt issuance premiums of $7.5 million for the year ended December 31, 2019.

(2) 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.

(3) Beneficial interests in the Ginnie Mae MSRs, servicing advances and deposits are pledged to the Issuer Trust and together serve as the collateral backing the VFN, GMSR Servicing Advance Notes, and the Term Notes described in Note 13 – *Long-Term Debt- Notes payable secured by mortgage servicing assets*. The VFN and the GMSR Servicing Advance Notes are included in *Assets sold under agreements to repurchase* and the Term Notes are included in *Notes payable secured by mortgage servicing assets* on the Company's consolidated balance sheets.

(4) Margin deposits are included in *Other* assets on the Company's consolidated balance sheets.

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

Remaining maturity at December 31, 2021	Unpaid principal balance (dollars in thousands)
Within 30 days	$ 1,152,623
Over 30 to 90 days	5,640,686
Over 90 to 180 days	308,434
Over 180 days to one year	95,617
Over one year to two years	100,000
Total assets sold under agreements to repurchase	$ 7,297,360
Weighted average maturity (in months)	2.7

The amounts at risk (the fair value of the assets pledged plus the related margin deposits, less the amounts advanced by the counterparty and interest payable) relating to the Company's assets sold under agreements to repurchase are summarized by counterparty below as of December 31, 2021:

Counterparties	Amount at risk (in thousands)	Weighted average maturity of advances	Facility maturity
Credit Suisse First Boston Mortgage Capital LLC & Citibank, N.A. (1)	$ 2,688,383	March 31, 2023	March 31, 2023
Credit Suisse First Boston Mortgage Capital LLC	$ 137,054	February 18, 2022	March 31, 2023
Bank of America, N.A.	$ 674,074	March 20, 2022	June 7, 2023
JP Morgan Chase Bank, N.A.	$ 355,202	June 23, 2022	September 29, 2023
JP Morgan Chase Bank, N.A.	$ 9,914	March 3, 2022	June 6, 2023
Barclays Bank PLC	$ 74,455	February 25, 2022	November 3, 2022
Royal Bank of Canada	$ 68,643	March 12, 2022	December 14, 2022
Goldman Sachs	$ 48,483	January 5, 2022	December 23, 2022
Citibank, N.A.	$ 20,948	March 7, 2022	August 10, 2023
BNP Paribas	$ 17,568	March 13, 2022	July 31, 2023
Morgan Stanley Bank, N.A.	$ 17,469	March 5, 2022	November 2, 2022
Wells Fargo Bank, N.A.	$ 12,395	March 17, 2022	November 17, 2023

(1) The calculation of the amount at risk includes the VFN and the Term Notes because beneficial interests in the Ginnie Mae MSRs, Fannie Mae MSRs and servicing advances are pledged to the Issuer Trust and together serve as the collateral backing the VFN and the Term Notes described in *Notes payable secured by mortgage servicing assets* below. The VFN is included in *Assets sold under agreements to repurchase* and the Term Notes are included in *Notes payable secured by mortgage servicing assets* on the Company's consolidated balance sheets.

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 into Fannie Mae, Freddie Mac or Ginnie Mae securities, are sold to a lender pending the securitization of the mortgage loans and sale of the resulting securities which generally occurs within 30 days. 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:

	Year ended December 31,		
	2021	2020	2019
	(dollars in thousands)		
Average balance	$ 249,255	$ 226,689	$ 244,203
Weighted average interest rate (1)	1.39 %	1.88 %	3.42 %
Total interest expense	$ 4,153	$ 4,933	$ 8,874
Maximum daily amount outstanding	$ 532,819	$ 540,977	$ 548,038

(1) Excludes the effect of amortization of debt issuance costs totaling $688,000, $662,000 and $514,000 for the years ended December 31, 2021, 2020 and 2019, respectively.

	December 31,	
	2021	2020
	(dollars in thousands)	
Carrying value:		
Unpaid principal balance	$ 479,845	$ 521,477
Unamortized debt issuance costs	—	—
	$ 479,845	$ 521,477
Weighted average interest rate	1.48 %	1.39 %
Fair value of loans pledged to secure mortgage loan participation purchase and sale agreements	$ 505,716	$ 545,500

Corporate Revolving Line of Credit

The Company, through its subsidiary PNMAC, entered into an amended and restated credit agreement on November 18, 2016, as amended (the "Credit Agreement") under which PNMAC established a revolving line of credit in an amount not to exceed $150 million. PNMAC did not borrow under the revolving line of credit during the periods presented and terminated the Credit Agreement on September 29, 2020 concurrent with the issuance the *Unsecured Senior Notes* described below.

Note 13—Long-Term Debt

Obligations Under Capital Lease

The Company has a capital lease transaction secured by certain fixed assets and capitalized software. The capital lease matures on June 13, 2022 and bears interest at a spread over one-month LIBOR.

Obligations under capital lease are summarized below:

	Year ended December 31,		
	2021	2020	2019
	(dollars in thousands)		
Average balance	$ 7,999	$ 16,224	$ 17,021
Weighted average interest rate	2.11%	2.62%	4.07%
Total interest expense	$ 169	$ 425	$ 693
Maximum daily amount outstanding	$ 11,864	$ 20,810	$ 28,295

	December 31,	
	2021	2020
	(dollars in thousands)	
Unpaid principal balance	$ 3,489	$ 11,864
Weighted average interest rate	2.11%	2.15%
Assets pledged to secure obligations under capital lease:		
Capitalized software	$ 4,546	$ 7,675
Furniture, fixtures and equipment	$ 4,116	$ 5,689

Notes Payable Secured by Mortgage Servicing Assets

Term Notes

The Company, through the Issuer Trust described in Note 4 – *Transactions with Affiliates—Transactions with PMT—Investing Activities* and Note 12—*Short-Term Borrowings—Assets Sold Under Agreements to Repurchase*, issued the GMSR GT1 and the GMSR GT2 term notes (the "Term Notes") to qualified institutional buyers under Rule 144A of the Securities Act of 1933, as amended (the "Securities Act"). 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 mortgage servicing assets that are financed pursuant to the GNMA MSR Facility.

Following is a summary of the issued and outstanding Term Notes:

Issuance date	Principal balance (in thousands)	Stated interest rate (1) (annual)	Stated maturity date (2)
February 28, 2018 - (GMSR GT1)	$ 650,000	2.85%	2/25/2023
August 10, 2018 - (GMSR GT2)	650,000	2.65%	8/25/2023
	$ 1,300,000		

(1) Spread over one-month LIBOR.

(2) The Term Notes' indentures provide the Company with the option to extend the maturity of the Term Notes by two years after the stated maturity.

MSR Note Payable

On February 1, 2018, the Company issued a note payable that was secured by Freddie Mac MSRs. Interest is charged at a rate based on LIBOR plus the applicable contract margin. The facility expired on November 19, 2021. The maximum amount that the Company was able to borrow under the note payable was $400 million, less any amount outstanding under the agreements to repurchase pursuant to which the Company finances the Ginnie Mae MSRs and servicing advances and the Fannie Mae MSRs. The Company did not borrow under this note payable during the years presented.

Notes payable secured by mortgage servicing assets are summarized below:

	Year ended December 31,		
	2021	2020	2019
	(dollars in thousands)		
Average balance	$ 1,300,000	$ 1,300,000	$ 1,300,000
Weighted average interest rate (1)	2.89%	3.42%	5.08%
Total interest expense	$ 39,782	$ 46,222	$ 67,789

(1) Excludes the effect of amortization of debt issuance costs totaling $2.2 million, $1.8 million and $1.8 million for the years ended December 31, 2021, 2020 and 2019, respectively.

	December 31,	
	2021	2020
	(dollars in thousands)	
Carrying value:		
Unpaid principal balance	$ 1,300,000	$ 1,300,000
Unamortized debt issuance costs	(2,378)	(4,160)
	$ 1,297,622	$ 1,295,840
Weighted average interest rate	2.84%	2.93%
Assets pledged to secure notes payable (1) (2):		
Servicing advances	$ 232,107	$ 413,484
Mortgage servicing rights	$ 3,856,791	$ 2,421,326
Deposits	$ 36,632	$ 153,054

(1) Beneficial interests in the Ginnie Mae MSRs, servicing advances and deposits are pledged to the Issuer Trust and together serve as the collateral backing the VFN, GMSR Servicing Advance Notes and the Term Notes. The VFN financing and the GMSR Servicing Advance Notes are included in *Assets sold under agreements to repurchase* and the Term Notes are included in *Notes payable secured by mortgage servicing assets* on the Company's consolidated balance sheets.

(2) Beneficial interests in the Fannie Mae MSRs are pledged to the PFSI Issuer Trust - FMSR and serve as the collateral backing the FMSR VFN and any FMSR Term Notes. The FMSR VFN financing is included in *Assets sold under agreements to repurchase* and the FMSR Term Note is included in *Notes payable secured by mortgage servicing assets* on the Company's consolidated balance sheets.

Unsecured Senior Notes

The Company issued unsecured senior notes (the "Unsecured Notes") to qualified institutional buyers under Rule 144A of the Securities Act. The Unsecured Notes are senior unsecured obligations of the Company and will rank senior in right of payment to any future subordinated indebtedness of the Company, equally in right of payment with all existing and future senior indebtedness of the Company and effectively subordinated to any future secured indebtedness of the Company to the extent of the fair value of collateral securing such indebtedness.

The Unsecured Notes are fully and unconditionally guaranteed, jointly and severally, on a senior unsecured basis by PFSI's existing and future wholly-owned domestic subsidiaries (other than certain excluded subsidiaries defined in the indenture under which the Unsecured Notes were issued). The guarantees are senior unsecured obligations of the guarantors and will rank senior in right of payment to any future subordinated indebtedness of the guarantors, equally in right of payment with all existing and future senior indebtedness of the guarantors and effectively subordinated to any future secured indebtedness of the guarantors to the extent of the fair value of collateral securing such indebtedness. The Unsecured Notes and the guarantees are structurally subordinated to the indebtedness and liabilities of the Company's subsidiaries that do not guarantee the Unsecured Notes.

Following is a summary of the Company's issued and outstanding Unsecured Notes:

Issuance date	Principal balance (in thousands)	Coupon interest rate (annual)	Maturity date	Optional redemption date (1)
September 29, 2020	$ 500,000	5.38%	October 15, 2025	October 15, 2022
October 19, 2020	150,000	5.38%	October 15, 2025	October 15, 2022
February 11, 2021	650,000	4.25%	February 15, 2029	February 15, 2024
September 16, 2021	500,000	5.75%	September 15, 2031	September 15, 2026
	$ 1,800,000			

(1) Before the optional redemption date, the Company may redeem some or all of the Unsecured Notes for that issuance at a price equal to 100% of the principal amount, plus accrued and unpaid interest and a make-whole premium or the Company may redeem up to 40% of the Unsecured Notes for that issuance with an amount equal to or less than the net proceeds from certain equity offerings at the redemption price set forth in the indenture, plus accrued and unpaid interest. On or after the optional redemption date, the Company may redeem some or all of the Unsecured Notes for that issuance at the redemption prices set forth in the indenture, plus accrued and unpaid interest.

	Year ended December 31,	
	2021	2020
	(dollars in thousands)	
Average balance	$ 1,373,562	$ 158,743
Weighted average interest rate (1)	4.94%	5.38%
Total interest expense	$ 70,208	$ 8,774

(1) Excludes the effect of amortization of debt issuance costs of $2.3 million and $225,000 for the years ended December 31, 2021 and 2020, respectively.

	December 31,	
	2021	2020
	(dollars in thousands)	
Carrying value:		
Unpaid principal balance	$ 1,800,000	$ 650,000
Unamortized debt issuance costs and premiums, net	(23,781)	(4,180)
	$ 1,776,219	$ 645,820
Weighted average interest rate	5.07%	5.38%

Maturities of Long-Term Debt

Maturities of long-term debt obligations (based on final maturity dates) are as follows:

	Year ended December 31,						
	2022	2023	2024	2025	2026	Thereafter	Total
	(in thousands)						
Obligations under capital lease	$ 3,489	$ —	$ —	$ —	$ —	$ —	$ 3,489
Notes payable secured by mortgage servicing assets	—	1,300,000	—	—	—	—	1,300,000
Unsecured Notes	—	—	—	650,000	—	1,150,000	1,800,000
Total	$ 3,489	$ 1,300,000	$ —	$ 650,000	$ —	$ 1,150,000	$ 3,103,489

Note 14—Liability for Losses Under Representations and Warranties

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

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
Balance at beginning of year	$ 32,688	$ 21,446	$ 21,155
Provision for losses:			
Resulting from sales of loans	31,590	21,035	8,377
Reduction in liability due to change in estimate	(16,037)	(8,667)	(7,877)
Losses incurred, net	(4,720)	(1,126)	(209)
Balance at end of year	$ 43,521	$ 32,688	$ 21,446
Unpaid principal balance of loans subject to representations and warranties at end of year	$ 257,369,777	$ 210,222,447	

Note 15—Income Taxes

The Company files U.S. federal and state corporate income tax returns for PFSI and partnership returns for PNMAC. The Company's federal tax returns are subject to examination for 2018 and forward and its state tax returns are generally subject to examination for 2017 and forward. PNMAC's federal partnership returns are subject to examination for 2018 and forward, and its state tax returns are generally subject to examination for 2017 and forward. The returns of both the Company and PNMAC are in the initial stages of an examination by New York State for years 2019 and 2020. We do not expect any material changes from this examination.

The following table details the Company's provision for income taxes:

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
Current expense:			
Federal	$ 101,659	$ 378,984	$ 17,661
State	39,551	128,495	8,071
Total current expense	141,210	507,479	25,732
Deferred expense:			
Federal	160,587	61,592	85,296
State	53,896	24,654	25,451
Total deferred expense	214,483	86,246	110,747
Total provision for income taxes	$ 355,693	$ 593,725	$ 136,479

The following table is a reconciliation of the Company's provision for income taxes at statutory rates to the provision for income taxes at the Company's effective tax rate:

	Year ended December 31,		
	2021	2020	2019
Federal income tax statutory rate	21.0 %	21.0 %	21.0 %
State income taxes, net of federal benefit	5.4 %	5.5 %	5.6 %
Tax rate revaluation	— %	(0.1)%	(0.6)%
Other	(0.2)%	0.1 %	(0.2)%
Effective income tax rate	26.2 %	26.5 %	25.8 %

The components of the Company's provision for deferred income taxes are as follows:

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
Mortgage servicing rights	$ 196,697	$ 128,471	$ 91,592
Reserves and losses	15,736	(33,477)	(2,945)
California franchise taxes	10,753	(15,200)	—
Additional tax basis in partnership from exchanges of partnership units into the Company's common stock	4,420	5,200	4,269
Compensation accruals	(11,456)	(647)	(12,286)
Net operating loss	—	581	23,445
Other	(1,717)	1,318	6,106
Tax credits	50	—	566
Total provision for deferred income taxes	$ 214,483	$ 86,246	$ 110,747

The components of *Income taxes payable* are as follows:

	December 31,	
	2021	2020
	(in thousands)	
Income taxes currently (receivable) payable	$ (126,542)	$ 25,379
Deferred income tax liability, net	811,804	597,321
Income taxes payable	$ 685,262	$ 622,700

The tax effects of temporary differences that gave rise to deferred income tax assets and liabilities are presented below:

	December 31,	
	2021	2020
	(in thousands)	
Deferred income tax assets:		
Compensation accruals	$ 53,141	$ 41,685
Additional tax basis in partnership from exchanges of partnership units into the Company's common stock	30,277	34,697
Reserves and losses	47,275	63,011
California franchise tax	4,447	15,200
Net operating loss carryforward	1,077	1,077
Income tax credits carryforward	—	50
Gross deferred income tax assets	136,217	155,720
Deferred income tax liabilities:		
Mortgage servicing rights	933,803	737,106
Other	14,218	15,935
Gross deferred income tax liabilities	948,021	753,041
Net deferred income tax liability	$ 811,804	$ 597,321

The Company recorded a deferred tax asset of $1.1 million related to California's net operating loss carryforwards, which were incurred in 2018 and expire in 2038. A newly signed law allows the utilization of this remaining net operating loss starting in 2022, which was previously suspended until 2023 under the California budget deal. All of the federal net operating loss carryforward has been fully utilized in 2019.

At December 31, 2021 and 2020, the Company had no unrecognized tax benefits and does not anticipate any unrecognized tax benefits. Should the recognition of any interest or penalties relative to unrecognized tax benefits be necessary, it is the Company's policy to record such expenses in the Company's income tax accounts. No such accruals existed at December 31, 2021 and 2020.

Note 16—Commitments and Contingencies

From time to time, the Company may be involved in various legal and regulatory proceedings, lawsuits and other claims arising in the ordinary course of its business. The amount, if any, of ultimate liability with respect to such matters cannot be determined, but despite the inherent uncertainties of litigation, management currently believes that the ultimate disposition of any such proceedings and exposure will not have, individually or taken together, a material adverse effect on the financial condition, results of operations, or cash flows.

Litigation

On November 5, 2019, Black Knight Servicing Technologies, LLC, a wholly-owned indirect subsidiary of Black Knight, Inc. (“BKI”), filed a Complaint and Demand for Jury Trial in the Fourth Judicial Circuit Court in and for Duval County, Florida (the “Florida State Court”), captioned *Black Knight Servicing Technologies*, LLC v. *PennyMac Loan Services, LLC*, Case No. 2019-CA-007908 (the “BKI Complaint”). Allegations contained within the BKI Complaint include breach of contract and misappropriation of MSP® System trade secrets in order to develop an imitation mortgage-processing system intended to replace the MSP® System.

The BKI Complaint seeks damages for breach of contract and misappropriation of trade secrets, injunctive relief under the Florida Uniform Trade Secrets Act and declaratory judgment of ownership of all intellectual property and software developed by or on behalf of PLS as a result of its wrongful use of and access to the MSP® System and related trade secret and confidential information. On March 30, 2020, the Florida State Court granted a motion to compel arbitration filed by PLS. While no assurance can be provided as to the ultimate outcome of this claim or the account of any losses to the Company, the Company believes the BKI Complaint is without merit and plans to vigorously defend the matter, which remains pending.

Regulatory Matters

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

On January 7, 2021, PLS received a letter from the CFPB notifying PLS that, in accordance with the CFPB’s discretionary Notice and Opportunity to Respond and Advise (“NORA”) process, the CFPB’s Office of Enforcement was considering recommending that the CFPB take legal action against PLS for alleged violations of the Real Estate Settlement Procedures Act and Truth in Lending Act. The CFPB's examination covered the period from March 2015 through September 2016. Should the CFPB commence an action, it may seek restitution, civil monetary penalties, injunctive relief, or other corrective action, the extent of which remains uncertain at this time. Notably, certain of the alleged violations were originally self-identified by PLS and remediated prior to the CFPB's examination, and all alleged violations were fully remediated as of August 2017. PLS confirmed these remediation actions as well as full restitution to any affected borrowers in its response to the NORA letter submitted on February 8, 2021. While the NORA process remains open and pending at this time, and there can be no assurance as to the nature or extent of any actions taken by the CFPB with regard to these alleged violations, the Company does not believe that the ultimate resolution of this matter will have a material adverse effect on its financial statements or operations.

Commitments to Purchase and Fund Loans

The Company’s commitments to purchase and fund loans totaled $14.1 billion as of December 31, 2021.

Cessation of the LIBOR Index

The Company is involved in both lending and financing transactions that use the LIBOR index to establish the applicable interest rates. It has been announced that this index will no longer be published. The Company services LIBOR-based adjustable rate mortgages for which the underlying mortgage notes incorporate fallback provisions. The Company also has debt agreements that have not already transitioned from LIBOR to a replacement index but contain replacement provisions related to the transition from LIBOR. The Company cannot anticipate whether the response of borrowers or note holders to the adoption of the replacement indices adopted by the Company will result in future losses to PFSI.

Note 17—Stockholders' Equity

In August 2021, the Company's board of directors approved an increase to the Company's common stock repurchase program from $1 billion to $2 billion.

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

	Year ended December 31,			Cumulative
	2021	2020	2019	total (1)
	(in thousands)			
Shares of common stock repurchased	15,368	8,890	51	25,074
Cost of shares of common stock repurchased	$ 958,194	$ 337,479	$ 1,056	$ 1,310,621

(1) Amounts represent the total shares of common stock repurchased under the stock repurchase program through December 31, 2021.

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

Note 18—Net Gains on Loans Held for Sale

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

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
From non-affiliates:			
Cash gains:			
Loans	$ 600,840	$ 2,025,260	$ (190,853)
Hedging activities	443,341	(767,588)	(175,305)
	1,044,181	1,257,672	(366,158)
Non-cash gains:			
Mortgage servicing rights and mortgage servicing liabilities resulting from loan sales	1,755,318	1,114,720	846,888
Provisions for losses relating to representations and warranties:			
Pursuant to loan sales	(31,590)	(21,035)	(8,377)
Reductions in liability due to change in estimate	16,037	8,667	7,877
Changes in fair values of loans and derivatives held at year end:			
Interest rate lock commitments	(354,833)	540,376	87,312
Loans	210,961	(326,986)	(42,878)
Hedging derivatives	(124,200)	116,690	17,499
	2,515,874	2,690,104	542,163
From PennyMac Mortgage Investment Trust (1)	(51,473)	50,681	183,365
	$ 2,464,401	$ 2,740,785	$ 725,528

(1) Gains on sales of loans to PMT are described in Note 4–*Transactions with Affiliates.*

Note 19—Net Interest (Expense) Income

Net interest (expense) income is summarized below:

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
Interest income:			
From non-affiliates:			
Cash and short-term investments	$ 3,280	$ 6,154	$ 9,776
Loans held for sale at fair value	275,176	184,789	138,124
Placement fees relating to custodial funds	21,326	52,758	134,498
	299,782	243,701	282,398
From PennyMac Mortgage Investment Trust—*Assets purchased from PennyMac Mortgage Investment Trust under agreements to resell*	387	3,325	6,302
	300,169	247,026	288,700
Interest expense:			
To non-affiliates:			
Assets sold under agreements to repurchase (1)	164,132	112,778	74,215
Mortgage loan participation purchase and sale agreements	4,153	4,933	8,874
Obligations under capital lease	169	425	693
Notes payable secured by mortgage servicing assets	39,782	46,222	67,789
Unsecured senior notes	70,208	8,774	—
Corporate revolving line of credit	—	1,537	1,921
Interest shortfall on repayments of mortgage loans serviced for Agency securitizations	105,430	82,285	41,439
Interest on mortgage loan impound deposits	5,545	6,179	6,757
	389,419	263,133	201,688
To PennyMac Mortgage Investment Trust—*Excess servicing spread financing at fair value*	1,280	8,418	10,291
	390,699	271,551	211,979
	$ (90,530)	$ (24,525)	$ 76,721

(1) In 2017, the Company entered a master repurchase agreement that provided it with incentives to finance mortgage loans approved for satisfying certain consumer relief characteristics as provided in the agreement. The master repurchase agreement expired on August 21, 2019. During the year ended December 31, 2019, the Company included $14.7 million of such incentives as a reduction in *Interest expense.*

Note 20—Stock-based Compensation

The Company has adopted an equity incentive plan that provides for grants of stock options, time-based and performance-based restricted stock units ("RSUs"), stock appreciation rights, performance units and stock grants. As of December 31, 2021, the Company has 4.8 million units available for future awards.

Following is a summary of the stock-based compensation expense by instrument awarded:

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
Performance-based RSUs	$ 23,166	$ 20,610	$ 14,820
Time-based RSUs	10,184	9,515	6,659
Stock options	4,444	14,980	3,292
	$ 37,794	$ 45,105	$ 24,771

Performance-Based RSUs

The performance based RSUs provide for the issuance of shares of the Company's common stock based on the achievement of performance goals and job performance ratings. Approximately 643,000 shares under the grants with performance periods ending December 31, 2021 are expected to vest and be issued to the grantees in the first quarter of 2022.

The fair value of the performance-based RSUs is measured based on the fair value of the Company's common stock at the grant date, taking into consideration management's estimate of the expected outcome of the performance goal, and the number of shares to be forfeited during the vesting period. The Company assumes forfeiture rates of 0 – 20.3% per year based on the grantees' employee classification. The actual number of shares that vest could vary from zero, if the performance goals are not met, to as much as 175% of the units granted, if the performance goals are meaningfully exceeded.

The table below summarizes performance-based RSU activity:

	Year ended December 31,		
	2021	2020	2019
	(in thousands, except per unit amounts)		
Number of units:			
Outstanding at beginning of year	1,583	1,807	1,892
Granted	310	440	682
Vested (1)	(634)	(645)	(735)
Forfeited or cancelled	(33)	(19)	(32)
Outstanding at end of year	1,226	1,583	1,807
Weighted average grant date fair value per unit:			
Outstanding at beginning of year	$ 27.02	$ 21.67	$ 14.48
Granted	$ 58.85	$ 35.95	$ 23.11
Vested	$ 24.47	$ 18.16	$ 11.28
Forfeited	$ 36.91	$ 26.71	$ 21.72
Outstanding at end of year	$ 36.12	$ 27.02	$ 21.67

(1) The actual number of performance-based RSUs vested during the years ended December 31, 2021, 2020 and 2019 was 781,000, 608,000 and 648,000 shares, respectively, which is approximately 123%, 94% and 88% of the 634,000, 645,000 and 735,000 originally granted units, respectively, due to the performance varying from the established target for the respective grant.

Following is a summary of performance-based RSUs as of December 31, 2021:

Unamortized compensation cost (in thousands)	$ 20,593
Number of shares expected to vest (in thousands)	1,122
Weighted average remaining vesting period (in months)	10

Time-Based RSUs

The RSU grant agreements provide for the award of time-based RSUs, entitling the award recipient to one share of the Company's common stock for each RSU. In general, and except as otherwise provided by the agreement, one-third of the time-based RSUs vest on each of the first, second, and third anniversaries of the grant date, subject to the recipient's continued service through each anniversary.

Compensation cost relating to time-based RSUs is based on the grant date fair value of the Company's common stock and the number of shares expected to vest. For purposes of estimating the cost of the time-based RSUs granted, the Company assumes forfeiture rates of 0% – 20.3% per year based on the grantees' employee classification.

The table below summarizes time-based RSU activity:

	Year ended December 31,		
	2021	2020	2019
	(in thousands, except per unit amounts)		
Number of units:			
Outstanding at beginning of year	587	642	627
Granted	173	311	334
Vested	(312)	(357)	(300)
Forfeited	(14)	(9)	(19)
Outstanding at end of year	434	587	642
Weighted average grant date fair value per unit:			
Outstanding at beginning of year	$ 29.37	$ 22.40	$ 20.39
Granted	$ 58.90	$ 34.98	$ 22.88
Vested	$ 28.08	$ 21.75	$ 18.73
Forfeited	$ 39.48	$ 28.14	$ 22.29
Outstanding at end of year	$ 41.74	$ 29.37	$ 22.40

Following is a summary of RSUs as of December 31, 2021:

Unamortized compensation cost (in thousands)	$ 4,912
Number of units expected to vest (in thousands)	401
Weighted average remaining vesting period (in months)	8

Stock Options

The stock option award agreements provide for the award of stock options to purchase the optioned common stock. In general, and except as otherwise provided by the agreement, one-third of the stock option awards vests on each of the first, second, and third anniversaries of the grant date, subject to the recipient's continued service through each anniversary. Each stock option has a term of ten years from the date of grant but expires (1) immediately upon termination of the holder's employment or other association with the Company for cause, (2) one year after the holder's employment or other association is terminated due to death or disability and (3) three months after the holder's employment or other association is terminated for any other reason. During the year ended December 31, 2020, the Company awarded approximately 604,000 shares of stock options that vested on the grant date with a term of ten years from the date of grant, subject to certain transfer restrictions.

The fair value of each stock option award is estimated on the date of grant using a variant of the Black Scholes model based on the following inputs:

	Year ended December 31,		
	2021	2020	2019
Expected volatility (1)	38%	34%	30%
Expected dividends	1.4%	1.4%	0%
Risk-free interest rate	0.1% - 1.7%	0.1% - 1.5%	2.5% - 2.7%
Expected grantee forfeiture rate	0% - 6.7%	0% - 6.7%	2.3% - 22.7%

(1) Based on historical volatilities of the Company's common stock.

The Company uses its historical employee departure behavior to estimate the grantee forfeiture rates used in its option-pricing model. The expected term of common stock options granted is derived from the Company's option pricing model and represents the period that common stock options granted are expected to be outstanding. The risk-free interest rate for periods within the contractual term of the common stock option is based on the U.S. Treasury yield curve in effect at the time of grant.

The table below summarizes stock option award activity:

	Year ended December 31,		
	2021	2020	2019
	(in thousands, except per option amounts)		
Number of stock options:			
Outstanding at beginning of year	4,040	3,699	3,693
Granted	249	876	344
Exercised	(377)	(530)	(317)
Forfeited	(6)	(5)	(21)
Outstanding at end of year	3,906	4,040	3,699
Weighted average exercise price per option:			
Outstanding at beginning of year	$ 28.01	$ 18.40	$ 17.81
Granted	$ 58.85	$ 52.00	$ 22.92
Exercised	$ 19.96	$ 17.72	$ 16.26
Forfeited	$ 39.52	$ 20.61	$ 20.70
Outstanding at end of year	$ 28.43	$ 28.01	$ 18.40

Following is a summary of stock options as of December 31, 2021:

Number of options exercisable at end of year (in thousands)	3,397
Weighted average exercise price per exercisable option	$ 25.97
Weighted average remaining contractual term (in years):	
Outstanding	5.6
Exercisable	5.1
Aggregate intrinsic value:	
Outstanding (in thousands)	$ 161,544
Exercisable (in thousands)	$ 148,820
Expected vesting amounts:	
Number of options expected to vest (in thousands)	509
Weighted average vesting period (in months)	10

Note 21—Earnings Per Share of Common Stock

Basic earnings per share is determined by dividing net income by the weighted average number of shares of common stock outstanding during the year. Diluted earnings per share is determined by dividing net income by the weighted average number of shares of common stock outstanding, assuming all dilutive securities were issued.

The Company's potentially dilutive securities are stock-based compensation awards. The Company applies the treasury stock method to determine the diluted weighted average number of shares of common stock outstanding based on the outstanding stock-based compensation awards.

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

	Year ended December 31,		
	2021	2020	2019
	(in thousands, except per share data)		
Net income	$ 1,003,490	$ 1,646,884	$ 392,965
Weighted average basic shares of common stock outstanding	63,799	75,161	78,206
Effect of dilutive securities - shares issuable under stock-based compensation plan	3,672	3,567	2,134
Weighted average shares of common stock applicable to diluted earnings per share	67,471	78,728	80,340
Basic earnings per share	$ 15.73	$ 21.91	$ 5.02
Diluted earnings per share	$ 14.87	$ 20.92	$ 4.89

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 outstanding performance-based RSUs, time-based RSUs and stock options excluded from the calculation of diluted earnings per share:

	Year ended December 31,		
	2021	2020	2019
	(in thousands except for weighted average exercise price)		
Performance-based RSUs (1)	223	322	1,032
Time-based RSUs	1	—	—
Stock options (2)	211	83	572
Total anti-dilutive units and options	435	405	1,604
Weighted average exercise price of anti-dilutive stock options (2)	$ 58.85	$ 43.89	$ 23.70

(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 prices during the year.

Note 22—Supplemental Cash Flow Information

	Year ended December 31,		
	2021	2020	2019
	(in thousands)		
Cash paid for interest	$ 389,527	$ 272,970	$ 188,346
Cash paid for income taxes, net	$ 293,131	$ 475,594	$ 32,457
Non-cash investing activity:			
Mortgage servicing rights resulting from loan sales	$ 1,861,949	$ 1,138,045	$ 884,876
Operating right-of-use assets recognized	$ 28,401	$ 14,128	$ 83,248
Non-cash financing activity:			
Mortgage servicing liabilities resulting from loan sales	$ 106,631	$ 23,325	$ 37,988
Issuance of *Excess servicing spread payable to PennyMac Mortgage Investment Trust* pursuant to a recapture agreement	$ 557	$ 2,093	$ 1,757
Issuance of common stock in settlement of directors' fees	$ 200	$ 194	$ 233

Note 23—Regulatory Capital and Liquidity Requirements

The Company, through PLS, is required to maintain specified levels of capital and liquidity to remain a seller/servicer in good standing with the Agencies. Such capital and liquid asset requirements generally are tied to the size of the Company's loan servicing portfolio, loan origination volume and delinquency rates.

The Company is subject to financial eligibility requirements established by the Federal Housing Finance Agency ("FHFA") 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 UPB of the Company's total 1-4 unit servicing portfolio, excluding mortgage loans subserviced for others;

- 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 less 70% of such nonperforming Agency servicing UPB in excess of 600 basis points where the underlying loans are in COVID-19 forbearance but were current at the time they entered forbearance.

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:

	December 31, 2021		December 31, 2020	
Agency requirement – PLS	**Actual (1)**	**Requirement (1)**	**Actual (1)**	**Requirement (1)**
	(dollars in thousands)			
Capital				
Fannie Mae & Freddie Mac	$ 5,872,064	$ 722,040	$ 4,454,680	$ 633,331
Ginnie Mae	$ 5,424,747	$ 976,303	$ 3,794,112	$ 1,058,641
HUD	$ 5,424,747	$ 2,500	$ 3,794,112	$ 2,500
Liquidity				
Fannie Mae & Freddie Mac	$ 316,659	$ 93,973	$ 506,096	$ 84,444
Ginnie Mae	$ 316,659	$ 220,577	$ 506,096	$ 215,722
Adjusted net worth / Total assets ratio				
Ginnie Mae	29 %	6 %	12 %	6 %
Tangible net worth / Total assets ratio				
Fannie Mae & Freddie Mac	32 %	6 %	14 %	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 PNMAC's ability to sell loans to and service loans on behalf of the respective Agency.

Note 24—Segments

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 loan origination, acquisition and sale activities. The servicing segment performs servicing of loans on behalf of PMT and non-affiliate investors, execution and management of early buyout transactions and servicing of loans sourced and managed by the investment management segment for PMT.

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 the acquired assets and correspondent production activities for PMT.

Financial performance and results by segment are as follows:

	Year ended December 31, 2021				
	Mortgage Banking			Investment	
	Production	Servicing	Total	Management	Total
			(in thousands)		
Revenues: (1)					
Net gains on loans held for sale at fair value	$ 1,746,650	$ 717,751	$ 2,464,401	$ —	$ 2,464,401
Loan origination fees	384,154	—	384,154	—	384,154
Fulfillment fees from PennyMac Mortgage Investment Trust	178,927	—	178,927	—	178,927
Net loan servicing fees	—	182,954	182,954	—	182,954
Net interest expense:					
Interest income	134,706	165,463	300,169	—	300,169
Interest expense	139,296	251,393	390,689	10	390,699
	(4,590)	(85,930)	(90,520)	(10)	(90,530)
Management fees	—	—	—	37,801	37,801
Other	1,623	2,520	4,143	5,511	9,654
Total net revenue	2,306,764	817,295	3,124,059	43,302	3,167,361
Expenses	1,262,353	510,617	1,772,970	35,208	1,808,178
Income before provision for income taxes	$ 1,044,411	$ 306,678	$ 1,351,089	$ 8,094	$ 1,359,183
Segment assets at year end	$ 8,934,032	$ 9,821,436	$ 18,755,468	$ 21,144	$ 18,776,612

(1) All revenues are from external customers.

	Year ended December 31, 2020				
	Mortgage Banking			Investment	
	Production	Servicing	Total	Management	Total
			(in thousands)		
Revenues: (1)					
Net gains on loans held for sale at fair value	$ 2,297,108	$ 443,677	$ 2,740,785	$ —	$ 2,740,785
Loan origination fees	285,551	—	285,551	—	285,551
Fulfillment fees from PennyMac Mortgage Investment Trust	222,200	—	222,200	—	222,200
Net loan servicing fees	—	439,448	439,448	—	439,448
Net interest income (expense):					
Interest income	101,605	145,421	247,026	—	247,026
Interest expense	82,160	189,368	271,528	23	271,551
	19,445	(43,947)	(24,502)	(23)	(24,525)
Management fees	—	—	—	34,538	34,538
Other	695	1,584	2,279	5,321	7,600
Total net revenue	2,824,999	840,762	3,665,761	39,836	3,705,597
Expenses	860,878	578,618	1,439,496	25,492	1,464,988
Income before provision for income taxes	$ 1,964,121	$ 262,144	$ 2,226,265	$ 14,344	$ 2,240,609
Segment assets at year end	$ 7,870,398	$ 23,709,122	$ 31,579,520	$ 18,275	$ 31,597,795

(1) All revenues are from external customers.

	Year ended December 31, 2019				
	Mortgage Banking			Investment	
	Production	Servicing	Total	Management	Total
			(in thousands)		
Revenues: (1)					
Net gains on loans held for sale at fair value	$ 635,464	$ 90,064	$ 725,528	$ —	$ 725,528
Loan origination fees	174,156	—	174,156	—	174,156
Fulfillment fees from PennyMac Mortgage Investment Trust	160,610	—	160,610	—	160,610
Net loan servicing fees	—	293,665	293,665	—	293,665
Net interest income (expense):					
Interest income	82,338	206,362	288,700	—	288,700
Interest expense	59,973	151,950	211,923	56	211,979
	22,365	54,412	76,777	(56)	76,721
Management fees	—	—	—	36,492	36,492
Other	1,289	2,643	3,932	6,300	10,232
Total net revenue	993,884	440,784	1,434,668	42,736	1,477,404
Expenses	466,050	455,535	921,585	26,375	947,960
Income before provision for income taxes	$ 527,834	$ (14,751)	$ 513,083	$ 16,361	$ 529,444
Segment assets at year end	$ 4,836,472	$ 5,347,549	$ 10,184,021	$ 19,996	$ 10,204,017

(1) All revenues are from external customers.

Note 25—Parent Company Information

The Company's debt financing agreements require PLS, the Company's indirect controlled subsidiary, to comply with financial covenants that include a minimum tangible net worth of $500 million. PLS is limited from transferring funds to the Parent by this minimum tangible net worth requirement. The Company's Unsecured Notes are fully and unconditionally guaranteed, jointly and severally, on a senior unsecured basis by the Company's existing and future wholly-owned domestic subsidiaries (other than certain excluded subsidiaries defined in the indentures under which the Unsecured Notes were issued).

PENNYMAC FINANCIAL SERVICES, INC.
CONDENSED BALANCE SHEETS

	December 31,	
	2021	2020
	(in thousands)	
ASSETS		
Cash	$ 9,276	$ 19,013
Investments in subsidiaries	4,217,461	3,918,583
Receivable from PennyMac Mortgage Investment Trust	27	—
Due from subsidiaries	1,477,332	580,069
Total assets	$ 5,704,096	$ 4,517,665
LIABILITIES AND STOCKHOLDERS' EQUITY		
Unsecured senior notes	$ 1,776,219	$ 645,820
Accounts payable and accrued expenses	28,135	14,590
Payable to subsidiaries	116	22,405
Income taxes payable	481,301	445,462
Total liabilities	2,285,771	1,128,277
Stockholders' equity	3,418,325	3,389,388
Total liabilities and stockholders' equity	$ 5,704,096	$ 4,517,665

PENNYMAC FINANCIAL SERVICES, INC.
CONDENSED STATEMENTS OF INCOME

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
Revenues			
Dividends from subsidiaries	$ 982,740	$ 602,606	$ 36,376
Net interest income (expense):			
Interest income from subsidiary	77,162	15,830	—
Interest expense:			
To non-affiliates	70,208	8,774	—
To subsidiary	—	83	153
	70,208	8,857	153
Net interest income (expense)	6,954	6,973	(153)
Total revenues	989,694	609,579	36,223
Expenses			
Charitable contributions	5,800	2,314	—
Professional services	2,236	42	—
Other	449	327	—
Total expenses	8,485	2,683	—
Income before provision for income taxes and equity in undistributed earnings of subsidiaries	981,209	606,896	36,223
Provision for income taxes	238,803	395,340	91,291
Income (loss) before equity in undistributed earnings of subsidiaries	742,406	211,556	(55,068)
Equity in undistributed earnings of subsidiaries	261,084	1,435,328	448,033
Net income	$ 1,003,490	$ 1,646,884	$ 392,965

PENNYMAC FINANCIAL SERVICES, INC.
CONDENSED STATEMENTS OF CASH FLOWS

	Year ended December 31,		
	2021	2020	2019
		(in thousands)	
Cash flows from operating activities			
Net income	$ 1,003,490	$ 1,646,884	$ 392,965
Adjustments to reconcile net income to net cash provided by operating activities			
Equity in undistributed earnings of subsidiaries	(261,084)	(1,435,328)	(448,033)
Amortization of net debt issuance cost	2,321	225	—
Increase in receivable from PennyMac Mortgage Investment Trust	(27)	—	—
(Increase) decrease in intercompany receivable	(897,063)	(574,518)	8,962
Increase in accounts payable and accrued expenses	13,545	14,590	—
(Decrease) increase in payable to subsidiaries	(22,289)	18,211	—
Increase in income taxes payable	35,839	65,406	58,609
Net cash (used in) provided by operating activities	(125,268)	(264,530)	12,503
Cash flows from financing activities			
Issuance of unsecured senior notes	1,150,000	650,000	—
Payment of debt issuance costs	(21,922)	(4,405)	—
Payment of dividend to holders of common stock	(52,896)	(30,947)	(9,708)
Issuance of common stock pursuant to exercise of stock options	7,536	9,389	5,145
Payment of withholding taxes relating to stock-based compensation	(8,993)	(5,265)	(4,634)
Repurchase of common stock and Class A common stock	(958,194)	(337,479)	(1,056)
Net cash provided by (used in) financing activities	115,531	281,293	(10,253)
Net increase (decrease) in cash (1)	(9,737)	16,763	2,250
Cash at beginning of year	19,013	2,250	—
Cash at end of year	$ 9,276	$ 19,013	$ 2,250
Supplemental cash flow information:			
Non-cash financing activity:			
Issuance of common stock in settlement of directors' fees	$ 200	$ 194	$ 233

(1) The Company did not hold restricted cash during the years presented.

Note 26—Subsequent Events

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

- On February 1, 2022, the Company the Company's board of directors declared a cash dividend of $0.20 per common share. The dividend will be paid on February 25, 2022 to common stockholders of record as of February 15, 2022.

SIGNATURES

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

PENNYMAC FINANCIAL SERVICES, INC.
(Registrant)
By: /s/ David A. Spector
David A. Spector
Chairman and Chief Executive Officer
(Principal Executive Officer)

Dated: February 23, 2022

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed by the following persons on behalf of the registrant in the capacities and on the dates indicated.

Signatures	Title	Date
/s/ David A. Spector David A. Spector	Chairman and Chief Executive Officer (Principal Executive Officer)	February 23, 2022
/s/ Daniel S. Perotti Daniel S. Perotti	Senior Managing Director and Chief Financial Officer (Principal Financial Officer)	February 23, 2022
/s/ Gregory L. Hendry Gregory L. Hendry	Chief Accounting Officer (Principal Accounting Officer)	February 23, 2022
/s/ James Hunt James Hunt	Director	February 23, 2022
/s/ Jonathon S. Jacobson Jonathon S. Jacobson	Director	February 23, 2022
/s/ Patrick Kinsella Patrick Kinsella	Director	February 23, 2022
/s/ Anne D. McCallion Anne D. McCallion	Director	February 23, 2022
/s/ Joseph Mazzella Joseph Mazzella	Director	February 23, 2022
/s/ Farhad Nanji Farhad Nanji	Director	February 23, 2022
/s/ Jeffrey Perlowitz Jeffrey Perlowitz	Director	February 23, 2022
/s/ Lisa Shalett Lisa Shalett	Director	February 23, 2022
/s/ Theodore Tozer Theodore Tozer	Director	February 23, 2022
/s/ Emily Youssouf Emily Youssouf	Director	February 23, 2022

EXECUTIVE OFFICERS*

David A. Spector
Chairman and Chief Executive Officer

Daniel S. Perotti
Senior Managing Director and Chief Financial Officer

Doug Jones
President and Chief Mortgage Banking Officer

Don White
Senior Managing Director and Chief Risk Officer

Vandad Fartaj
Senior Managing Director and Chief Investment Officer

Steven Richard Bailey
Senior Managing Director and Chief Servicing Officer

Derek W. Stark
Senior Managing Director, Chief Legal Officer and Secretary

James Follette
Senior Managing Director and Chief Mortgage Fulfillment Officer

*as of April 1, 2022

BOARD OF DIRECTORS*

David A. Spector
Chairman and Chief Executive Officer,
PennyMac Financial Services, Inc.

Farhad Nanji[2]
Co-Founder, *MFN Partners Management, L.P.*
Former Managing Director, *Highfields Capital Management, LP*

James K. Hunt[2][4]
Former Managing Partner and CEO, Middle Market Credit, *Kayne Anderson Capital Advisors, LLC*

Jeffrey A. Perlowitz[2][3][6]
Independent Lead Director
Former Managing Director and Co-Head of Global Securitized Markets, *Citigroup*

Jonathon S. Jacobson[3][4]
Founder, *HighSage Ventures, LLC*
Former Chief Investment Officer and Chief Executive Officer, *Highfields Capital Management, L.P.*

Lisa M. Shalett[1][4]
Former Partner, *Goldman Sachs*
Former Managing Partner, *Brookfield Asset Management*

Patrick Kinsella[1][5][6]
Former Senior Audit Partner, *KPMG LLP*

Theodore W. Tozer[1][5][6]
Former President, *Government National Mortgage Association (Ginnie Mae)*

Joseph Mazzella[4][5]
Former Managing Director and General Counsel, *Highfields Capital Management LP*

Emily Youssouf[1][3]
Clinical Professor, *NYU Schack Institute of Real Estate*

Anne D. McCallion[3][6]
Former Senior Managing Director and Chief Enterprise Operations Officer, *PennyMac Financial Services, Inc.*

*as of April 1, 2022

Board Committees:
(1) Audit Committee
(2) Compensation Committee
(3) Finance Committee
(4) Nominating and Corporate Governance Committee
(5) Related Party Matters Committee
(6) Risk Committee