

2019 Annual Report

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the fiscal year ended December 31, 2019 or

1 of the mount juin characters 2007 and 101, 2017 of			
☐ TRANSITION REPORT PURSUANT TO For the transition period from to		THE SECURITIES EXCHA	ANGE ACT OF 1934
	Commission File Number: 1	-14100	
IN	IPAC MORTGAGE HOLDI	NGS, INC.	
(Exact	name of registrant as specifie	d in its charter)	
Maryland (State or other jurisdiction incorporation or organization)		33-0675505 (I.R.S. Employer Identification No.)	
	O Jamboree Road, Irvine, Cal (Address of principal executive		
(Comp	(949) 475-3600 pany's telephone number, inclu	ding area code)	
Securities	registered pursuant to Section	n 12(b) of the Act:	
<u>Title of each class</u> Common Stock, \$0.01 par value	<u>Trading Symbol(s)</u> IMH	Name of each	n exchange on which registered NYSE American
Preferred Stock Purchase Rights	IMH		NYSE American
Securities re	gistered pursuant to Section 1	12(g) of the Act: none	
Indicate by check mark if the registrant is a well-known se	-		□ No ⊠
Indicate by check mark if the registrant is not required to f			
Indicate by check mark whether the registrant (1) has filed the preceding 12 months (or for such shorter period that the past 90 days. Yes \boxtimes No \square			
Indicate by check mark whether the registrant has subm Regulation S-T ($\S232.405$ of this chapter) during the p files). Yes \boxtimes No \square			
Indicate by check mark whether the registrant is a large ac emerging growth company. See the definitions of "large ac in Rule 12b-2 of the Exchange Act.			
Large Accelerated Filer □ Acceler	ated Filer □ Non-acc	celerated Filer ⊠	Smaller Reporting Company ⊠
Emerging Growth Company \square			
If an emerging growth company, indicate by check mark revised financial accounting standards provided pursuant t	_	-	eriod for complying with any new or
Indicate by check mark whether the registrant is a shell co	mpany (as defined in Exchange A	Act Rule 12b-2) Yes □ No ☒	
As of June 28, 2019, the aggregate market value of the voti sales price of common stock on the NYSE American on June 2019.			

DOCUMENTS INCORPORATED BY REFERENCE

holders of more than 10% of the stock of the registrant have been deemed affiliates. There were 21,264,926 shares of common stock outstanding as of March 6,

Portions of the Company's definitive Proxy Statement relating to its 2020 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission are incorporated by reference into Part III of this Annual Report on Form 10-K.

2020.

IMPAC MORTGAGE HOLDINGS, INC. 2019 FORM 10-K ANNUAL REPORT TABLE OF CONTENTS

PART I

ITEM 1.	BUSINESS	1
ITEM 1A.	RISK FACTORS	10
ITEM 1B.	UNRESOLVED STAFF COMMENTS	24
ITEM 2.	PROPERTIES	24
ITEM 3.	LEGAL PROCEEDINGS	24
ITEM 4.	MINE SAFETY DISCLOSURES	24
	PART II	
ITEM 5.	MARKET FOR COMPANY'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES	25
ITEM 6.	SELECTED FINANCIAL DATA	25
ITEM 7.	MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS	26
ITEM 7A.	QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK	58
ITEM 8.	FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA	58
ITEM 9.	CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE	58
ITEM 9A.	CONTROLS AND PROCEDURES	59
ITEM 9B.	OTHER INFORMATION	62
	PART III	
ITEM 10.	DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE	62
ITEM 11.	EXECUTIVE COMPENSATION	62
ITEM 12.	SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS	62
ITEM 13.	CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE	62
ITEM 14.	PRINCIPAL ACCOUNTING FEES AND SERVICES	62
	PART IV	
ITEM 15.	EXHIBITS AND FINANCIAL STATEMENT SCHEDULES	62
ITEM 16.	FORM 10-K SUMMARY	66
SIGNATII	RES	67

PART I

ITEM 1. BUSINESS

Impac Mortgage Holdings, Inc., sometimes referred to herein as the "Company," "we," "our" or "us," is a Maryland corporation incorporated in August 1995 and includes the following subsidiaries: Integrated Real Estate Service Corporation (IRES), Impac Mortgage Corp. (IMC), IMH Assets Corp. (IMH Assets) and Impac Funding Corporation (IFC). Impac Mortgage Corp. (IMC) a subsidiary of IRES, conducts our mortgage lending and real estate services operations.

Forward-Looking Statements

This report on Form 10-K contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Forward-looking statements, some of which are based on various assumptions and events that are beyond our control, may be identified by reference to a future period or periods or by the use of forward-looking terminology, such as "may," "will," "believe," "expect," "likely," "should," "could," "seem to," "anticipate," "plan," "intend," "project," "assume," or similar terms or variations on those terms or the negative of those terms. The forward-looking statements are based on current management expectations. Actual results may differ materially as a result of several factors, including, but not limited to the following: successful development, marketing, sale and financing of new and existing financial products; expansion of NonQM loan originations and conventional and government-insured loan programs; local, national and international economic conditions; including the impact of the Covid-19 pandemic on he economy and demand for our products; ability to successfully diversify our loan products; ability to successfully sell loans to third-party investors; volatility in the mortgage industry; unexpected interest rate fluctuations and margin compression; performance of third-party sub-servicers; our ability to manage personnel expenses in relation to mortgage production levels; our ability to successfully use warehousing capacity and satisfy financial convents requirements; increased competition in the mortgage lending industry by larger or more efficient companies; issues and system risks related to our technology; ability to successfully create cost and product efficiencies through new technology; more than expected increases in default rates or loss severities and mortgage related losses; ability to obtain additional financing through lending and repurchase facilities, debt or equity funding, strategic relationships or otherwise; the terms of any financing, whether debt or equity, that we do obtain and our expected use of proceeds from any financing; increase in loan repurchase requests and ability to adequately settle repurchase obligations; failure to create brand awareness; the outcome, including any settlements, of litigation or regulatory actions pending against us or other legal contingencies; our compliance with applicable local, state and federal laws and regulations; and other general market and economic conditions.

For a discussion of these and other risks and uncertainties that could cause actual results to differ from those contained in the forward-looking statements, see Item 1A. "Risk Factors" and Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations" in this report. This document speaks only as of its date and we do not undertake, and specifically disclaim any obligation, to release publicly the results of any revisions that may be made to any forward-looking statements to reflect the occurrence of anticipated or unanticipated events or circumstances after the date of such statements except as required by law.

Available Information

Our internet website address is www.impaccompanies.com. We make available our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and proxy statements for our annual stockholders' meetings, as well as any amendments to those reports, free of charge through our website as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission, or the SEC. You can learn more about us by reviewing our SEC filings on our website by clicking on "Investor Relations—Stockholder Relations" located on our home page and proceeding to "SEC Filings." We also make available on our website, under "Corporate Governance," charters for the audit, compensation, and governance and nominating committees of our board of directors, our Code of Business Conduct and Ethics, our Corporate Governance Guidelines and other company information, including amendments to such documents and waivers, if any, to our Code of Business Conduct and Ethics. These documents will also be furnished, free of charge, upon written request to Impac Mortgage Holdings, Inc., Attention: Stockholder Relations, 19500 Jamboree Road, Irvine, California 92612. The SEC also maintains a website at www.sec.gov that contains reports, proxy statements and other information regarding SEC registrants, including our Company.

Our Company

We were founded in 1995 and are an established nationwide independent residential mortgage lender which originates, sells and services residential mortgage loans. We originate non-qualified mortgages (NonQM), conventional mortgage loans eligible for sale to U.S. government-sponsored enterprises, (GSEs), including Fannie Mae, Freddie Mac (conventional loans), and government-insured mortgage loans eligible for government securities issued through Ginnie Mae (government loans).

Segments

Our business activities are organized and presented in three primary operating segments: Mortgage Lending, Real Estate Services and the Long-Term Mortgage Portfolio. Our mortgage lending segment provides mortgage lending products through three lending channels, retail, wholesale and correspondent and opportunistically retain mortgage servicing rights. Our real estate services segment performs master servicing and provides loss mitigation services for primarily our securitized long-term mortgage portfolio. And, our long-term mortgage portfolio consists of residual interests in securitization trusts. A description of each operating segment is presented below with further details and discussions of each segment's results of operations presented in Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations."

In addition to the segments described above, we also have a corporate segment, which supports all of the operating segments. The corporate segment includes unallocated corporate and other administrative costs as described below.

Mortgage Lending

We are focused on expanding our mortgage lending platform which provides conventional and government-insured mortgage loans as well as providing innovative products to meet the needs of borrowers not met by traditional conventional and government products. Our mortgage lending operation generates origination and processing fees, net of origination costs, at the time of origination, interest income during the period from origination to sale of loan, as well as gains or unexpected losses when the loans are sold to third party investors, including the GSEs and Ginnie Mae. We opportunistically retain mortgage servicing rights from the sale of mortgage loans and earn servicing fees, net of sub-servicer costs, from our mortgage servicing portfolio. From time to time, we sell mortgage servicing rights from our servicing portfolio.

During 2014, we began originating NonQM loans. NonQM mortgages are generally loans that do not meet the qualified mortgage (QM) guidelines set out by the Consumer Financial Protection Bureau (CFPB). We believe there is an underserved mortgage market for borrowers with good credit who may not meet the QM guidelines, for example self-employed borrowers. As the demand by consumers for the NonQM product grows we expect the investor appetite will increase for the NonQM mortgages. A NonQM borrower is generally less sensitive to interest rates and generally does not have the same income documentation that a conforming loan borrower does, nonetheless the borrower is still required to meet the "ability to repay" guidelines.

As a nationwide mortgage lender, we are approved to originate and service Fannie Mae, Freddie Mac and Ginnie Mae eligible loans. We primarily originate, sell and service conventional, conforming agency and government insured residential mortgage loans originated or acquired through our three channels: Retail (consumer direct), Correspondent and Wholesale.

- Retail channel CashCall Mortgage (CCM), operates as a centralized call center that utilizes a marketing
 platform to generate customer leads through the internet and call center loan agents. As a centralized retail call
 center, loan applications are received and taken by loan agents directly from consumers and through the Internet.
- Wholesale channel Originates loans sourced through mortgage brokers.
- Correspondent channel Acquires closed loans from approved correspondent sellers.

Our mortgage lending activities primarily consist of the origination, sale and servicing of conventional loans eligible for sale to Fannie Mae and Freddie Mac, government-insured loans eligible for Ginnie Mae securities issuance as well as NonQM. We currently originate and fund mortgages through our wholly-owned subsidiary, IMC. In order to originate mortgage loans we must be able to finance them and hold them on our consolidated balance sheets until such

loans are sold. In order to do this, we must have lines of credit with banks (called warehouse lines) that allow us the short term funding required to finance the loans and hold them prior to sale.

The following table presents selected data from our mortgage lending operations for the years ended December 31, 2019 and 2018:

(in millions)	 2019	 2018
Originations	\$ 4,548.8	\$ 3,839.6
Servicing portfolio	4,931.8	6,218.1
Mortgage servicing rights	41.5	64.7
Servicing fees, net	12.9	37.3

Our origination volumes increased 18% in 2019 to \$4.5 billion as compared to \$3.8 billion in 2018. Of the \$4.5 billion in total originations in 2019, approximately \$3.5 billion, or 77%, was originated through the retail channel. In contrast, during 2018, our retail originations contributed 48% to our total origination volume. The increase in originations was the result of the significant drop in mortgage interest rates which began in the first quarter of 2019 and continued through year end.

Our loan products primarily include NonQM mortgages, conventional loans eligible for sale to Fannie Mae and Freddie Mac and loans eligible for government insurance (government loans) by the Federal Housing Administration (FHA), Veterans Affairs (VA), and United States Department of Agriculture (USDA).

Our mortgage servicing portfolio decreased to \$4.9 billion at December 31, 2019 as compared to \$6.2 billion at December 31, 2018. The decrease was due to a shift in strategy during 2018 to direct our efforts on repositioning the Company by focusing on our core NonQM lending business and strengthen our liquidity position. During the year ended December 31, 2019, we continued to selectively retain mortgage servicing as well as increase whole loan sales on servicing released basis to investors.

Each of our three origination channels, Retail, Wholesale and Correspondent, produces similar mortgage loan products and applies similar underwriting standards.

	For the year ended December 31,								
(in millions)	2019	%	2018	%					
Originations by Channel:									
Retail	\$ 3,505.7	77 %	\$ 1,842.2	48 %					
Wholesale	816.3	18	877.9	23					
Correspondent	226.8	5	1,119.5	29					
Total originations	\$ 4,548.8	100 %	\$ 3,839.6	100 %					

Retail—Our retail channel today consists of our consumer direct call center CCM, a leading originator which was previously based in Orange, California. During the fourth quarter of 2018, we relocated the consumer direct call center from the office in Orange, California into our corporate office in Irvine, California. This transition was part of our plan to streamline the operations and reposition the consumer direct platform to be more competitive in a challenging lending market.

The retail channel utilizes a high-volume, rapid response time funding model with a focus on providing exceptional customer service. The acquisition of CCM's residential lending platform in 2015 added a centralized retail call center to IMC's current business-to-business origination channels and provides additional capacity to process increased origination volumes of expanded products including our NonQM loan programs and government insured Ginnie Mae programs, while profitably generating servicing assets for IMC.

When loans are originated on a retail basis, the origination documentation is completed inclusive of customer disclosures and other aspects of the lending process and funding of the transaction is completed internally. Our call center representatives contact borrowers through either inbound or outbound marketing campaigns sourced from our digital marketing campaigns, TV and radio ads, purchase-money and refinance mortgage leads, including leads sourced from customer referrals and retention of customers in the servicing portfolio that are seeking to refinance or purchase a property.

For the year ended December 31, 2019, we closed \$3.5 billion of loans in this origination channel, which equaled 77% of total originations, as compared to \$1.8 billion or 48% of total originations during 2018.

Correspondent—Our correspondent channel represents mortgage loans acquired from our correspondent sellers. Our correspondent channel has historically targeted a market of small banks, credit unions and small mortgage banking firms. Prior to accepting loans from correspondent sellers, each seller is underwritten to determine if it meets our financial and other underwriting guidelines. Our review of each prospective seller includes obtaining a third party due diligence report that verifies licensing, insurance coverage, quality of recent Federal Housing Administration (FHA) originations and provides information on any industry sanctions that might exist. In addition, each seller is required to sign our correspondent seller agreement that contains certain representations and warranties from the seller allowing us to require the seller to repurchase a loan sold to us for various reasons including (i) ineligibility for sale to GSEs, (ii) early payment default, (iii) early pay-off or (iv) if the loan is uninsurable by a government agency.

In our correspondent channel, the correspondent seller originates and closes the loan. After the loan is originated, the correspondent seller provides the needed documentation and information to us to review and determine if it meets our underwriting guidelines. The loan is acquired by us only after we approve it for purchase. We focus on customer service for our clients by facilitating prompt review by our due diligence team, providing bid pricing on both newly originated and seasoned portfolios, enabling clients to deliver one loan at a time on a flow basis and providing clients with expedited funding timelines. We purchase NonQM loans, conventional loans eligible for sale to the GSEs and government-insured loans eligible for Ginnie Mae securities. For the year ended December 31, 2019, we closed loans totaling \$226.8 million in the correspondent origination channel, which equaled 5% of total originations, compared to \$1.1 billion or 29%, of total originations during 2018.

Wholesale—In a wholesale transaction, our account executives work directly with mortgage brokers who originate and document loans for delivery to our operational center where we underwrite and fund the mortgage loan. Each loan is underwritten to our underwriting standards and, if approved, the borrower is sent new disclosures under our name and the loan is funded in the name of Impac Mortgage.

Prior to accepting loans from mortgage brokers, each mortgage broker is required to meet our guidelines for minimum experience, credit score and net worth. We also obtain a third-party due diligence report for each prospective broker that verifies licensing and provides information on any industry sanctions that might exist. In addition, each mortgage broker is required to sign our broker agreement that contains certain representations and warranties from the brokers. For the year ended December 31, 2019, we closed loans totaling \$816.3 million in this origination channel, which equaled 18% of total originations, as compared to \$877.9 million, or 23%, of total originations during 2018.

Since 2011, we have provided loans to customers predominantly in the Western U.S. with California, Washington and Arizona comprising 84% of originations in 2019. Currently, we provide nationwide lending with our retail call center, correspondent sellers and mortgage brokers.

Loan Types

Our loan products primarily include conventional loans eligible for sale to Fannie Mae and Freddie Mac and loans eligible for government insurance by FHA, Veteran's Administration (VA) and U.S. Department of Agriculture (USDA) and NonQM. The FHA, VA and USDA loans are government-insured loans eligible for Ginnie Mae securities issuance. We have established strict lending guidelines, including determining the prospective borrowers' ability to repay the mortgage, which we believe will keep delinquencies and foreclosures at acceptable levels. We continue to refine our guidelines to expand our reach to the underserved market of credit worthy borrowers who can fully document and substantiate an ability to repay mortgage loans, but unable to obtain financing through traditional programs (QM loans), for example self-employed borrowers. In conjunction with establishing strict lending guidelines, we have also established investor relationships which provide us with an exit strategy for these NonQM loans. In 2018 and 2019, two of our strategic relationships closed three private label securitizations with AAA ratings by two ratings agencies, which were both 100% backed by our NonQM collateral. In 2019, our NonQM origination volume decreased slightly to \$1.2 billion with an average Fair Isaac Company credit score (FICO) of 731 and a weighted average loan to value ratio (LTV) of 70%. In 2018, our NonQM origination volume was \$1.3 billion with an average Fair Isaac Corporation credit score (FICO) of 725 and a weighted average LTV of 68%.

The following table indicates the breakdown of our originations by loan type for the periods indicated:

	For the year ended December 31,							
(in millions)		2019						
Originations by Loan Type:								
Conventional	\$	3,123.3	\$	1,263.2				
NonQM		1,241.5		1,300.9				
Government-insured		184.0		1,275.5				
Total originations	\$	4,548.8	\$	3,839.6				

Loan Sales—Selling Loans to GSEs, Issuing Ginnie Mae Securities and Selling Loans on a Whole Loan Basis

We sell the mortgage loans to the secondary market, including sales to the GSEs and issuing securities through Ginnie Mae. We opportunistically sell loans on a servicing-retained basis where the loan is sold to an investor such as Freddie Mac, and we retain the right to service that loan, called mortgage servicing rights (MSRs). We securitize government-insured loans by issuing Ginnie Mae securities through a process whereby a pool of loans is transferred to Ginnie Mae as collateral for a government-insured mortgage-backed security. Traditionally, we have not sold a significant amount of residential mortgage loans on a whole loan basis where the investor also acquires the servicing rights. In 2018 and into 2019, we began to do more whole loans sales servicing released in an effort to expand our take out investor base for NonQM loans as well as balance our investment in MSRs with our liquidity needs.

During the fourth quarter of 2017, as a result of the prepayment speeds from our retail channel, Fannie Mae sufficiently limited the manner and volume for our deliveries of eligible loans such that we elected to cease deliveries to them and we expanded our whole loan investor base for these loans. As a result in our shift in takeout investor base, during 2018 and 2019, we increased servicing released loan sales to whole loan investors and expect to continue to utilize these alternative exit strategies for Fannie Mae eligible loans. We continue to take steps to manage our prepayment speeds to be more consistent with our industry comparables and to reestablish the full confidence and delivery mechanisms to our investor base. We remain an approved Seller and Servicer with Fannie Mae and Freddie Mac.

The following table indicates the breakdown of our loan sales to GSEs, issuance of Ginnie Mae securities and loans sold to investors on a whole loan servicing-released basis for the periods as indicated:

	For the y Decem	
(in millions)	 2019	2018
Freddie Mac	\$ 187.0	\$ 878.2
Ginnie Mae	103.7	1,512.0
Fannie Mae	_	_
Total servicing retained sales	290.7	 2,390.2
Other (servicing released)	3,805.5	1,664.2
Total loan sales	\$ 4,096.2	\$ 4,054.4

Mortgage Servicing

Upon our sale of loans to GSEs or the issuance of securities through Ginnie Mae, we generally retain the mortgage servicing rights with respect to the mortgage loans. We also sell loans on a servicing-released basis to secondary market investors where we do not retain the servicing rights. When we retain servicing rights, we are entitled to receive a servicing fee which is collected from interest payments made by the borrower and paid to us on a monthly basis equal to a specified percentage, typically between 0.25% and 0.44% per annum of the outstanding principal balance of the loans. We may also be entitled to receive additional servicing compensation, such as late payment fees and earn additional income through the use of non-interest bearing escrows. As a mortgage servicer, we are required to advance certain amounts to meet the contractual loan servicing requirements for certain investors. We may advance principal, interest, property taxes and insurance for borrowers that have become delinquent, plus any other costs to preserve the property. Also, we will advance funds to maintain, repair and market foreclosed real estate properties. Such advances are typically repaid when the loan becomes current or repaid from the proceeds generated from the sale of the property subsequent to foreclosure.

We have hired a nationally recognized residential servicer to sub-service the servicing portfolio. Although we use a sub-servicer to provide primary servicing and certain default servicing functions, our servicing surveillance team, which

is experienced in loss mitigation and real estate recovery, monitors and surveys the performance of the loans and sub-servicer. We generally earn a servicing fee on each loan, but we also incur the cost of the sub-servicer as well as the internal servicing surveillance team. Incurring the cost of both a sub-servicer and an internal surveillance team reduces the net revenues we earn from the mortgage servicing portfolio; however, we believe it reduces our risk by minimizing delinquencies and repurchase risk.

We may sell mortgage servicing rights to fund the expansion of origination volumes as well as balance the capital invested in mortgage servicing with liquidity, which has and will result in a decrease in our mortgage servicing portfolio. We have continued to selectively retain mortgage servicing in 2019 and may selectively purchase pools of mortgage servicing rights in the future. Furthermore, the value of mortgage servicing rights are affected by increases and decreases in mortgage interest rates. Therefore, volatility in mortgage rates generally causes volatility in the value of mortgage servicing rights.

Risk Management

We are exposed to various business risks which may significantly impact our financial statements. Our risk management framework and governance structure is intended to provide oversight and ongoing management of the risks inherent in our business activities and create a culture of risk awareness. Our Compliance and Risk Management oversees governance processes and monitoring of these risks including the establishment of risk strategy and documentation of risk policies and controls. Compliance and Risk Management work in partnership with the business to provide oversight of enterprise risk management and controls. This includes establishing enterprise-level risk management policies, appropriate governance activities and creating risk transparency through risk reporting. For further discussion on operational and market risks, see Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations—Operational and Market Risks."

Underwriting

We primarily originate residential first mortgage loans for sale that conform to the respective underwriting guidelines established by Fannie Mae, Freddie Mac, FHA, VA and USDA. Our mortgage loans are underwritten individually on a loan-by-loan basis. Each mortgage loan originated from our retail and wholesale channel are underwritten by one of our underwriters or by a third party contract underwriter using our underwriting guidelines. Each mortgage loan originated from our correspondent channel is reviewed internally or by a third party underwriting company to determine if the borrower meets our underwriting guidelines.

Our criteria for underwriting generally include, but are not limited to, full documentation of borrower's income, assets, other relevant financial information, the specific agency's eligible LTV, borrower's debt-to-income ratio and full appraisals when required. Variances from any of these standards are permitted only to the extent allowable under the specific program requirements. Our underwriting procedures for all retail and wholesale loans require the use of a GSE automated underwriting system (AUS). Our underwriting procedures for all correspondent originated loans includes a file review verifying that the borrower's credit and the collateral meet our applicable program guidelines and an appropriate AUS report has been completed. We also confirm the loan is compliant with regulatory guidelines. In addition, we perform quality control procedures on selected pools prior to our acquisition of the loan.

Quality Control

Prior to funding, retail and wholesale loans are reviewed internally by our quality control department to verify the loan conforms to our program guidelines and meets state and federal compliance guidelines. Prior to the acquisition of a correspondent loan, we perform quality control procedures on selected pools. Management reviews the reports prior to the acquisition of any correspondent loan. We also perform post origination quality controls procedures on at least 10% of all mortgage loans funded or acquired from third party originators. Additionally, we closely monitor the servicing performance of loans retained in our mortgage servicing portfolio to identify any opportunities to improve our underwriting process or procedures and identify any issues with mortgage brokers or correspondent sellers. Findings are summarized monthly and the appropriate changes are implemented.

Hedging

We are exposed to interest rate risks relating to our mortgage lending operations. We use derivative instruments to manage some of our interest rate risk; however, we do not attempt to hedge interest rate risk completely. For further discussion on interest rate risk and hedging, see Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations—Operation and Market Risks."

Data Security

Sensitive borrower information, such as name, address and social security number is included in nearly all mortgage loan files. We seek to keep this information secure for every borrower. To do so, our policy requires all sensitive borrower data to be transmitted to us through our secure website portal which allows all of our customers, correspondent sellers, mortgage brokers and individual borrowers to send data to us securely in an encrypted manner. For a discussion of cybersecurity and data privacy risk see Item 1A. "Risk Factors - Cybersecurity risks, data privacy breaches, 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."

Real Estate Services

In 2008, we established our Real Estate Services segment to provide solutions to the distressed mortgage and real estate markets. We provide loss mitigation and real estate services primarily on our own long-term mortgage portfolio, including default surveillance, loan modification services, short sale services (where a lender agrees to take less than the balance owed from the borrower), real estate owned (REO) surveillance and disposition services and monitoring, reconciling and reporting services for residential and multifamily mortgage portfolios. The activities and related revenues have declined in recent years, and we expect these revenues to gradually decline over time as our long-term mortgage portfolio declines. These operations are conducted by IMC.

Long-Term Mortgage Portfolio

The long-term mortgage portfolio primarily consists of residual interests in the securitization trusts reflected as trust assets and liabilities in our consolidated balance sheets that hold non-conforming mortgage loans originated between 2002 and 2007. Since we are no longer adding new mortgage loans to the long-term mortgage portfolio, the long-term mortgage portfolio continues to decrease and is a smaller component of our overall operating results.

Our long-term mortgage portfolio consists of our residual interests in securitizations represented on our consolidated balance sheets as the difference between total trust assets and total trust liabilities. Our long-term mortgage portfolio includes adjustable rate and, to a lesser extent, fixed rate Alt-A single-family residential mortgages and commercial (primarily multifamily residential loans) mortgages that were acquired and originated primarily by our discontinued, prior non-conforming mortgage lending operations and retained in our long-term portfolio before 2008. Alt-A mortgages are primarily first lien mortgages made to borrowers whose credit was generally within established Fannie Mae and Freddie Mac guidelines at origination date but have loan characteristics that make them non-conforming under those guidelines.

In previous years, we securitized mortgage loans by transferring originated residential single-family mortgage loans and multifamily commercial loans (the "transferred assets") into non-recourse bankruptcy remote trusts which in turn issued tranches of bonds to investors supported only by the cash flows of the transferred assets. Because the assets and liabilities in the securitizations are nonrecourse to us, the bondholders cannot look to us for repayment of their bonds in the event of a shortfall. These securitizations were structured to include interest rate derivatives. We retained the residual interest in each trust, and in most cases are the master servicer. A trustee and servicer, unrelated to us, was named for each securitization. Cash flows from the loans (the loan payments and liquidation of foreclosed real estate properties) collected by the loan servicer are remitted to us, the master servicer. The master servicer remits payments to the trustee who remits payments to the bondholders (investors). The servicer collects loan payments and performs loss mitigation activities for defaulted loans. These activities include foreclosing on properties securing defaulted loans, which results in REO.

Commercial mortgages in our long-term mortgage portfolio are primarily adjustable rate mortgages with initial fixed interest rate periods of two, three, five, seven and ten years that subsequently convert to adjustable rate mortgages

(hybrid ARMs), and are primarily secured with multi-family residential real estate. Commercial mortgages have provided greater asset diversification on our consolidated balance sheets as borrowers of commercial mortgages typically have higher credit scores and commercial mortgages typically have lower LTVs.

Before 2007, we securitized mortgage loans in the form of collateralized mortgage obligations, or CMOs, which were consolidated and accounted for as secured borrowings for financial statement purposes. Securitized mortgages in the form of real estate mortgage investment conduits, or REMICs, were either consolidated or unconsolidated depending on the design of the securitization structure. We consolidated the variable interest entity, or VIE, as the primary beneficiary of the sole residual interest in each securitization trust where we also performed the master servicing. Amounts consolidated were included in trust assets and liabilities as securitized mortgage collateral, real estate owned, derivative assets, securitized mortgage borrowings and derivative liabilities in the accompanying consolidated balance sheets. At December 31, 2019, our residual interests in securitizations (represented by the difference between total trust assets and total trust liabilities) decreased to \$15.5 million, compared to \$17.4 million at December 31, 2018.

Since 2007, we have not added any mortgage loans to our long-term mortgage portfolio.

For additional information regarding the long-term mortgage portfolio refer to Item 7. "Management's Discussion and Analysis of Financial Condition," and Note 7. "Securitized Mortgage Trusts" in the notes to the consolidated financial statements.

Master Servicing

Until 2007, we were retaining master servicing rights on substantially all of our non-conforming single-family residential and commercial mortgage acquisitions and originations that were sold through securitizations. Since 2008, we have not retained any additional master servicing rights, but have continued to be the master servicer of previously retained master servicing rights.

The function of a master servicer includes collecting loan payments from loan servicers and remitting loan payments, less master servicing fees receivable and other fees, to a trustee or other purchaser for each series of mortgage-backed securities or mortgages master serviced. In addition, as master servicer, we monitor compliance with the servicing guidelines and perform or contract with third parties to perform all functions not adequately performed by any loan servicer. The master servicer is also required to advance funds, or cause the loan servicers to advance funds, to cover principal and interest payments not received from borrowers depending on the status of their mortgages, but only to the extent that it is determined that such advances are recoverable either from the borrower or from the liquidation of the property.

Master servicing fees are generally 0.03% per annum on the unpaid principal balance of the mortgages serviced. As a master servicer, we also earn income or incur expense on principal and interest payments received from borrowers until those payments are remitted to the investors of those mortgages. Fees from the master servicing portfolio have declined significantly due to a decrease in principal balances since the end of 2008, which in turn affects the amount we earn on balances held in custodial accounts. At December 31, 2019, we were the master servicer for approximately 13,400 mortgages with an UPB of approximately \$3.2 billion of which \$636.7 million of those loans were 60 or more days delinquent. At December 31, 2019, we were also the master servicer for unconsolidated securitizations (included in the total master servicing portfolio above) totaling approximately \$268.1 million in unpaid principal balance of which \$125.5 million of those loans were 60 or more days delinquent. Fees earned from master servicing are separate from those earned from mortgage servicing which are generated from servicing rights generated from loans sold servicing retained from new originations since 2011.

Corporate

This segment includes all corporate services groups including information technology, human resources, legal, facilities, accounting, treasury and corporate administration. This corporate services group supports all operating segments. A portion of these costs are allocated to the operating segments based on certain allocation methods. These corporate services groups are centralized to be efficient and avoid any duplicate cost burdens. Specific costs associated with being a publicly traded company are not allocated and remain in this segment.

The corporate segment also includes debt expense related to the Convertible Notes due in 2020 as well as capital leases. Debt service expense is not allocated and remains in this segment. We have taken advantage of very low financing rates and entered into capital lease arrangements to finance the purchase of equipment, mostly computer equipment, used in all three segments. The interest expense associated with the capital leases is not allocated and remains in this segment.

Regulation

The U.S. mortgage industry is heavily regulated. Our mortgage lending operations, as well as our real estate services, are subject to federal, state and local laws that regulate and restrict the manner in which we operate in the residential mortgage industry. Plus, mortgage bankers and brokers in our wholesale production channel and correspondents from which we purchase loans are also subject to regulation, which may have an effect on our business and the mortgage loans we are able to fund or acquire. Compliance with regulations in the mortgage industry requires us to incur costs and expenses in our operations. To the extent we, or others with which we conduct business, do not comply with applicable laws and regulations, we may be subject to fines, reimbursements and other penalties. The laws and regulations that we are subject to include (but are not limited to) the following:

- the Federal Truth-in-Lending Act (known as TILA) and Regulation Z promulgated thereunder, which require certain disclosures to the borrowers regarding the terms of the loans, regulates the methods in which compensation can be paid to brokers and loan originators; and prohibits lenders from making residential mortgage loans unless a good faith determination is made of a borrower's creditworthiness based on verified and documented information;
- the Equal Credit Opportunity Act and Regulation B promulgated thereunder, which prohibit discrimination on the basis of age, race, color, sex, religion, marital status, national origin, receipt of public assistance or the exercise of any right under the Consumer Credit Protection Act, in the extension of credit;
- the Fair Housing Act, which prohibits discrimination in housing on the basis of race, color, national origin, religion, sex, familial status, or handicap, in housing-related transactions;
- the Fair Credit Reporting Act, which regulates the use and reporting of information related to the borrower's credit experience;
- the Fair and Accurate Credit Transaction Act, which regulates credit reporting and use of credit information in making unsolicited offers of credit;
- state and federal privacy regulations which include the Gramm-Leach-Bliley Act, which imposes requirements
 on all lenders with respect to their collection and use of nonpublic financial information and requires them to
 maintain the security of that information and the California Consumer Privacy Act (and comparable data privacy
 regulations in other states) which enhances privacy rights and consumer protections for California residents and
 property owners;
- the Real Estate Settlement Procedures Act (known as RESPA) and Regulation X promulgated thereunder, outlaws kickbacks that increase the cost of settlement services;
- the Home Mortgage Disclosure Act (known as HMDA) and Regulation C promulgated thereunder, which requires the reporting of public loan data;
- the Telephone Consumer Protection Act and the CAN-SPAM Act, which regulate commercial solicitations via telephone, fax, and the Internet;
- the Depository Institutions Deregulation and Monetary Control Act of 1980, which preempts certain state usury laws:
- the Alternative Mortgage Transaction Parity Act of 1982, which preempts certain state lending laws which regulate alternative mortgage transactions;

- the Fair Debt Collection Practices Act, which prohibits unfair debt collection practices;
- the Secure and Fair Enforcement for Mortgage Licensing Act of 2008, which establishes national minimum standards for mortgage licensees;
- regulations promulgated by the CFPB to help assure that consumers are provided with timely and understandable information about residential mortgage loans that protect them against Unfair, Deceptive or Abusive Acts or Practices; and
- interagency final rules required pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act establishing minimum national underwriting guidelines for residential mortgages that lenders will be allowed to securitize without retaining any of the loans' default risk.

Our mortgage lending operations is an approved Housing and Urban Development (HUD) lender, a Ginnie Mae approved issuer and servicer and an approved seller/servicer of Fannie Mae and Freddie Mac. As such, we are required to submit annually to Fannie Mae, Freddie Mac, and HUD, as applicable, audited financial statements, or the equivalent, according to the financial reporting requirements of each regulatory entity for its sellers/servicers. Our lending activities are also subject to examination by Fannie Mae, Ginnie Mae, Freddie Mac, HUD, CFPB and state regulatory agencies including the California Department of Business Oversight at any time to assure compliance with applicable regulations, policies and procedures. Also refer to "Regulatory Risks" under Item 1A. Risk Factors for a further discussion of regulations that may affect us.

Competition

We operate in a highly competitive industry that could become even more competitive as a result of legislative, regulatory, economic, and technological changes, as well as continued consolidation or expansion. Our competitors include banks, thrifts, credit unions, real estate brokerage firms, mortgage brokers, fintech companies and mortgage banking companies. Competition is based on a number of factors including, among others, customer service, quality and range of products and services offered, price, reputation, interest rates, lending limits and customer convenience. To compete effectively, we must have a very high level of operational, technological, and managerial expertise, as well as access to capital at a competitive cost. Many of our competitors are larger than we are and have access to greater financial resources than we do, which can place us at a competitive disadvantage. In addition, many of our largest competitors are banks or affiliated with banking institutions, the advantages of which include, but are not limited to, the ability to hold new mortgage loan originations in an investment portfolio and having access to financing with more favorable terms than we do, including lower funding costs with bank deposits as a source of liquidity.

Our real estate services segment competes with firms that provide similar services, including loan modification companies, real estate asset management and disposition companies and real estate brokerage firms. Our competitors include large mortgage servicers, established subprime loan servicers, and newer entrants to the specialty servicing and recovery collections business. Efforts to market our ability to provide real estate services for others is more difficult than many of our competitors because we have not historically provided such services to unrelated third parties, and we are not a rated primary or special servicer of residential mortgage loans as designated by a rating agency.

Risk factors, as outlined below, provide additional information related to risks associated with competition in the mortgage industry.

Employees

As of December 31, 2019, we had a total of 530 employees. Management believes that relations with our employees are good. We are not a party to any collective bargaining agreements.

ITEM 1A. RISK FACTORS

Our long-term success is primarily dependent on our ability to increase the profitability of our mortgage originations.

We believe that a key driver for our Company will be increasing the profitability of our mortgage lending operations. Our success is dependent on many factors such as the documentation and data capture technology we employ,

increasing our loan origination operational capacities, increasing our mortgage origination efficiencies, attracting qualified employees, ability to maintain our approvals and sell or securitize loans with Fannie Mae, Freddie Mac, Ginnie Mae and other investors, ability to increase our mortgage servicing portfolio, the ability to obtain adequate warehouse borrowing capacity, the ability to adequately maintain loan quality and manage the risk of losses from loan repurchases, the changing regulatory environment for mortgage lending and the ability to fund our originations.

If we are unable to generate sufficient net earnings from our mortgage lending operations, we may be unable to satisfy our future operating costs and liabilities, including repayment of our debt obligations, which may materially and adversely affect our financial condition and results of operations.

Our earnings may decrease, or losses increase, because of changes in prevailing interest rates.

Our profitability is directly affected by changes in prevailing interest rates over which we have no control. The following are certain material risks we face related to changes in interest rates:

Originations:

- an increase in interest rates could adversely affect our loan originations volume because refinancing an existing loan would be less attractive for homeowners and qualifying for a purchase money loan may be more difficult for consumers;
- an increase in interest rates could also adversely affect our production margins due to increased competition among originators;

Servicing:

• a decrease in interest rates may increase prepayment speeds which may lead to (i) increased amortization; (ii) decrease in servicing fees; and (iii) decrease in the value of our MSRs;

Debt:

• an increase in interest rates would increase the cost of servicing our outstanding debt or the costs associated with financing new debt, including our ability to finance loan originations.

Any of the foregoing could materially and adversely affect our business, financial condition and results of operations.

If we are unable to satisfy our debt obligations or to meet or maintain the requisite financial covenant requirements with our lenders, our financial condition and results of operations may be materially and adversely effected.

We have significant debt obligations including:

- \$25.0 million Convertible Promissory Notes due May 2020;
- Junior Subordinated Notes with an outstanding principal balance of \$62.0 million at December 31, 2019 and due March 2034; and
- Warehouse facilities with third-party lenders which are secured by and used to fund residential mortgage loans until such loans are sold.

Our ability to make scheduled payments on our debt obligations depends on our future performance, which is subject to economic, financial, competitive and other factors beyond our control. Our business may not generate cash flow from operations in the future sufficient to service our debt. If we are unable to generate cash flow from operations, we may be required to pursue one or more alternatives, including, but not limited to, selling assets, restructuring debt or obtaining additional equity capital on terms that may be unfavorable to us or, highly dilutive to our shareholders. We may not be able to engage in any of these activities or engage in these activities on desirable terms, which could have a material adverse effect on our financial condition and results of operations. Additionally, if we are unable to sell loans timely to repay our warehouse lenders, our liquidity may be adversely affected.

In addition, our credit and warehouse facilities contain covenants, including requirements to maintain a certain minimum net worth, liquidity, litigation judgment thresholds, debt ratios, profitability levels and other customary debt covenants. A breach of the covenants can result in an event of default under our facilities and as such allows the lender to pursue certain remedies, including foreclosure on our assets. Furthermore, a breach under one facility may constitute a cross default under other agreements which would allow counterparties to pursue additional remedies against us. At December 31, 2019, we were in compliance with all financial covenants under our warehouse facilities. In the event we are in noncompliance with our debt obligations, we cannot provide any assurance that we will be able to obtain waivers in the event of future noncompliance of our debt obligations.

The outbreak of the novel coronavirus, or COVID-19 (coronavirus), or an outbreak of other highly infectious or contagious diseases, could adversely impact, or cause disruption to the Company's operations. Further, the spread of the outbreak could cause severe disruptions in the U.S. economy, may further disrupt financial markets and could potentially create widespread business continuity issues.

In recent years the outbreak of a number of diseases including the novel coronavirus, Avian Bird Flu, H1N1, and various other "super bugs" have increased the risk of a pandemic. The potential impact and duration of global events such as a pandemic could have repercussions across regional and global economies and financial markets. The outbreak of the coronavirus in many countries continues to adversely impact global activity and has contributed to significant volatility and negative pressure in financial markets. The global impact of the outbreak has been rapidly evolving, and as cases of the virus have continued to be identified in additional countries, many countries have reacted by instituting quarantines and restrictions on travel. Such actions are creating disruption in global supply chains, and adversely impacting a number of industries. The outbreak could have a continued adverse impact on economic and market conditions and trigger a period of global economic slowdown. The ultimate adverse impact of the coronavirus on global and financial markets and the effects on the Company's ability to successfully operate could be adversely impacted due to, but not limited to:

- the continued service and availability of skilled personnel, including our executive officers and other leaders that
 are part of our management team. To the extent our management or personnel are impacted in significant numbers
 by the outbreak of pandemic or epidemic disease and are not available to conduct work, our business and operating
 results may be negatively impacted;
- the productivity of our personnel to be able to monetize the value of our portfolio from the time a loan is locked until the ultimate disposition of the loan. To the extent our management or personnel are impacted in significant numbers by the outbreak of a pandemic or epidemic disease while operating at peak capacity, our business and operating results may be negatively impacted;
- difficulty accessing debt and equity capital on attractive terms, or at all, and a severe disruption and instability in
 the global financial markets or deteriorations in credit and financing conditions may cause us to reduce the volume
 of loans we originate and/or fund, adversely affect the valuation of financial assets and liabilities, any of which
 could have a material adverse effect on our business, financial condition, results of operations and cash flows;
 and
- our ability to ensure business continuity in the event our continuity of operations plan is not effective or improperly implemented or deployed during a disruption; the Company's ability to operate could be adversely impacted, which may cause our business and operating results to decline or impact the Company's ability to comply with regulatory obligations leading to reputational harm and regulatory issues or fines.

The rapid development and fluidity of this situation precludes any prediction as to the ultimate adverse impact of the coronavirus. Nevertheless, the coronavirus presents material uncertainty and risk with respect to our performance, financial condition, results of operations and cash flows.

Our performance may be adversely affected by the performance of parties who service or sub-service our mortgage loans,

We contract with third parties for the servicing of our mortgage loans in our long-term mortgage portfolio, for which we are the master servicer, and the servicing portfolio in our mortgage lending operations. Although we use third-party servicers, we retain primary responsibility to ensure the serviced loans meet contractual and regulatory requirements. Our operations, performance and liabilities are subject to risks associated with inadequate or untimely servicing. If a servicer defaults or fails to perform to certain standards then this can be deemed to be a default or failure by us to perform those duties or functions. If we, or our sub-servicers, commit a material breach of our obligations as a servicer or master servicer, we may be subject to damages or termination if the breach is not cured within a specified period of time following

notice, causing us to lose servicing rights income. In addition, we may be required to indemnify the investor or securitization trustee against losses from any failure by us, as master servicer or on behalf of the sub-servicer, to perform the servicing obligations properly. If, as a result of a servicer or sub-servicer's failure to perform adequately, we were terminated as servicer by an investor, trustee or master servicer, the value of any servicing or master servicing rights held by us could be adversely affected. Also, this could affect the cash flow generated by our servicing rights portfolio.

Poor performance by a sub-servicer may result in greater than expected delinquencies and foreclosures and losses on our mortgage loans or, in the case of our long-term mortgage portfolio, in our resulting exposure to investors, bond holders, bond insurers or others to whom we are responsible for the performance of our loan sub-servicers. As master servicer in our securitizations we are responsible for the duties, responsibilities and actions of the subservicers. Their actions, or lack thereof, may impose liability upon us from third party claims. A substantial increase in our delinquency or foreclosure rate could adversely affect our ability to access the capital and secondary markets for our financing needs. With respect to our long-term mortgage portfolio, greater delinquencies would adversely affect the value of our cash flows and residual interests, if any, we hold in connection with that securitization.

The value of mortgage servicing rights are dependent upon various factors, including, but not limited to, the adequate performance of the servicing function by our sub-servicer, the responsibilities imposed on us by the investors of our loans for which we hold the servicing rights, interest rates, the cost of our sub-servicers, loan prepayments and delinquencies. As these factors and others vary, the value of our mortgage servicing rights may fluctuate which may affect our ability to meet financial covenants, maintain credit facilities, expand our operations and generate income from our operations.

Our NonQM product offerings may expose us to a higher risk of delinquencies, regulatory risks, foreclosures and losses adversely affecting our earnings and financial condition.

We originate and acquire various types of residential mortgage products, which include NonQM and non-conforming loan products. Unlike Qualified Mortgages, NonQM loans do not benefit from a presumption that the borrower has the ability to repay the loan. In the event that these NonQM mortgages begin to experience a significant rate of default, we could be subject to statutory claims for violations of the ability to repay standard. Any such claims could materially and adversely affect our ability to underwrite these loans, our business, and results of operations or financial condition.

While we undertake initiatives to mitigate any exposure and use our commercially reasonable efforts to ensure that we have made a reasonable determination that the borrowers will have the ability to repay a loan, this type of product has increased risk and exposure to litigation and claims of borrowers. If, however, we were to make a loan which does not satisfy the regulatory standards for ascertaining the borrower's ability to repay the loan, the consequences could include giving the borrower a defense to repayment of the loan, which may prevent us from collecting interest and principal on that loan.

NonQM loans are mortgages that generally did not qualify for purchase by government-sponsored entities such as Fannie Mae and Freddie Mac. Credit risks associated with all these mortgages may be greater than those associated with conforming mortgages. Mortgages made to these borrowers may entail a higher risk of delinquency and higher losses than mortgages made to borrowers who utilize conventional mortgage sources. Delinquency, foreclosures and losses generally increase during economic slowdowns or recessions. The actual risk of delinquencies, foreclosures and losses on mortgages made to these borrowers may be higher to the extent the economy enters a recession. Additionally, the combination of different underwriting criteria and higher rates of interest can adversely affect our business and financial condition from higher prepayment rates and higher delinquency rates and /or credit losses.

A decline in real estate values may have a material adverse effect on our financial condition and results of operation.

If there is a decline in real estate values, borrowers may default on our residential loans. A reduction in real estate values reduces a borrower's equity in their home which generally increases the underlying loan to value ratio and leads to a corresponding risk of default. If a borrower defaults and we have sold the loan or the servicing of the loan, we may violate our representations and warranties from the sale and be obligated to repurchase the loan.

Cybersecurity risks, data privacy breaches, 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 business relationships.

As our reliance on rapidly changing technology has increased, so have the risks posed to its information systems, both proprietary and those provided to us by third-party service providers. System disruptions and failures caused by fire, power loss, telecommunications outages, unauthorized intrusion, unintended employee actions, computer viruses and disabling devices, natural disasters and other similar events may interrupt or delay our ability to provide services to our customers or result in the unintended disclosure of consumer information.

Despite our efforts to ensure the integrity of our systems, our investment in significant physical and technological security measures, employee training, contractual precautions and business continuity plans, and our implementation of policies and procedures designed to help mitigate cybersecurity risks and cyber intrusions, there can be no assurance that any such cyber intrusions or data privacy breaches 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. We are also held accountable for the actions and inactions of our third-party vendors regarding cybersecurity, data privacy breaches 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, governmental enforcement actions, 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.

Inability to successfully complete securitizations, or delayed mortgage loan sales or securitization closings, could result in a liquidity shortage which would adversely affect our operating results.

We are exploring utilizing securitizations as an additional exit strategy to generate cash proceeds to repay borrowings and replenish our borrowing capacity. If there is a delay in mortgage loan sales or securitization closing or any reduction in our ability to complete mortgage loan sales or securitizations, we may be required to utilize other sources of financing, which, may not be available on favorable terms or at all. In addition, delays in closing mortgage sales or securitizations of our mortgages exposes us to additional credit and interest rate risk up to the closing of the transaction. Several factors could affect our ability to complete securitizations of our mortgages or mortgage loan sales, including:

- conditions in the securities and secondary markets;
- credit quality of the mortgages acquired or originated through our mortgage operations;
- volume of our mortgage loan acquisitions and originations;
- operational inefficiencies causing delay in settlement;
- our ability to obtain credit enhancements; and
- lack of investors purchasing higher risk components of the securities.

If we are unable to sell a sufficient number of mortgages at a premium or profitably securitize a significant number of our mortgages in a particular financial reporting period, of if we experience a delay in mortgage loan sales or securities closings, then we could experience a liquidity shortage leading to lower net earnings or a loss for that period. We cannot assure you that we will be able to continue to profitably securitize or sell our loans on a whole loan basis, or at all.

We may not be able to access financing sources on favorable terms, or at all, which could adversely affect our ability to implement and operate our business as planned.

Future financing sources may include borrowings in the form of credit facilities (including term loans and revolving facilities), repurchase agreements, warehouse facilities, structured financing arrangements, public and private equity and debt issuances and derivative instruments, in addition to transactions or asset specific funding arrangements. Our access to sources of financing depends upon a number of factors some of which we have little or no control over, including general market conditions, resources and policies or lenders. In addition, if regulatory capital requirements imposed on our private lenders change, they may be required to limit, or increase the cost of, financing they provide to us. This could potentially increase our financing costs and reduce our liquidity as well as limit our ability to expand our mortgage operations. Depending on market conditions at the relevant time, we may have to rely more heavily on additional equity issuances, which may be dilutive to our shareholders, or on less efficient forms of debt financing that require a larger portion of our cash flow from operations, thereby reducing funds available for our operations and future business opportunities. We cannot assure you that we will have access to such equity or debt capital on favorable terms (including, without limitation, cost and term) at the desired times, or at all, which could negatively affect our results of operations. If our access to such funds are restricted or are on terms that are materially changed, we may not be able to continue those operations which may affect our income and loan origination volumes.

We may become, and in some cases are, a defendant in lawsuits, some of which may be class action matters, and we may not prevail in these matters. We recently received an adverse ruling which may have a material adverse effect on our financial condition or results of operations.

Individual and class action lawsuits and regulatory actions alleging improper marketing practices, abusive loan terms and fees, disclosure violations and other matters are risks faced by all mortgage originators. We are a defendant in purported class actions pending in different states and could be named in other matters. Some of the actions allege generally that the loan originator (whether or not Impac) improperly charged fees in violation of various state lending or consumer protection laws in connection with mortgages that we acquired while others allege that our lending or servicing practice was a statutory violation, an unlawful business practice, an unfair business practice or a breach of a contract. They generally seek unspecified compensatory damages, punitive damages, pre- and post-judgment interest, costs and expenses and rescission of the mortgages, as well as a return of any improperly collected fees. We will incur defense costs and other expenses in connection with the lawsuits, and we cannot assure you that the ultimate outcome of these or other actions will not have a material adverse effect on our financial condition or results of operations. In addition to the expense and burden incurred in defending any of these actions and any damages that we may suffer, our management's efforts and attention may be diverted from the ordinary business operations in order to address these claims. We may also issue shares of common stock to settle outstanding obligations and liabilities which could also affect the market price of our common stock. Plus, we may be deemed in default of our warehouse lines if a judgment for money that exceeds specified thresholds is rendered against us. If the final resolution of this litigation is unfavorable to us in any of these actions, our financial condition, results of operations and cash flows might be materially adversely affected.

We are subject to a purported class action lawsuit relating to our Series B Preferred Stock in which holders are seeking cumulative dividends, unpaid dividends, certain restrictions on our actions, including the ability to pay common stock dividends, and the election of two directors by the preferred holders. In July 2018, we received an unfavorable Court Order ruling that the rights, preferences and terms of the Series B Preferred Stock prior to the 2009 closing of the tender offer and consent solicitation remain in effect, that the 2009 amendments were ineffective, and the 2004 rights remain in effect. We have since appealed that decision and in October 2019, the appellate court held oral argument for all appeals in the matter. To date, the Court has yet to opine on the oral arguments and related briefs. If not reversed, the decision affects the rights of the Series B holders to receive, when and as authorized by the Board of Directors, cumulative preferential cash dividends at a rate of 9.375% of the \$25.00 liquidation preference per annum (equivalent to a fixed annual amount of \$2.34375 per share) payable on a quarterly basis. Further, the court has declared that the Company is required to pay three calendar quarters of dividends on the Series B Preferred Stock under the 2004 rights (approximately, \$1.2 million, but did not order the Company to make any payment at this time). In addition, under the Series B Preferred Stock terms prior to the 2009 amendments, whenever dividends are in arrears for six or more quarters, whether or not consecutive, the Series B Preferred Stock will be entitled to call a special meeting for the election of two additional directors. The 2004 rights also provide for certain other voting rights prior to amendment of any provisions of our charter so as to materially and adversely affect the Series B Preferred Stock, or approve a merger or similar transaction unless the Series B Preferred Stock remain outstanding and materially unchanged. We would also be prohibited from paying any dividend on our common stock until dividends on the Series B Preferred Stock are paid in full. The continued appeal of the court ruling will continue the cost and expense related to defending this lawsuit and diversion of our management's efforts and attention from ordinary business operations in order to address the claims. This court ruling and the possible judgment may have a material adverse effect on our financial condition or results of operations.

Our hedging strategies implemented by our mortgage lending operations may not be successful in mitigating our risks associated with the market movement of interest rates.

We use various derivative financial instruments to provide a level of protection against interest rate risks in our mortgage lending operations, but no hedging strategy can protect us completely. When interest rates change, we expect to record a gain or loss on derivatives which would be offset by an inverse change in the value of mortgage loans held for sale, our held mortgage servicing rights, forward sale and interest rate lock commitments. We cannot assure you, however, that our use of derivatives will offset the risks related to changes in interest rates. There have been periods, and it is likely that there will be periods in the future, during which we will not have offsetting gains or losses in mortgage loans, forward sale and interest rate lock commitment values after accounting for our derivative financial instruments. The derivative financial instruments we select may not have the effect of reducing our interest rate risk. In addition, the nature and timing of hedging transactions may influence the effectiveness of these strategies. Poorly designed strategies, improperly executed and recorded transactions or inaccurate assumptions could actually increase our risk and losses. In addition, hedging strategies involve transaction and other costs. We cannot assure you that our hedging strategy and the derivatives that we use will adequately offset the risk of interest rate volatility or that our hedging transactions will not result in losses.

A decrease in our mortgage origination volume could adversely affect our mortgage servicing portfolio.

Origination volume is subject to multiple factors, including changes in interest rates, market and economic conditions and availability of government programs. If our origination volume declines or if we cannot replace this volume with other loan origination channels such as new customer acquisitions or purchase money loans, then our business, financial condition and results of operations could be adversely affected.

Our business is affected by changes in the state of the general economy and the financial markets, and a slowdown or downturn in the general economy or the financial markets could adversely affect our results of operations.

Our customer activity is intrinsically linked to the health of the economy generally and of the financial markets specifically. In addition to the economic factors, a downturn in the real estate or commercial markets generally could cause our customers and potential customers to exit the market for loans. As a result, we believe that fluctuations, disruptions, instability or downturns in the general economy and the financial markets could disproportionately affect demand for our lending products. In addition, recent concerns over the spread of the Covid - 19 virus have caused economic disruption worldwide, the effect of which may be over an extended period of time and may have a material adverse effect on our financial condition or results of operations. If such conditions occur and persist, our business and financial results, including our liquidity and our ability to fulfill our debt obligations, could be materially adversely affected.

A decline in the unpaid principal balance of the servicing portfolio and the related estimated fair value of the MSRs could adversely affect our net earnings, financial condition, future servicing fees and our ability to borrow on our MSR financing facilities.

The servicing portfolio and the value of the related MSRs are sensitive to changes in prevailing interest rates:

- a decrease in interest rates may increase prepayment speeds which may lead to (i) increased amortization; (ii) decrease in servicing fees; and (iii) decrease in the value of our MSRs;
- an increase in interest rates, together with an increase in monthly payments when an adjustable mortgage loan's
 interest rate adjusts upward from an initial fixed rate or a low introductory rate, may cause increased delinquency,
 default and foreclosure. Increased mortgage defaults and foreclosures may adversely affect our business as they
 increase our expenses and reduce the number of mortgages we service.

Our servicing portfolio is subject to "run off", meaning that mortgage loans serviced by us may be prepaid prior to maturity or repaid through standard amortization of principal. As a result, our ability to maintain the size of our servicing

portfolio depends on our ability to retain the right to service the existing residential mortgages or to originate additional mortgages. Significant "run off" could result in decreasing the estimated value of the MSRs, which could have an adverse impact our net earnings.

Our MSR financing facilities generally allow us to borrow up to 60% of the estimated fair value of MSRs. A decline in value of the MSRs could limit our ability to borrow on these facilities. Limitations on borrowings on these financing facilities imposed by the amount of eligible collateral pledged could affect the borrowing capacity of the facility, which could have a material adverse impact on our financial condition and results of operations.

Replacement of the LIBOR benchmark interest rate may have an adverse impact on our business, financial condition or results of operations.

On July 27, 2017, the Financial Conduct Authority (FCA), a regulator of financial services firms in the United Kingdom, announced that it intends to stop persuading or compelling banks to submit London Interbank Offered Rate (LIBOR) rates after 2021. The FCA and the submitting LIBOR banks have indicated they will support the LIBOR indices through 2021 to allow for an orderly transition to an alternative reference rate. In the United States, efforts to identify a set of alternative U.S. dollar reference interest rates include proposals by the Alternative Reference Rates Committee of the Federal Reserve Board. Other financial services regulators and industry groups are evaluating the possible phase-out of LIBOR and the development of alternate reference rate indices or reference rates. Many of our assets and liabilities are indexed to LIBOR. Recent announcements by government-sponsored entities such as Fannie Mae and Freddie Mac, suggest that the Secured Overnight Financing Rate (SOFR) will become the LIBOR replacement for the industry. We are evaluating the potential impact of the possible SOFR replacement of the LIBOR benchmark interest rate, but are not able to predict what the impact of such a transition will have on our business, financial condition, or results of operations. The market transition away from LIBOR to an alternative reference rate is complex and could have a range of adverse effects on our business, financial condition and results of operations. In particular any such transition could:

- adversely affect the interest rates paid or received on, the revenue and expenses associate with, and the value of
 our floating-rate obligations, loans, derivatives, and other financial instruments tied to LIBOR rates, or other
 securities or financial arrangements given LIBOR's role in determining market interest rates globally;
- prompt inquiries or other actions from regulators in respect of our preparation and readiness for the replacement of LIBOR with an alternative reference rate;
- prompt inquiries or other actions from regulators in respect of our preparation and readiness for the replacement of LIBOR with an alternative reference rate;
- require the transition to or development of appropriate systems and analytics to effectively transition our risk management processes from LIBOR-based products to those based on the applicable alternative pricing benchmark.

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

Our ability to realize the anticipated benefits of an acquisition is dependent on our ability to successfully integrate the company with our business. The performance of the businesses and assets we acquire through acquisitions may not match the historical performance of our other assets. Nor can we assure you that the businesses and assets we may acquire will perform at levels meeting our expectations. We may find that we overpaid for the acquired business or assets or that the economic conditions underlying our acquisition decision have changed. In order to finance an acquisition we may borrow funds, thereby increasing our leverage and diminishing our liquidity, or we could raise additional equity capital, which could dilute the interests of our existing shareholders. We may not be able to achieve the synergies we anticipate from acquired businesses, and we may not be able to grow acquired businesses in the manner we anticipate. In fact, the businesses we acquire could decrease in size, even if the integration process is successful. Further, certain one-time expenses associated with such acquisitions may have a negative impact on our results of operations and financial condition.

We cannot assure you that acquisitions will not adversely affect our results of operations and financial condition. The risks associated with acquisitions include, among others:

• unanticipated issues in integrating information, communications and other systems;

- unanticipated incompatibility in lending, purchasing, logistics, marketing and administration methods;
- direct and indirect costs and liabilities;
- management culture, processes and procedures and internal controls;
- not retaining key employees;
- the diversion of management's attention from ongoing business concerns;
- compliance and regulatory scrutiny; and
- goodwill impairment.

Our ability to utilize our net operating losses and certain other tax attributes may be limited.

At the end of our 2019 taxable year, we had estimated federal and California net operating loss (NOL) carry-forwards of approximately \$566.6 million and \$385.2 million, respectively. Federal NOLs begin to expire in 2027 and California NOLs begin to expire in 2028. We may not generate sufficient taxable income in future periods to be able to realize fully the tax benefits of our NOL carry-forwards. Although, under existing tax rules, we are generally allowed to use those NOL carry-forwards to offset taxable income in subsequent taxable years, our ability to use those NOL carry-forwards to offset income may be severely limited to the extent that we experience an ownership change within the meaning of Section 382 of the Internal Revenue Code. These provisions could also limit our ability to deduct certain losses (built-in losses) we recognize after an ownership change with respect to assets we own at the time of the ownership change. In general, an ownership change, as defined by Section 382, results from transactions increasing ownership of certain stockholders or public groups in our stock by more than 50% over a three-year period. In addition, the generation of taxable income from cancellation of debt may further reduce the NOL. Any limitation on our NOL carry-forwards that could be used to offset taxable income would adversely affect our liquidity and cash flow, as and when we become profitable. On October 23, 2019, our Board enacted an NOL rights plan, which, subject to our stockholder approval, is designed to mitigate the risk of losing net operating loss carry-forwards and certain other tax attributes from being limited in reducing future income taxes. Although our NOL rights plan is intended to prevent an ownership change, we cannot provide any assurance that our NOL rights plan will be approved by our stockholders or that an ownership change will not occur.

We depend on the accuracy and completeness of information provided by customers and counterparties.

In deciding whether to extend credit or enter into other transactions with customers and counterparties, we may rely on information furnished to us by, or on behalf of, customers and counterparties, including financial statements and other financial information. We also may rely on representations of customers and counterparties as to the accuracy and completeness of that information. In deciding whether to extend credit, we may rely upon our customers' representations that their financial statements are accurate. We also may rely on customer representations and certifications, or other audit or accountants' reports, with respect to the business and financial condition of our commercial clients. Our financial condition, results of operations, financial reporting and reputation could be materially adversely affected if we rely on materially misleading, false, inaccurate or fraudulent information.

Representations and warranties made by us in our loan sales, servicing rights sales and securitizations may subject us to liability.

In connection with our loan and/or servicing rights sales to third parties and our prior securitizations, we transferred mortgages and/or servicing rights to third parties or, to a lesser extent, into a trust in exchange for cash and, in the case of a securitized mortgage, residual certificates issued by the trust. The trustee, purchaser, bondholder, guarantor or other entities involved in the sales or issuance of the securities (which may include bond insurers) may have recourse to us with respect to the breach of the representations and warranties made by us at the time such mortgages and/or servicing rights are transferred or when the securities are sold. We attempt to mitigate the potential recourse from such purchasers by seeking remedies from correspondent sellers and wholesale brokers who originated the mortgages if we did not originate the loan. However, many of the entities we acquired loans from in the past are no longer in business or may not be able to financially cover the losses. Furthermore, if we discover, prior to the sale or transfer of a loan, that there is any fraud or misrepresentation with respect to the mortgage and the originator fails to repurchase the mortgage, then we may not be able to sell the mortgage or we may have to sell the mortgage at a discount. Changes in the timing, processes and procedures of our primary investors' review of loans which they purchase from us may affect the number of loans that are rejected,

the timing of our loan sales, or the frequency of repurchase demands issued to us. Also, similar changes by mortgage insurers who agree to insure loans may also affect the frequency and timing of our loan sales. As a result, the effectiveness of our loan sales, our repurchase reserves and our profitability may be adversely affected.

Litigation in the mortgage industry related to securitizations against issuers, sellers, servicers, originators, underwriters and others may adversely affect our business operations.

As defaults, delinquencies, foreclosures, and losses in the real estate market continue, there have been lawsuits by various investors, insurers, underwriters and others against various participants in securitizations, such as sponsors, depositors, underwriters, servicers and loan sellers. Some lawsuits have alleged that the mortgage loans had origination defects, that there were misrepresentations made about the mortgage loans and that the parties failed to properly disclose the quality of the mortgage loans or repurchase defective loans wherein servicing standards were not maintained or that there were other misrepresentations or false representations. Historically, we both securitized and sold mortgage loans to third parties that may have been deposited or included in pools for securitizations. As a result, we may incur significant legal and other expenses in defending against claims and litigation and we may be required to pay settlement costs, damages, penalties or other charges which could adversely affect our financial condition and results of operations.

The geographic concentration of our mortgages increases our exposure to risks in those areas.

We do not set limitations on the percentage of mortgages composed of properties located in any one area (whether by state, zip code or other geographic measure). Concentration in any one area increases our exposure to the economic and natural hazard risks associated with that area. A majority of our mortgage acquisitions and originations and mortgages held in our long-term mortgage portfolio are secured by properties in California (approximately 81% of our mortgage originations were generated from California in 2019) and, to a lesser extent, Florida, Washington and Arizona. These states have previously experienced, and may experience in the future, economic downturns and California and Florida have also suffered the effects of certain natural hazards. During past economic downturns, real estate values in California and Florida have decreased drastically, which could have a material adverse effect on our results of operations or financial condition. In addition, Florida is among several states with higher than average costs for investors in circumstances of mortgage default and foreclosure, since the foreclosure process takes significantly longer than average. Accordingly, to the extent the mortgages we originate or are held in our long-term mortgage portfolio experience defaults or foreclosures in that area, we may be exposed to higher losses.

Furthermore, if borrowers are not insured for natural disasters, which are typically not covered by standard hazard insurance policies, then they may not be able to repair the property or may stop paying their mortgages if the property is damaged. This would cause increased foreclosures and decrease our ability to recover losses on properties affected by such disasters. This would have a material adverse effect on our results of operations or financial condition.

Our vendor relationships subject us to a variety of risks.

We have significant vendors that, among other things, provide us with financial, technology and other services to support our mortgage loan servicing and origination businesses. Some of these outsourced services, such as technology, could have a material effect on our business and operations if our third party provider was unable to, or failed to, properly provide such services. With respect to vendors engaged to perform activities required by servicing criteria, we have elected to take responsibility for assessing compliance with the applicable servicing criteria for the applicable vendor and are required to have procedures in place to provide reasonable assurance that the vendor's activities comply in all material respects with servicing criteria applicable to the vendor, including but not limited to, monitoring compliance with our predetermined policies and procedures and monitoring the status of payment processing operations. In the event that a vendor's activities do not comply with the servicing criteria, it could negatively impact our servicing agreements. In addition, if our current vendors were to stop providing services to us on acceptable terms, including as a result of one or more vendor bankruptcies due to poor economic conditions, we may be unable to procure alternatives from other vendors in a timely and efficient manner and on acceptable terms, or at all. Further, we may incur significant costs to resolve any such disruptions in service and this could adversely affect our business, financial condition and results of operations. Additionally, the CFPB has stated that supervised banks and non-banks could be held liable for actions of their service providers. As a result, we could be exposed to liability, CFPB enforcement actions or other administrative penalties if the vendors with whom we do business violate consumer protection laws.

If we are forced to liquidate, we may have few unpledged assets for distribution to unsecured creditors or equity holders.

In the event we were forced to liquidate and distribute our assets, our common stockholders would share in our assets only after we satisfy any amounts we owe to our creditors and preferred equity holders. The majority of our assets are either collateral for specific borrowings or pledged as collateral for secured liabilities. Additionally, there is volatility and significant judgement with respect to the valuation of a significant portion our assets and liabilities. If our liquidation or dissolution were attributable to our inability to profitably operate our business, then it is likely that we would have material liabilities at the time of liquidation or dissolution. Accordingly, we cannot provide any assurance that sufficient assets will remain available after the payment of our creditors and preferred equity holders to enable common stockholders to receive any liquidation distribution with respect to any common stock.

Our risk management policies and procedures may not be effective.

Our risk management framework seeks to mitigate risk and appropriately balance risk and return. We have established policies and procedures intended to identify, monitor and manage the types of risk to which we are subject, including credit risk, market and interest rate risk, liquidity risk, cyber risk, regulatory, legal and reputational risk. Although we have devoted significant resources to develop our risk management policies and procedures and expect to continue to do so in the future, these policies and procedures, as well as our risk management techniques such as our hedging strategies, may not be fully effective. There may also be risks that exist, or that develop in the future, that we have not appropriately anticipated, identified or mitigated. As regulations and markets in which we operate continue to evolve, our risk management framework may not always keep sufficient pace with those changes. If our risk management framework does not effectively identify or mitigate our risks, we could suffer unexpected losses and could be materially adversely affected.

If we fail to maintain effective systems of internal control over financial reporting and disclosure controls and procedures, we may not be able to report our financial results accurately or prevent fraud, which could cause current and potential stockholders to lose confidence in our financial reporting, adversely affect the trading price of our securities or harm our operating results.

Effective internal control over financial reporting and disclosure controls and procedures are necessary for us to provide reliable financial reports and effectively prevent fraud and operate successfully as a public company. We cannot be certain that our efforts to improve or maintain our internal control over financial reporting and disclosure controls and procedures will be successful or that we will be able to maintain adequate controls over our financial processes and reporting in the future. Any failure to develop or maintain effective controls or difficulties encountered in their implementation or other effective improvement of our internal control over financial reporting and disclosure controls and procedures could harm our operating results, or cause us to fail to meet our reporting obligations. If we are unable to adequately establish or maintain our internal control over financial reporting, our external auditors will not be able to issue an unqualified opinion on the effectiveness of our internal control over financial reporting. In the past, we have reported, and may discover in the future, material weaknesses in our internal control over financial reporting.

Ineffective internal control over financial reporting and disclosure controls and procedures could cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our securities or affect our ability to access the capital markets and could result in regulatory proceedings against us by, among others, the SEC. In addition, a material weakness in internal control over financial reporting, which may lead to deficiencies in the preparation of financial statements, could lead to litigation claims against us. The defense of any such claims may cause the diversion of management's attention and resources, and we may be required to pay damages if any such claims or proceedings are not resolved in our favor. Any litigation, even if resolved in our favor, could cause us to incur significant legal and other expenses or cause delays in our public reporting. Such events could harm our business, affect our ability to raise capital and adversely affect the trading price of our securities.

Risks Related to Regulation

Loss of our approvals with, or the potential limitation or wind-down of, the role Ginnie Mae, Fannie Mae and Freddie Mac play in the residential mortgage-backed security (MBS) market could adversely affect our business, operations and financial condition.

We originate loans eligible for sale to Fannie Mae, Freddie Mac, government insured or guaranteed loans, such as FHA, VA and USDA loans, and loans eligible for Ginnie Mae securities issuance. We also service loans sold to the

GSEs and other investors. We believe that having the ability to both sell loans directly to these agencies and issue Ginnie Mae securities gives us an advantage in the overall mortgage origination market. The government may limit over time the role of the GSEs in guaranteeing mortgages and purchasing mortgage loans, as well as proposals to implement reforms relating to borrowers, lenders, and investors in the mortgage market, including reducing the maximum size of a loan that the GSEs can purchase, phasing-in a minimum down payment requirement for borrowers, changing underwriting standards, and increasing accountability and transparency in the securitization process. The GSEs may also limit the amount of loans a company can sell to them based upon the company's net worth or the performance of loans sold to them. This could negatively impact our financial condition, net earnings and growth.

We also service loans on behalf of Fannie Mae and Freddie Mac, as well as loans that have been delivered into securitization programs sponsored by Ginnie Mae in connection with the issuance of agency guaranteed mortgage-backed securities. These entities establish the base service fee to compensate us for servicing loans as well as the assessment of fines and penalties that may be imposed upon us for failing to meet servicing standards.

The extent and timing of any regulatory reform regarding the GSEs and the home mortgage market, as well as any effect on Impac's business operations and financial results, are uncertain. It is important for us to sell or securitize the loans we originate and, when doing so, maintain the option to also sell the related MSRs associated with these loans. Some investors have raised concerns about the high prepayment speeds of our loans generated through our retail channel and this has resulted and could further result in adverse pricing or delays in our ability to sell or securitize loans and related MSRs on a timely and profitable basis. During the fourth quarter of 2017, Fannie Mae sufficiently limited the manner and volume for our deliveries of eligible loans such that we elected to cease deliveries to them and we expanded our whole loan investor base for these loans. During 2018, we completed servicing released loan sales to these whole loan investors and expect to continue to utilize these alternative exit strategies for Fannie Mae eligible loans. We continue to take steps to manage our prepayment speeds to be more consistent with our industry comparables and to reestablish the full confidence and delivery mechanisms to our investor base. We remain an approved Seller and Servicer with Fannie Mae, Ginnie Mae and Freddie Mac. If the agencies cease to exist, wind down, or otherwise significantly change their business operations or if we lose our approved seller/servicer status with the GSEs, the GSE's limit the amount of loans we can sell to them, or we otherwise are unable to sell loans to them there could be a material adverse effect on our mortgage lending operations, financial condition, results of operations and cash flows.

Regulatory laws affecting our operations, or interpretations of them, may affect our mortgage lending operations.

Existing laws, regulations, or regulatory policies and changes thereto or to the way they are interpreted can affect whether and to what extent we may be able to expand our mortgage lending activities and compliance with such requirements could expose us to fines, penalties or licensing restrictions that could affect our operations. Many states and local governments and the Federal government have enacted or may enact laws or regulations that restrict or prohibit some provisions in some programs or businesses that we currently participate in or plan to participate in the future. As such, we cannot be sure that in the future we will be able to engage in activities that were similar to those we engaged or participated in in the past thereby limiting our ability to commence new operations. As a result, we might be at a competitive disadvantage which would affect our operations and profitability.

We are subject to federal, state and local laws and regulations related to the mortgage industry that generally regulate interest rates and other charges, require certain disclosures, and require applicable licensing. In addition, other state and local laws, public policy and general principles of equity relating to the protection of consumers, unfair and deceptive practices and debt collection practices may apply to the origination, servicing and collection of our loans. Violations of certain provisions of these federal and state laws and regulations may limit our ability to collect all or part of the principal of or interest on the loans and in addition could subject us to damages, could result in the mortgagors rescinding the loans whether held by us or subsequent holders of the loans, or could cause us to repurchase the loan and thereby suffer a loss on the transaction. In addition, such violations could subject us to fines and penalties imposed by state and federal regulators and cause us to be in default under our credit and repurchase lines and could result in the loss of licenses held by us.

The regulatory changes in loan originator compensation, qualified mortgage requirements and other regulatory restrictions may put us at a competitive disadvantage to our competitors. Since some banks and financial institutions are not subject to the same regulatory changes as mortgage lenders, they could have an advantage over independent mortgage lenders. As a result of the nature of our operations, our capital, costs, source of funds and other similar factors may affect our ability to maintain and grow lending.

The Consumer Financial Protection Bureau has implemented rules and interpretations with strict residential mortgage loan compliance and underwriting standards as called for in the Dodd-Frank Act. The Act imposes significant liability for violation of those underwriting standards, and offers certain protection from that liability only for loans that comply with tight limitations and that do not contain certain alternative features (like balloon payments or interest only provisions). Those requirements and subsequent changes may affect our ability to originate residential mortgage loans or the profitability of those operations.

Additionally, the Mortgage Reform and Anti-Predatory Lending Act ("Mortgage Act") imposes a number of additional requirements on lenders and servicers of residential mortgage loans by amending certain existing provisions and adding new sections to TILA, RESPA, and other federal laws. This includes the TILA RESPA Integrated Disclosure requirements and new disclosure requirements, fee limitations and timing requirements in most of our loan products. The Mortgage Act also broadly prohibits unfair, deceptive or abusive acts or practices, and knowingly or recklessly providing substantial assistance to a covered person in violation of that prohibition. The penalties for noncompliance with any of these laws are also significantly increased by the Mortgage Act, which could lead to an increase in lawsuits against mortgage lenders and servicers or could lead to fines, penalties licensing restrictions or la loss of licenses which could restrict our ability to expand or continue lending in certain states.

Regulatory proceedings and related matters could adversely affect us.

We have been, and may in the future become, involved in regulatory proceedings. We consider most of the proceedings to be in the normal course of our business or typical for the industry; however, it is inherently difficult to assess the outcome of these matters, and we may not prevail in any proceedings or litigation. There could be substantial cost and management diversion in such litigation and proceedings, and any adverse determination could have a material adverse effect on our business, reputation, or our financial condition and results of our operations.

Risks Related to Our Common Stock

Our share price has been and may continue to be volatile and the trading of our shares may be limited.

The market price of our securities has been volatile. We cannot guarantee that a consistently active trading market for our securities will continue. In addition, there can be no assurances that such markets will continue or that any shares which may be purchased may be sold without incurring a loss. Any such market price variation of our shares may not necessarily bear any relationship to our book value, assets, past operating results, financial condition or any other established criteria of value, and may not be indicative of the market price for the shares in the future. The market price of our common stock is likely to continue to be highly volatile and could be significantly affected by factors including:

- unanticipated fluctuations in our operating results;
- general market and mortgage industry conditions;
- mortgage and real estate fees;
- delinquencies and defaults on outstanding mortgages;
- loss severities on loans and REO;
- prepayments on mortgages;
- the regulatory environment and results of our mortgage originations;
- mark to market adjustments related to the fair value of loans held- for-sale, mortgage servicing rights, long-term debt and derivatives;
- interest rates; and
- litigation.

In addition, significant price and volume fluctuations in the stock market have particularly affected the market prices for the securities of mortgage companies such as ours. Furthermore, general conditions in the mortgage industry may adversely affect the market price of our securities. These broad market fluctuations have adversely affected and may continue to adversely affect the market price of our securities. If our results of operations fail to meet the expectations of security analysts or investors in a future quarter, the market price of our securities could also be materially adversely affected and we may experience difficulty in raising capital.

Issuances of additional shares of our common stock may adversely affect its market price and significantly dilute stockholders.

In order to support our business objectives, we may raise capital through the sale of equity or convertible securities, including through the shelf registration statement that was declared effective by the Securities and Exchange Commission on December 19, 2019. The issuance or sale, or the proposed sale, of substantial amounts of our common stock in the public market could materially adversely affect the market price of our common stock or other outstanding securities. We do not know the actual or perceived effect of these issuances, the timing of any offerings or issuances of securities, the potential dilution of the book value or earnings per share of our securities then outstanding and the effect on the market price of our securities then outstanding.

We do not expect to pay dividends in the foreseeable future and we may be restricted in paying dividends on our common stock.

We do not anticipate paying any dividends on our common stock in the foreseeable future as we intend to retain any future earnings for funding growth. In addition, our existing and any future warehouse facilities or other contracts may contain covenants prohibiting dividend payments upon an occurrence of a default or otherwise. Furthermore, if we do not succeed in appealing and reversing an adverse judgment on the purposed class action relating to our Series B Preferred stock and we are required to pay dividends on the Series B Preferred stock, we will be prohibited from paying dividends on our common stock until such preferred stock dividends are paid. As a result, you should not rely on an investment in our stock if you require dividend income. Capital appreciation, if any, of our stock may be your sole source of gain for the foreseeable future.

Our principal stockholders beneficially own a large portion of our stock, and accordingly, may have control over stockholder matters and sales may adversely affect the market price of our common stock.

As of February 28, 2020, Todd M. Pickup and Richard H. Pickup, a director of the Company, and their respective affiliates beneficially owned approximately 13.5% and 26.3%, respectively, of our outstanding common stock. Their beneficial ownership includes 465,117 shares and 639,535 shares of our common stock that Todd Pickup and Richard Pickup, respectively, has the right to acquire at any time by converting the outstanding principal balance of Convertible Notes Due May 9, 2020, at the initial conversion price of \$21.50 per share. As of February 28, 2020, Thomas B. Akin and his affiliate beneficially owned approximately 13.1% of our outstanding common stock. These stockholders could exercise significant influence over our Company. Such ownership may have the effect of control over substantially all matters requiring stockholder approval, including the election of directors. Furthermore, such ownership and control may have the effect of delaying or preventing a change in control of our Company, impeding a merger, consolidation, takeover or other business combination involving our Company or discourage a potential acquirer from making a tender offer or otherwise attempting to obtain control of our Company. We do not expect that these stockholders will vote together as a group. In addition, sales of significant amounts of shares held by these stockholders, or the prospect of these sales, could adversely affect the market price of our common stock.

Provisions in our charter documents and Maryland law, as well as our NOL Rights Plan, impose limitations that may delay or prevent our acquisition by a third party.

Our charter and bylaws contain provisions that may make it more difficult for a third party to acquire control of us without the approval of our board of directors. These provisions include, among other things, advance notice for raising business issues or making nominations at meetings and blank check preferred stock that allows our board of directors, without stockholder approval, to designate and issue additional series of preferred stock with rights and terms as our board of directors may determine, including rights to dividends and proceeds in a liquidation that are senior to our common stock.

We are also subject to certain provisions of the Maryland General Corporation Law, which could delay, prevent or deter a merger, acquisition, tender offer, proxy contest or other transaction that might otherwise result in our stockholders receiving a premium over the price for their common stock or may otherwise be in the best interests of our stockholders. This includes the "business combinations" statute that prohibits transactions between a Maryland corporation and "interested stockholders," which is any person who beneficially owns 10% or more of the voting power of our then-outstanding voting stock for a period of five years unless the board of directors approved the transaction prior to the party's becoming an interested stockholder. The five-year period runs from the most recent date on which the interested stockholder became an interested stockholder. The law also requires a super majority stockholder vote for such transactions after the end of the five-year period.

Maryland law also provides that "control shares" of a Maryland corporation acquired in a "control share acquisition" have no voting rights except to the extent approved by a vote of two-thirds of the shares eligible to vote. The control share acquisition statute would not apply to shares acquired in a merger, consolidation or share exchange if we were a party to the transaction. The control share acquisition statute could have the effect of discouraging offers to acquire us and of increasing the difficulty of consummating any such offers, even if our acquisition would be in our stockholders' best interests.

We have also adopted a Tax Benefits Preservations Rights Agreement, also known as an NOL rights plan, pursuant to which each share of common stock also has a "right" attached to it. Although the NOL rights plan was adopted to help preserve the value of certain deferred tax benefits, including those generated by net operating losses, it also has the effect of deterring or delaying an acquisition of our Company by a third party. The rights are not exercisable except upon the occurrence of certain takeover-related events—most importantly, the acquisition by a third party (the "Acquiring Person") of more than 4.99% of our outstanding voting shares. Once triggered, the rights entitle the stockholders, other than the Acquiring Person, to certain "flip-in", "flip-over" and exchange rights. The effect of triggering the rights is to expose the Acquiring Person to severe dilution of its ownership interest, as the shares of our common stock (or any surviving corporation) are offered to all of the stockholders other than the Acquiring Person at a steep discount to their market value. We have in the past, and may in the future, grant waivers to the limitations imposed by our Tax Benefits Preservations Rights Agreement. This may affect the holdings of those shareholders who obtained the waivers and may affect the protection of, and hence the ability to make use of, our NOL's.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Our primary executive and administrative offices are located at 19500 Jamboree Road, Irvine, California 92612 where we have a premises lease expiring in September 2024. The premises consist of five floors where we occupy approximately 149,639 square feet.

In October 2018, we vacated the office in Orange, California and the remaining lease obligation was paid off in December 2018.

ITEM 3. LEGAL PROCEEDINGS

Information with respect to this item may be found in Note 14 – Commitments and Contingencies in the Consolidated Financial Statements in Item 8 of Part II of this Annual Report on Form 10-K, which information is incorporated herein by reference.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR COMPANY'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND PURCHASES OF EQUITY SECURITIES

Our common stock is currently listed on the NYSE American under the symbol "IMH".

On March 6, 2020, the last quoted price of our common stock on the NYSE American was \$7.28 per share. As of March 6 2020, there were 181 holders of record, including holders who are nominees for an undetermined number of beneficial owners, of our common stock.

Our Board of Directors authorizes in its discretion the payment of cash dividends on its common stock, subject to an ongoing review of our profitability, liquidity and future operating cash requirements. We and some of our subsidiaries are subject to restrictions under our warehouse borrowings and long-term debt agreements on our ability to pay dividends if there is an event of default or otherwise. Plus, certain debt arrangements require the maintenance of ratios and contain restrictive financial covenants that could limit our ability, and the ability of our subsidiaries, to pay dividends. Furthermore, if we do not succeed in appealing and reversing an adverse judgment on the purported class action relating to our Series B Preferred stock and we are required to pay dividends on the Series B Preferred stock, we will be prohibited from paying dividends on our common stock until such preferred stock dividends are paid. The Board of Directors did not declare cash dividends on our common stock during the years ended December 31, 2019 and 2018. We do not expect to declare or pay any cash dividends on our common stock in the foreseeable future.

ITEM 6. SELECTED FINANCIAL DATA

As a smaller reporting company, we are not required to provide the information required by this Item.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Management's discussion and analysis of financial condition and results of operations contain certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Refer to Item 1. "Business—Forward-Looking Statements" for a complete description of forward-looking statements. Refer to Item 1. "Business" for information on our businesses and operating segments.

Amounts are presented in thousands, except per share data or as otherwise indicated.

Market Conditions

The U.S. economy continued to grow during 2019, although the pace of growth was slower than in 2018. U.S. Gross Domestic Product (GDP) grew at an estimated annual rate of 2.3 percent in 2019, lower than 2018's GDP annual growth rate, while inflation in 2019 remained below the Federal Reserve Boards (FRB) target inflation rate. The U.S. economy added over 2.1 million jobs during 2019 and the total unemployment rate fell to 3.5 percent at December 2019 as compared with 3.9 percent at December 2018. In October 2019, the FRB cut short-term interest rates by 25 basis points, the third such rate decrease of the year, as a result of increased economic uncertainty from trade tensions and a slowing global economy.

The slowing of economic growth both in the United States and abroad during 2019, together with the worldwide concern about the impact of COVID-19 (coronavirus), has created global uncertainty about the future economic environment. The sustainability of economic growth will be determined by numerous other variables including consumer sentiment, impact and duration of the recent outbreak of coronavirus, energy prices, credit market volatility, employment levels and housing market conditions which will impact corporate earnings and the capital markets. Concerns over interest rate levels, inflation, domestic and global policy issues, U.S. trade policy and geopolitical events as well as the implications of those events on the markets in general further add to global uncertainty. Interest rate levels, in combination with global economic conditions, fiscal and monetary policy and the level of regulatory and government scrutiny of financial institutions will continue to impact our results in 2020 and beyond.

Selected Financial Results for 2019 and 2018

	For the Three Months Ended					For the Year Ended				
	Dec	ember 31,	Sept	ember 30,	Dec	ember 31,	Dec	ember 31,	De	cember 31,
(in thousands, except per share data)		2019		2019		2018		2019		2018
Revenues:										
Gain on sale of loans, net	\$	26,072	\$	31,073	\$	12,854	\$	98,830	\$	66,750
Servicing fees, net		2,973		3,465		7,807		12,943		37,257
Gain (loss) on mortgage servicing rights, net		353		(9,755)		(6,303)		(24,911)		(3,625)
Real estate services fees, net		753		921		1,192		3,287		4,327
Other		220		71		15		479		291
Total revenues		30,371		25,775		15,565		90,628		105,000
Expenses:										
Personnel expense		18,005		18,725		13,661		65,191		64,143
Business promotion		3,091		1,292		3,854		9,319		26,936
General, administrative and other		6,284		5,619		8,323		22,410		35,339
Intangible asset impairment		_		_		_		_		18,347
Goodwill impairment										104,587
Total expenses		27,380		25,636		25,838		96,920		249,352
Operating income (loss):		2,991		139		(10,273)		(6,292)		(144,352)
Other (expense) income:										
Net interest income		2,501		2,490		540		9,330		2,517
Change in fair value of long-term debt		(2,388)		304		3,281		(1,429)		3,978
Change in fair value of net trust assets		(3,964)		(1,724)		687		(9,831)		(2,549)
Total other (expense) income		(3,851)		1,070		4,508		(1,930)		3,946
(Loss) earnings before income taxes		(860)		1,209		(5,765)		(8,222)		(140,406)
Income tax expense (benefit)		(183)		(230)		676		(245)		5,004
Net (loss) earnings	\$	(677)	\$	1,439	\$	(6,441)	\$	(7,977)	\$	(145,410)
Other comprehensive (loss) earnings:										
Change in fair value of mortgage-backed securities		(121)		107		_		_		_
Change in fair value of instrument specific credit risk		474		72		(1,201)		909		(3,141)
Total comprehensive (loss) earnings	\$	(324)	\$	1,618	\$	(7,642)	\$	(7,068)	\$	(148,551)
Diluted weighted average common shares		21,220		21,259		21,116		21,189		21,026
Diluted (loss) earnings per share	\$	(0.03)	\$	0.07	\$	(0.31)	\$	(0.38)	\$	(6.92)

Status of Operations

For the year ended 2019, net loss was \$8.0 million, or \$0.38 per diluted common share, as compared to net loss of \$145.4 million, or \$6.92 per diluted common share in 2018. For the quarter ended December 31, 2019, net loss was \$677 thousand, or \$0.03 per diluted common share, as compared to net loss of \$6.4 million, or \$0.31 per diluted common share in the fourth quarter of 2018, and net earnings of \$1.4 million, or \$0.07 per diluted common share, in the third quarter of 2019.

Net loss for the year ended December 31, 2019 as compared to the year ended December 31, 2018 decreased as a result of an increase in gain on sale of loans, net as well as a decrease in operating expenses and intangible asset and goodwill impairment charges partially offset by a mark-to-market decrease in fair value of our MSRs. The increase in gain on sale of loans for 2019 was due to origination volumes increasing to \$4.5 billion, with margins of approximately 217 bps as compared to \$3.8 billion in originations in 2018, with margins of approximately 174 bps. The increase in margins was a result of the significant drop in mortgage interest rates which began in the first quarter of 2019 and led to wider gain on sale margins. The primary driver of margin expansion was an increase in our consumer direct originations, which increased to 77% of total originations in 2019 as compared to 48% of total originations during the same period in 2018. During 2019, operating expenses (personnel, business promotion and general, administrative and other) decreased to \$96.9 million from \$126.4 million (excluding impairment) in 2018. Additionally, the Company recorded intangible asset and goodwill impairment charges of \$18.3 million and \$104.6 million in 2018 while no impairment charges were recorded in 2019.

Non-GAAP Financial Measures

For the year ended 2019, core earnings before tax (as defined below) were \$15.8 million, or \$0.75 per diluted

common share, as compared to core loss before tax of \$34.8 million, or \$1.65 per diluted common share, in 2018. For the quarter ended December 31, 2019, core earnings before tax were \$1.8 million, or \$0.08 per diluted common share, as compared to core loss before tax of \$6.6 million, or \$0.31 per diluted common share, for the quarter ended December 31, 2018.

To supplement our consolidated financial statements, which are prepared and presented in accordance with generally accepted accounting principles in the United States (GAAP), we use the following non-GAAP financial measures: core earnings (loss) before tax and diluted core earnings (loss) per share before tax. Core earnings (loss) before tax and diluted core earnings (loss) per share before tax are financial measurements calculated by adjusting GAAP earnings before tax to exclude certain non-cash items, such as fair value adjustments and mark-to-market of mortgage servicing rights (MSRs), and legacy non-recurring expenses. The fair value adjustments are non-cash items which management believes should be excluded when discussing our ongoing and future operations. The Company believes that core earnings more accurately reflects the Company's current business operations of mortgage originations and further aids our investors in understanding and analyzing our core operating results and comparing them among periods. These non-GAAP financial measures are not intended to be considered in isolation or as a substitute for net earnings (loss) before income taxes, net earnings (loss) or diluted earnings (loss) per share (EPS) prepared in accordance with GAAP. The tables below provide a reconciliation of net (loss) earnings before tax and diluted earnings (loss) per share to non-GAAP core earnings (loss) before tax and diluted per share non-GAAP core earnings (loss) before tax:

	For the Three Months Ended					For the Year Ended				
(in thousands, except per share data)	Dec	cember 31, 2019	Sep	otember 30, 2019	Dec	cember 31, 2018	Dec	cember 31, 2019	De	cember 31, 2018
Net (loss) earnings before tax:	\$	(860)	\$	1,209	\$	(5,765)	\$	(8,222)	\$	(140,406)
Change in fair value of mortgage servicing rights		(3,694)		5,264		1,763		12,161		(22,857)
Change in fair value of long-term debt		2,388		(304)		(3,281)		1,429		(3,978)
Change in fair value of net trust assets, including trust REO gains		3,964		1,724		(687)		9,831		2,549
Legal settlements and professional fees, for legacy matters						1,072		50		4,847
Severance		_		_		326		539		2,158
Intangible asset impairment		_		_		_		_		18,347
Goodwill impairment		_		_		_		_		104,587
Core earnings (loss) before tax	\$	1,798	\$	7,893	\$	(6,572)	\$	15,788	\$	(34,753)
Diluted weighted average common shares		21,220		21,259		21,116		21,189		21,026
Diluted core earnings (loss) per share before tax	\$	0.08	\$	0.37	\$	(0.31)	\$	0.75	\$	(1.65)
Diluted (loss) earnings per share Adjustments:	\$	(0.03)	\$	0.07	\$	(0.31)	\$	(0.38)	\$	(6.92)
Income tax (benefit) expense		(0.01)		(0.01)		0.03		(0.01)		0.24
Change in fair value of mortgage servicing rights		(0.17)		0.24		0.09		0.58		(1.08)
Change in fair value of long-term debt		0.11		(0.01)		(0.16)		0.07		(0.18)
Change in fair value of net trust assets, including trust REO gains (losses)		0.18		0.08		(0.03)		0.46		0.12
Legal settlements and professional fees, for legacy										
matters		_		_		0.05				0.23
Severance		_		_		0.02		0.03		0.10
Intangible asset impairment		_		_		_		_		0.87
Goodwill impairment	<u>¢</u>	0.00	\$	0.37	\$	(0.21)	\$	0.75	Φ.	4.97
Diluted core earnings (loss) per share before tax	\$	0.08	Þ	0.37	Þ	(0.31)	D	0.75	\$	(1.65)

Summary Highlights

- Total mortgage originations volumes increased to \$1.5 billion in the fourth quarter of 2019 and \$4.5 billion in 2019 as compared to \$632.1 million in the fourth quarter of 2018 and \$3.8 billion in 2018.
- NonQM mortgage origination volumes decreased to \$325.7 million in the fourth quarter of 2019 and \$1.2 billion in 2019 as compared to \$397.4 million in the fourth quarter of 2018 and \$1.3 billion in 2018.

- Mortgage servicing portfolio decreased to \$4.9 billion at December 31, 2019 as compared to \$6.2 billion at December 31, 2018.
- Gain on sale of loans increased to \$98.8 million, with margins of approximately 217 bps for the year ended December 31, 2019 as compared to \$66.8 million, with margins of approximately 174 bps for the year ended December 31, 2018.
- Servicing fees, net decreased to \$12.9 million during the year ended December 31, 2019 as compared to \$37.3 million during 2018.
- Operating expenses (excluding impairment) for 2019 decreased to \$96.9 million from \$126.4 million in 2018.

Mortgage Lending

During the year ended 2019, total originations increased 18% to \$4.5 billion as compared to \$3.8 billion in 2018. Retail originations represented the largest channel of originations with 77%, or \$3.5 billion, of total originations in 2019.

For the fourth quarter of 2019, our total originations increased to \$1.5 billion, a 139% increase, as compared to \$632.1 million for the fourth quarter of 2018. The increase in originations from 2018 was a result of the continued drop in mortgage interest rates which began in the first quarter of 2019.

	For the year ended December 31,								
(in millions)	2019	%	2018		%				
Originations by Channel:									
Retail	\$ 3,505.7	77 %	\$	1,842.2	48 %				
Wholesale	816.3	18		877.9	23				
Correspondent	226.8	5		1,119.5	29				
Total originations	\$ 4,548.8	100 %	\$	3,839.6	100 %				

Our loan products primarily include conventional loans for Fannie Mae and Freddie Mac and government loans insured by FHA, VA and USDA.

Originations by Loan Type:

	For the Year Ended December 31,								
(in millions)		2019	2018		% Change				
Conventional	\$	3,123.3	\$	1,263.2	147 %				
NonQM		1,241.5		1,300.9	(5)				
Government (1)		184.0		1,275.5	(86)				
Total originations	\$	4,548.8	\$	3,839.6	18 %				
Weighted average FICO (2)		743		707					
Weighted average LTV (3)		65.9%		73.8%					
Weighted average Coupon		4.51%		4.75%					
Avg. Loan size (in thousands)	\$	362.0	\$	313.2					

⁽¹⁾ Includes government-insured loans including FHA, VA and USDA.

We continue to believe there is an underserved mortgage market for borrowers with good credit who may not meet the qualified mortgage (QM) guidelines set out by the Consumer Financial Protection Bureau (CFPB). NonQM borrowers generally have a good credit history but income documentation that does not allow them to qualify for an agency loan, such as a self-employed borrower. We have established strict lending guidelines, including determining the prospective borrowers' ability to repay the mortgage, which we believe will keep delinquencies and foreclosures at acceptable levels. We continue to refine our guidelines to expand our reach to the underserved market of credit worthy borrowers who can fully document and substantiate an ability to repay mortgage loans, but unable to obtain financing through traditional programs (QM loans).

⁽²⁾ FICO—Fair Isaac Corporation credit score.

⁽³⁾ LTV—loan to value—measures ratio of loan balance to estimated property value based upon third party appraisal.

We invested in the capital structure of two securitizations in 2018 and an additional two during the first nine months of 2019, which were 100% backed by Impac NonQM collateral and the senior tranches received AAA ratings. During the fourth quarter of 2018 and throughout 2019, we expanded our investor relationships for NonQM which provides us with additional exit strategies for these nonconforming loans. We view these developments as the next step in the evolution and maturity of the NonQM market, and further evidence of the acceptance of the Company's NonQM product within both the primary and secondary markets, reflective of the quality, consistency and performance of our loans.

In the fourth quarter of 2019, the origination volume of NonQM loans was \$325.7 million, or 22% of total originations, as compared to \$397.4 million, or 63% of total originations, in the fourth quarter of 2018. For the year ended December 31, 2019, the origination volume of NonQM loans was \$1.2 billion, or 27% of total originations, as compared to \$1.3 billion, or 34% of total originations, in 2018. In 2019, the retail channel accounted for 21% of NonQM originations while the third-party origination (TPO) channels accounted for 79% of NonQM production. In 2018, the retail channel accounted for 26% of NonQM originations, while the TPO channels accounted for 74% of NonQM production.

For the year ended December 31, 2019, refinance volume increased \$1.3 billion, or approximately 52%, as compared to 2018. The increase was the result of the continued drop in mortgage interest rates which began in the first quarter of 2019. Our purchase money transactions declined 45% to \$735.8 million for the year ended December 31, 2019, as compared to \$1.3 billion in 2018. The reduction in purchase money transactions stems from the combination of increasing home prices in California which have contributed to a decline in home sales as well as the aforementioned significant drop in interest rates during 2019 which has substantially increased the demand to refinance.

	For the Year Ended December 31,									
(in millions)	 2019	%	2018	%						
Refinance	\$ 3,813.0	84 % \$	2,502.1	65 %						
Purchase	735.8	16	1,337.5	35						
Total originations	\$ 4,548.8	100 % \$	3,839.6	100 %						

As of December 31, 2019, we have approximately 1,030 approved wholesale relationships with mortgage brokerage companies and are approved to lend in 47 states. We have approximately 190 approved correspondent relationships with banks, credit unions and mortgage companies and are approved to lend in 50 states; however, currently approximately 81% of our mortgage originations were generated from California in 2019.

Mortgage Servicing

The following table includes information about our mortgage servicing portfolio:

(in millions)	A	t December 31, 2019	% 60+ days delinquent (1)	At December 31, 2018	% 60+ days delinquent (1)
Freddie Mac	\$	4,826.2	0.47 %	\$ 6,165.1	0.25 %
Ginnie Mae		105.4	2.41	51.2	0.53
Fannie Mae		0.2	0.00	_	0.00
Other		_	0.00	1.8	0.00
Total servicing portfolio	\$	4,931.8	0.51 %	\$ 6,218.1	0.25 %
Number of loans		17,756		21,260	
Weighted average Coupon		3.93%		3.96%	
Weighted average FICO		748		749	
Weighted average LTV		63.0%		63.2%	
Avg. Portfolio balance (in millions)		5,735.0		15,306.1	
Avg. Loan size (in thousands)	\$	277.8		\$ 292.5	

⁽¹⁾ Based on loan count.

At December 31 2019, the mortgage servicing portfolio decreased to \$4.9 billion as compared to \$6.2 billion at December 31, 2018. The decrease was due to a shift in strategy during the third and fourth quarters of 2018 to direct our efforts on repositioning the Company by focusing on our core NonQM lending business and strengthen our liquidity position. During 2018, the mortgage servicing portfolio decreased approximately \$10.1 billion as we completed two servicing sales of approximately \$10.5 billion in UPB of FNMA and GNMA mortgage servicing rights during the fourth

quarter. During 2019, we continued to selectively retain mortgage servicing as well as increase whole loan sales on a servicing released basis to investors. As a result of retaining a smaller portion of servicing on loans sold to third parties the runoff of the portfolio exceeded the servicing retained. The servicing portfolio generated net servicing fees of \$12.9 million for the year ended December 31, 2019, a 65% decrease over the net servicing fees of \$37.3 million for the year ended December 31, 2018, as a result of the aforementioned mortgage servicing sales in 2018. Delinquencies within the servicing portfolio have remained low at 0.51% for 60+ days delinquent as of December 31, 2019 as compared to 0.25% as of December 31, 2018.

Real Estate Services

We provide portfolio loss mitigation and real estate services including real estate owned (REO) surveillance and disposition services, default surveillance and loss recovery services, short sale and real estate brokerage services, portfolio monitoring and reporting services. The source of revenue for this segment is primarily from the long-term mortgage portfolio, along with a small number of third party clients as well.

The real estate services segment continues to be profitable and posted net earnings of \$1.9 million and \$2.2 million for the years ended December 31, 2019 and 2018. As the long-term mortgage portfolio continues to decline, we expect real estate services and the related revenues to decline.

Long-Term Mortgage Portfolio

The long-term mortgage portfolio primarily includes a) the residual interests in securitizations, b) master servicing rights from the securitizations and c) long-term debt.

Although we have seen some stabilization and improvement in defaults, the portfolio is expected to continue to suffer losses and may continue for the foreseeable future. Such losses have been included in estimating the fair value of the related securitized mortgage collateral and borrowings.

For the year ended December 31, 2019, our residual interest in securitizations (represented by the difference between total trust assets and total trust liabilities) generated cash flows of \$1.4 million as compared to \$5.1 million for the year ended December 31, 2018. The decrease in cash flows from our residual interest in securitizations during 2019 was due to an increase in prepayments and losses as well as a reduction due to recoveries on one multi-family trust in 2018. At December 31, 2019, our residual interest in securitizations (represented by the difference between total trust assets and total trust liabilities) decreased to \$15.5 million compared to \$17.4 million at December 31, 2018. The decrease in residual fair value at December 31, 2019 was the result of an increase in prepayment and loss assumptions partially offset by a decrease in LIBOR during 2019 as compared to 2018.

For additional information regarding the long-term mortgage portfolio refer to *Financial Condition and Results of Operations* below.

Corporate

The corporate segment includes all corporate services groups, public company costs as well as debt expense related to the Convertible Notes and capital leases. This corporate services group supports all operating segments. A portion of the corporate services costs are allocated to the operating segments. The costs associated with being a public company, unused space for growth as well as the interest expense related to the Convertible Notes and capital leases is not allocated to our operating segments and remains in this segment.

For additional information regarding the corporate segment refer to Results of Operations by Business Segment below.

Critical Accounting Policies

We define critical accounting policies as those that are important to the portrayal of our financial condition and results of operations. Our critical accounting policies require management to make difficult and complex judgments that rely on estimates about the effect of matters that are inherently uncertain due to the effect of changing market conditions and/or consumer behavior. In determining which accounting policies meet this definition, we considered our policies with

respect to the valuation of our assets and liabilities and estimates and assumptions used in determining those valuations. We believe the most critical accounting issues that require the most complex and difficult judgments and that are particularly susceptible to significant change to our financial condition and results of operations include the following:

- fair value measurements;
- variable interest entities and transfers of financial assets and liabilities:
- repurchase reserve;
- interest income and interest expense; and
- income taxes.

Fair Value Measurements

Financial Accounting Standards Board—Accounting Standards Codification FASB ASC 820-10-35 defines fair value, establishes a framework for measuring fair value and outlines a fair value hierarchy based on the inputs to valuation techniques used to measure fair value. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (also referred to as an exit price). Fair value measurements are categorized into a three-level hierarchy based on the extent to which the measurement relies on observable market inputs in measuring fair value. Level 1, which is the highest priority in the fair value hierarchy, is based on unadjusted quoted prices in active markets for identical assets or liabilities. Level 2 is based on observable market-based inputs, other than quoted prices, in active markets for similar assets or liabilities. Level 3, which is the lowest priority in the fair value hierarchy, is based on unobservable inputs. Assets and liabilities are classified within this hierarchy in their entirety based on the lowest level of any input that is significant to the fair value measurement.

The use of fair value to measure our financial instruments is fundamental to our financial statements and is a critical accounting estimate because a substantial portion of our assets and liabilities are recorded at estimated fair value. Financial instruments classified as Level 3 are generally based on unobservable inputs, and the process to determine fair value is generally more subjective and involves a high degree of management judgment and assumptions. These assumptions may have a significant effect on our estimates of fair value, and the use of different assumptions, as well as changes in market conditions and interest rates, could have a material effect on our results of operations or financial condition.

Mortgage loans held-for-sale—We elected to carry our mortgage loans held-for-sale originated or acquired from the mortgage lending operation at fair value. Fair value is based on quoted market prices, where available, prices for other traded mortgage loans with similar characteristics, and purchase commitments and bid information received from market participants.

Mortgage servicing rights—We elected to carry all of our mortgage servicing rights arising from our mortgage lending operation at fair value. The fair value of mortgage servicing rights is based upon a discounted cash flow model. The valuation model incorporates assumptions that market participants would use in estimating the fair value of servicing. These assumptions include estimates of prepayment speeds, discount rate, cost to service, escrow account earnings, contractual servicing fee income, prepayment and late fees, among other considerations.

Derivative financial instruments—We utilize certain derivative instruments in the ordinary course of our business to manage our exposure to changes in interest rates. These derivative instruments include to-be-announced MBS and forward loan sale commitments (TBA MBS or Hedging Instruments). We also issue interest rate lock commitments (IRLCs) to borrowers in connection with single family mortgage loan originations. We recognize all derivative instruments at fair value. The estimated fair value of IRLCs are based on underlying loan types with similar characteristics using the TBA MBS market, which is actively quoted and easily validated through external sources. The data inputs used in this valuation include, but are not limited to, loan type, underlying loan amount, note rate, loan program, and expected sale date of the loan, adjusted for current market conditions. These valuations are adjusted at the loan level to consider the servicing release premium and loan pricing adjustments specific to each loan. For all IRLCs, the base value is then adjusted for the anticipated current secondary market prices for underlying loans and estimated servicing value with similar coupons, maturities and credit quality, subject to the anticipated loan funding probability (Pull through Rate). The fair

value of the Hedging Instruments is based on the actively quoted TBA MBS market using observable inputs related to characteristics of the underlying MBS stratified by product, coupon and settlement date and are recorded in other liabilities in the consolidated balance sheets. The initial and subsequent changes in value of IRLCs and forward sale commitments are a component of gain on sale of loans, net in the consolidated statements of operations and comprehensive loss.

Long-term debt—Long-term debt (consisting of junior subordinated notes) is reported at fair value within the long-term mortgage portfolio. These securities are measured based upon an analysis prepared by management, which utilizes a discounted cash flow analysis which takes into consideration our credit risk. Unrealized gains and losses are recognized in earnings in the accompanying consolidated statements of operations and comprehensive loss as change in fair value of long-term debt. Our estimate of the fair value of the long-term debt requires us to exercise significant judgment as to the timing and amount of the future obligation. Changes in assumptions resulting from changes in our credit risk profile will affect the estimated fair value of the long-term debt and those changes are recorded as a component of net earnings. A change in assumptions associated with the improvement in our credit risk profile could result in a significant increase in the estimated fair value of the long-term debt which would result in a significant charge to net earnings.

Variable Interest Entities and Transfers of Financial Assets and Liabilities

Historically, we securitized mortgages in the form of collateralized mortgage obligations (CMO), which were consolidated and accounted for as secured borrowings for financial statement purposes. We also securitized mortgages in the form of real estate mortgage investment conduits (REMICs), which were either consolidated or unconsolidated depending on the design of the securitization structure. CMO and certain REMIC securitizations contained structural terms that resulted in the transferee (securitization trust) to not be a qualifying special purpose entity (QSPE), therefore we consolidated the variable interest entity (VIE) as we are the primary beneficiary of the sole residual interest in each securitization trust. Generally, this was achieved by including terms in the securitization agreements that gave us the ability to unilaterally cause the securitization trust to return specific mortgages, other than through a clean-up call. Amounts consolidated are included in trust assets and liabilities as securitized mortgage collateral, real estate owned and securitized mortgage borrowings in the accompanying consolidated balance sheets.

Securitizations that are structured as secured borrowings, we recognize interest income over the life of the securitized mortgage collateral and interest expense incurred for the securitized mortgage borrowings. We refer to these transactions as consolidated securitizations. The mortgage loans collateralizing the debt securities for these financings are included in securitized mortgage trust assets and the debt securities payable to investors in these securitizations are included in securitized mortgage trust liabilities in our consolidated balance sheets.

Investors in the securities issued by the securitization trust have no recourse to our non-securitized assets or to us and have no ability to require us to provide additional assets, but rather have recourse only to the assets transferred to the trust. These securitizations are evaluated for consolidation based on the provisions of FASB ASC 810-10-25, which eliminated the concept of a QSPE and changed the approach to determine a securitization trust's primary beneficiary. Amounts consolidated are included in trust assets and liabilities as securitized mortgage collateral, real estate owned and securitized mortgage borrowings in the accompanying consolidated balance sheets.

Repurchase Reserve

When we sell loans through whole loan sales we are required to make normal and customary representations and warranties about the loans to the purchaser. Our whole loan sale agreements generally require us to repurchase loans if we breach a representation or warranty given to the loan purchaser. In addition, we may be required to repurchase loans as a result of borrower fraud or if a payment default occurs on a mortgage loan shortly after its sale.

Investors may request us to repurchase loans or to indemnify them against losses on certain loans which the investors believe either do not comply with applicable representations or warranties or defaulted shortly after its purchase. Upon completion of our investigation regarding the investor claims, we may reject the investor claim, repurchase or provide indemnification on certain loans, as appropriate. We maintain a liability reserve for expected losses on dispositions of loans expected to be repurchased or on which indemnification is expected to be provided. We regularly evaluate the adequacy of this repurchase liability reserve based on trends in repurchase and indemnification requests, actual loss experience, settlement negotiations, and other relevant factors including economic conditions.

We record a provision for losses relating to such representations and warranties as part of each loan sale transaction. 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 and the potential severity of loss in the event of defaults and the probability of reimbursement by the correspondent loan seller. We establish a liability at the time loans are sold and continually update our estimated repurchase liability. The level of the repurchase liability for representations and warranties is difficult to estimate and requires considerable management judgment. The level of mortgage loan repurchase losses is dependent on economic factors, investor demand strategies, and other external conditions that may change over the lives of the underlying loans.

Interest Income and Interest Expense

Interest income on securitized mortgage collateral and interest expense on securitized mortgage borrowings are recorded using the effective interest method for the period based on the previous quarter-end's estimated fair value. Interest expense on long-term debt is recorded using the effective interest method based on estimated future interest rates and cash flows.

Income Taxes

Provision for income taxes is calculated using the asset and liability method, which requires the recognition of deferred income taxes. Deferred tax assets and liabilities are recognized and reflect the net tax effect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes and certain changes in the valuation allowance. Deferred tax assets are recognized subject to management's judgment that realization is more likely than not. A valuation allowance is recognized for a deferred tax asset if, based on the weight of the available evidence, it is more likely than not that some portion of the deferred tax asset will not be realized. In making such judgments, significant weight is given to evidence that can be objectively verified. We provide a valuation allowance against deferred tax assets if, based on available evidence, it is more likely than not that some portion or all of the deferred tax assets will not be realized. In determining the adequacy of the valuation allowance, we consider all forms of evidence, including: (1) historic earnings or losses; (2) the ability to realize deferred tax assets through carry back to prior periods; (3) anticipated taxable income resulting from the reversal of taxable temporary differences; (4) tax planning strategies; and (5) anticipated future earnings exclusive of the reversal of taxable temporary differences.

Financial Condition and Results of Operations

Financial Condition

For the years ended December 31, 2019 and 2018

The following table shows the condensed consolidated balance sheets for the following periods:

(in thousands, except per share data)	December 31, 2019		December 31, 2018		Increase (Decrease)		% Change
ASSETS							
Cash	\$	24,666	\$	23,200	\$	1,466	6 %
Restricted cash		12,466		6,989		5,477	78
Mortgage loans held-for-sale		782,143		353,601		428,542	121
Mortgage servicing rights		41,470		64,728		(23,258)	(36)
Securitized mortgage trust assets		2,634,746		3,165,590		(530,844)	(17)
Other assets		50,788		33,835		16,953	50
Total assets	\$	3,546,279	\$	3,647,943	\$	(101,664)	(3)%
LIABILITIES & EQUITY							
Warehouse borrowings	\$	701,563	\$	284,137	\$	417,426	147 %
Convertible notes		24,996		24,985		11	0
Long-term debt (Par value; \$62,000)		45,434		44,856		578	1
Securitized mortgage trust liabilities		2,619,210		3,148,215		(529,005)	(17)
Repurchase reserve		8,969		7,657		1,312	17
Other liabilities		41,870		27,918		13,952	50
Total liabilities		3,442,042		3,537,768		(95,726)	(3)
Total equity		104,237		110,175		(5,938)	(5)
Total liabilities and stockholders' equity	\$	3,546,279	\$	3,647,943	\$	(101,664)	(3)%
Book value per share	\$	4.90	\$	5.22	\$	(0.32)	(6)%
-	¢		-		¢		` ´
Tangible Book value per share	Ф	4.90	\$	5.22	Ф	(0.32)	(6)%

At December 31, 2019, cash increased to \$24.7 million from \$23.2 million at December 31, 2018. Significant cash inflows affecting cash were primarily attributed to increased mortgage loans sales servicing released which generate more cash and liquidity, mortgage servicing income, the sale of mortgage backed securities, real estate services fees and residual interest cash flows. Significant outflows affecting cash were the payment of operating expenses, paydown of high cost warehouse borrowings, repayment of MSR financings and investment in MSRs.

Mortgage loans held-for-sale increased \$428.5 million to \$782.1 million at December 31, 2019 as compared to \$353.6 million at December 31, 2018. The increase was due to \$4.5 billion in originations partially offset by \$4.1 billion in loan sales.

Mortgage servicing rights decreased \$23.3 million to \$41.5 million at December 31, 2019 as compared to \$64.7 million at December 31, 2018. The decrease was primarily due to mark-to-market decreases in fair value of \$25.8 million, which includes the change in fair value associated with principal reductions as well as prepayments. Partially offsetting the reduction in fair value were additions of \$2.5 million from servicing retained loan sales of \$290.7 million. At December 31, 2019, we serviced \$4.9 billion in UPB for others as compared to \$6.2 billion at December 31, 2018.

In January 2019, we adopted ASU No. 2016-02, Leases, which requires the majority of leases to be recognized on the consolidated balance sheets. We adopted ASU No. 2016-02 using the modified retrospective transition approach and elected the practical expedients transition option to recognize the adjustment in the period of adoption rather than in the earliest period presented. As a result, adoption of the new guidance resulted in the initial recognition of right of use (ROU) assets of \$19.7 million (net of the reversal of \$3.8 million deferred rent liability) and lease liabilities of

\$23.4 million in the consolidated balance sheets within other assets and other liabilities, respectively.

Warehouse borrowings increased \$417.4 million to \$701.6 million at December 31, 2019 as compared to \$284.1 million at December 31, 2018. The increase was due to a \$428.5 million increase in mortgage loans held-for-sale at December 31, 2019 as compared to December 31, 2018. During 2019, we increased our total borrowing capacity to \$1.7 billion as compared to \$900.0 million at December 31, 2018.

We have a MSR financing facility of \$60.0 million. This facility allows us to borrow up to 60% of the fair market value of Freddie Mac and Ginnie Mae (subject to an acknowledgment agreement) pledged mortgage servicing rights. At December 31, 2019, there were no outstanding borrowings under this facility and we had approximately \$24.4 million of available financing based on the fair market value of our mortgage servicing rights.

Repurchase reserve increased \$1.3 million to \$9.0 million at December 31, 2019 as compared to \$7.7 million at December 31, 2018. The increase was due to a \$5.5 million provision for repurchase as a result of an increase in our early payoff reserve as well as expected future losses, partially offset by \$4.2 million in settlements primarily related to repurchased loans as well as refunds of premiums to investors for early payoffs on loans sold.

Book value per share decreased 6% to \$4.90 at December 31, 2019 as compared to \$5.22 at December 31, 2018. Book value per common share decreased 11% to \$2.47 as of December 31, 2019, as compared to \$2.77 as of December 31, 2018 (inclusive of the remaining \$67.8 million of liquidation preference on our preferred stock). In the event we are not successful in appealing the Preferred B litigation, inclusive of the Preferred B stock cumulative undeclared dividends in arrears of \$16.0 million, common book value per share was \$1.72 at December 31, 2019.

The changes in total assets and liabilities are primarily attributable to decreases in our trust assets and trust liabilities as summarized below.

	December 31, 2019	December 31, 2018	Increase (Decrease)	% Change
Securitized mortgage collateral	\$ 2,628,064	\$ 3,157,071	\$ (529,007)	(17)%
Other trust assets	6,682	8,519	(1,837)	(22)
Total trust assets	2,634,746	3,165,590	(530,844)	(17)
Securitized mortgage borrowings	\$ 2,619,210	\$ 3,148,215	\$ (529,005)	(17)%
Total trust liabilities	2,619,210	3,148,215	(529,005)	(17)
Residual interests in securitizations	\$ 15,536	\$ 17,375	\$ (1,839)	(11)%

Since the consolidated securitization trusts are nonrecourse to us, trust assets and liabilities have been netted in the table above to present our interest in these trusts more simply, which are considered the residual interests in securitizations. The residual interests are represented by the fair value of securitized mortgage collateral and real estate owned, offset by the fair value of securitized mortgage borrowings. We receive cash flows from our residual interests in securitizations to the extent they are available after required distributions to bondholders and maintaining specified overcollateralization levels and other specified parameters (such as maximum delinquency and cumulative default) within the trusts. The estimated fair value of the residual interests, represented by the difference in the fair value of total trust assets and total trust liabilities, was \$15.5 million at December 31, 2019 compared to \$17.4 million at December 31, 2018. The decrease in residual fair value was the result of an increase in prepayment and loss assumptions partially offset by a decrease in LIBOR during 2019 as compared to 2018.

We update our collateral assumptions quarterly based on recent delinquency, default, prepayment and loss experience. Additionally, we update the forward interest rates and investor yield (discount rate) assumptions based on information derived from market participants. During the year ended December 31, 2019, actual losses were slightly elevated as compared to forecasted losses for the majority of trusts, including those with residual value. Principal payments and liquidations of securitized mortgage collateral and securitized mortgage borrowings also contributed to the reduction in trust assets and liabilities.

• The estimated fair value of securitized mortgage collateral decreased \$529.0 million during 2019 primarily due to reductions in principal from borrower payments and transfers of loans to REO for single-family and multi-family collateral. Additionally, other trust assets decreased \$1.8 million during the year ended

December 31, 2019, primarily due to a decrease of \$22.6 million in REO from liquidations and a \$6.4 million decrease in the net realizable value (NRV) of REO. Partially offsetting the decrease in REO was an increase in REO from foreclosures of \$27.2 million for the year ended December 31, 2019.

• The estimated fair value of securitized mortgage borrowings decreased \$529.0 million during 2019 primarily due to reductions in principal balances from principal payments during the period for single-family and multi-family collateral as well as a decrease in loss assumptions.

Prior to 2008, we securitized mortgage loans by transferring originated and acquired residential single-family mortgage loans and multi-family commercial loans (the "transferred assets") into non-recourse bankruptcy remote trusts which in turn issued tranches of bonds to investors supported only by the cash flows of the transferred assets. Because the assets and liabilities in the securitizations are nonrecourse to us, the bondholders cannot look to us for repayment of their bonds in the event of a shortfall. These securitizations were structured to include interest rate derivatives. We retained the residual interest in each trust, and in most cases would perform the master servicing function. A trustee and sub-servicer, unrelated to us, was utilized for each securitization. Cash flows from the loans (the loan payments as well as liquidation of foreclosed real estate properties) collected by the loan sub-servicer are remitted to us, the master servicer. The master servicer remits payments to the trustee who remits payments to the bondholders (investors). The sub-servicer collects loan payments and performs loss mitigation activities for defaulted loans. These activities include foreclosing on properties securing defaulted loans, which results in REO. Our real estate services segment also performs loss mitigation activities for loans within the portfolio.

For the trusts we consolidate, the loans are included in the consolidated balance sheets as "securitized mortgage trust assets", the foreclosed loans are included in the consolidated balance sheets as "real estate owned" and the various bond tranches owned by investors are included in the consolidated balance sheets as "securitized mortgage trust liabilities." To the extent there is excess overcollateralization (as defined in the securitization agreements) in these securitization trusts, we receive cash flows from the excess interest collected monthly from the residual interest we own. Because (i) we elected the fair value option on the securitized mortgage collateral, securitized mortgage borrowings, and (ii) real estate owned is reflected at NRV, which closely approximates fair market value, the net of the trust assets and trust liabilities represents the estimated fair value of the residual interests we own.

To estimate fair value of the assets and liabilities within the securitization trusts each reporting period, management uses an industry standard valuation and analytical model that is updated monthly with current collateral, real estate, derivative, bond and cost (servicer, trustee, etc.) information for each securitization trust. We employ an internal process to validate the accuracy of the model as well as the data within this model. Forecasted assumptions sometimes referred to as "curves," for defaults, loss severity, interest rates (LIBOR, which is currently available for periods beyond 2021, however there is a likelihood that this information may no longer be available in the near future) and prepayments are inputted into the valuation model for each securitization trust. We hire third-party market participants to provide forecasted curves for the aforementioned assumptions for each of the securitizations. Management employs a process to qualitatively and quantitatively review the assumption curves for reasonableness using other information gathered from the mortgage and real estate market (*i.e.*, third party home price indices, published industry reports discussing regional mortgage and commercial loan performance and delinquency) as well as actual default and foreclosure information for each trust from the respective trustees.

We use the valuation model to generate the expected cash flows to be collected from the trust assets and the expected required bondholder distribution (trust liabilities). To the extent that the trusts are over collateralized, we may receive the excess interest as the holder of the residual interest. The information above provides us with the future expected cash flows for the securitized mortgage collateral, real estate owned, securitized mortgage borrowings, and the residual interests.

To determine the discount rates to apply to these cash flows, we gather information from the bond pricing services and other market participants regarding estimated investor required yields for each bond tranche. Based on that information and the collateral type and vintage, we determine an acceptable range of expected yields an investor would require including an appropriate risk premium for each bond tranche. We use the blended yield of the bond tranches together with the residual interests to determine an appropriate yield for the securitized mortgage collateral in each securitization.

The following table presents changes in the trust assets and trust liabilities for the year ended December 31, 2019:

						TR	UST LIABILITIES	
	Securitized mortgage collateral		NRV (1) Real estate owned		Total trust assets		rel 3 Recurring Fair alue Measurement Securitized mortgage borrowings	Net trust assets
Recorded fair value at December 31, 2018	\$ 3,157,071	\$	8,519	\$	3,165,590	\$	(3,148,215)	\$ 17,375
Total gains/(losses) included in earnings:								
Interest income	11,279		_		11,279		_	11,279
Interest expense	_		_		_		(38,127)	(38,127)
Change in FV of net trust assets, excluding								
REO (1)	52,499		_		52,499		(55,896)	(3,397)
Losses from REO – not at FV but at NRV (2)	_		(6,434)		(6,434)		· · · · ·	(6,434)
Total gains (losses) included in earnings	63,778		(6,434)		57,344		(94,023)	(36,679)
Transfers in and/or out of level 3			_		_			
Purchases, issuances and settlements	(592,785)		4,597		(588,188)		623,028	34,840
Recorded fair value at December 31, 2019	\$ 2,628,064	\$	6,682	\$	2,634,746	\$	(2,619,210)	\$ 15,536

⁽¹⁾ Accounted for at net realizable value.

Inclusive of losses from REO, total trust assets above reflect a net gain of \$46.1 million as a result of an increase in fair value from securitized mortgage collateral and other trust assets of \$52.5 million partially offset by losses from REO of \$6.4 million. Net losses on trust liabilities were \$55.9 million from the increase in fair value of securitized mortgage borrowings. As a result, change in fair value of net trust assets, including trust REO gains and losses reflect a decrease of \$9.8 million for the year ended December 31, 2019.

The table below reflects the net trust assets as a percentage of total trust assets (residual interests in securitizations):

December 31

December 31

	 2019	 2018
Net trust assets	\$ 15,536	\$ 17,375
Total trust assets	2,634,746	3,165,590
Net trust assets as a percentage of total trust assets	0.59 %	0.55 %

For the year ended December 31, 2019, the estimated fair value of the net trust assets increased as a percentage of total trust assets. The increase was primarily due to a decrease in LIBOR throughout 2019 causing an increase in prepayments of trust assets. The increase in prepayments caused a greater reduction in the UPB of trust assets than the residual fair value as the UPB is significantly higher in the later vintage deals with little to no residual fair value.

Since the consolidated securitization trusts are nonrecourse to us, our economic risk is limited to our residual interests in these securitization trusts. Therefore, in the following table we have netted trust assets and trust liabilities to present these residual interests more simply. Our residual interests in securitizations are segregated between our single-family (SF) residential and multi-family (MF) residential portfolios and are represented by the difference between trust assets and trust liabilities.

⁽²⁾ Included in other income (expense) in the consolidated statements of operations and comprehensive loss for the year ended December 31, 2019.

The following tables present the estimated fair value of our residual interests by securitization vintage year and other related assumptions used to derive these values at December 31, 2019 and December 31, 2018:

	Estimated Fair Value of Residual Interests by Vintage Year at December 31, 2019						Estimated Fair Value of Residu Interests by Vintage Year at December 31, 2018					
Origination Year	_	SF		MF		Total		SF		MF		Total
2002-2003 (1)	\$	8,075	\$	604	\$	8,679	\$	10,097	\$	617	\$	10,714
2004		3,386		709		4,095		1,554		668		2,222
2005				88		88		2		2		4
2006				2,674		2,674		_		4,435		4,435
Total	\$	11,461	\$	4,075	\$	15,536	\$	11,653	\$	5,722	\$	17,375
Weighted avg. prepayment rate		10.5 %		11.4 %		10.6 %		8.2 %	, <u> </u>	6.2 %		8.0 %
Weighted avg. discount rate		18.0		17.2		17.8		16.3		18.2		16.9

^{(1) 2002 - 2003} vintage year includes CMO 2007 - A, since the majority of the mortgages collateralized in this securitization were originated during this period.

We utilize a number of assumptions to value securitized mortgage collateral, securitized mortgage borrowings and residual interests. These assumptions include estimated collateral default rates and loss severities (credit losses), collateral prepayment rates, forward interest rates and investor yields (discount rates). We use the same collateral assumptions for securitized mortgage collateral and securitized mortgage borrowings as the collateral assumptions determine collateral cash flows which are used to pay interest and principal for securitized mortgage borrowings and excess spread, if any, to the residual interests. However, we use different investor yields (discount rates) assumptions for securitized mortgage collateral and securitized mortgage borrowings and the discount rates used for residual interests based on underlying collateral characteristics, vintage year, assumed risk and market participant assumptions.

The table below reflects the estimated future credit losses and investor yield requirements for trust assets by product (SF and MF) and securitization vintage at December 31, 2019:

	Estimated I Losses		Investor Y Requireme	
	SF	MF	SF	MF
2002-2003	7 %	* (3)	5 %	8 %
2004	5	* (3)	4	5
2005	6	* (3)	4	3
2006	12	* (3)	4	4
2007	14	* (3)	4	2

⁽¹⁾ Estimated future losses derived by dividing future projected losses by unpaid principal balances at December 31, 2019.

Despite the increase in housing prices through December 31, 2019, housing prices in many parts of the country are still at levels which has significantly reduced or eliminated equity for loans originated after 2003. Future loss estimates are significantly higher for mortgage loans included in securitization vintages after 2005 which reflect severe home price deterioration and defaults experienced with mortgages originated during these periods.

Long-Term Mortgage Portfolio Credit Quality

We use the Mortgage Bankers Association (MBA) method to define delinquency as a contractually required payment being 30 or more days past due. We measure delinquencies from the date of the last payment due date in which a payment was received. Delinquencies for loans 60 days late or greater, foreclosures and delinquent bankruptcies were \$511.3 million or 17.2% of the long-term mortgage portfolio as of December 31, 2019, as compared to \$595.5 million or 16.4% as of December 31, 2018.

⁽²⁾ The estimated fair values of residual interests in vintage years 2005 through 2007 is reflective of higher estimated future losses and investor yield requirements compared to earlier vintage years.

⁽²⁾ Investor yield requirements represent our estimate of the yield third-party market participants would require to price our trust assets and liabilities given our prepayment, credit loss and forward interest rate assumptions.

⁽³⁾ Represents less than 1%.

The following table summarizes the unpaid principal balances of loans in our mortgage portfolio, included within securitized mortgage collateral, that were 60 or more days delinquent (utilizing the MBA method) as of the periods indicated:

	De	ecember 31,	Total	December 31,	Total
Securitized mortgage collateral		2019	Collateral	2018	Collateral
60 - 89 days delinquent	\$	88,553	3.0 %	\$ 101,546	2.8 %
90 or more days delinquent		191,781	6.5	212,668	5.8
Foreclosures (1)		155,082	5.2	177,099	4.9
Delinquent bankruptcies (2)		75,880	2.6	104,232	2.9
Total 60 or more days delinquent	\$	511,296	17.3 %	\$ 595,545	16.4 %
Total collateral	\$	2,964,654	100.0 % 3	\$ 3,640,902	100.0 %

⁽¹⁾ Represents properties in the process of foreclosure.

The following table summarizes the UPB of securitized mortgage collateral, mortgage loans held-for-sale and real estate owned, that were non-performing as of the dates indicated (excludes 60-89 days delinquent):

			Total			
	December 31, 2019		31, Collateral %		cember 31, 2018	Collateral %
90 or more days delinquent, foreclosures and						
delinquent bankruptcies	\$	422,743	14.3 %	\$	493,999	13.6 %
Real estate owned inside and outside trusts		6,834	0.2		9,885	0.3
Total non-performing assets	\$	429,577	14.5 %	\$	503,884	13.9 %

Non-performing assets consist of non-performing loans (mortgages that are 90 or more days delinquent, including loans in foreclosure and delinquent bankruptcies) plus REO. It is our policy to place a mortgage loan on nonaccrual status when it becomes 90 days delinquent and to reverse from revenue any accrued interest, except for interest income on securitized mortgage collateral when the scheduled payment is received from the servicer. The servicers are required to advance principal and interest on loans within the securitization trusts to the extent the advances are considered recoverable. IFC, a subsidiary of IMH and master servicer, may be required to advance funds, or in most cases cause the loan servicers to advance funds, to cover principal and interest payments not received from borrowers depending on the status of their mortgages. As of December 31, 2019, non-performing assets (unpaid principal balance of loans 90 or more days delinquent, foreclosures and delinquent bankruptcies plus REO) as a percentage of the total collateral was 14.5%. At December 31, 2018, non-performing assets to total collateral was 13.9%. Non-performing assets decreased by approximately \$74.3 million at December 31, 2019 as compared December 31, 2018. At December 31, 2019, the estimated fair value of non-performing assets (representing the fair value of loans 90 or more days delinquent, foreclosures and delinquent bankruptcies plus REO) was \$151.5 million or 4.5% of total assets. At December 31, 2018, the estimated fair value of non-performing assets was \$197.2 million or 5.4% of total assets.

REO, which consists of residential real estate acquired in satisfaction of loans, is carried at the lower of cost or net realizable value less estimated selling costs. Adjustments to the loan carrying value required at the time of foreclosure are included in the change in the fair value of net trust assets. Changes in our estimates of net realizable value subsequent to the time of foreclosure and through the time of ultimate disposition are recorded as gains or losses from real estate owned in the consolidated statements of operations and comprehensive loss.

For the year ended December 31, 2019, we recorded a \$6.4 million decrease in net realizable value of the REO compared to a decrease of \$950 thousand for the comparable 2018 period. Increases and write-downs of the net realizable value reflect increases or declines in value of the REO subsequent to foreclosure date, but prior to the date of sale.

⁽²⁾ Represents bankruptcies that are 30 days or more delinquent.

The following table presents the balances of the REO for continuing operations:

	Dec	December 31, 2018		
REO	\$	21,195	\$	17,813
Impairment (1)		(14,361)		(7,928)
Ending balance	\$	6,834	\$	9,885
REO inside trusts	\$	6,682	\$	8,519
REO outside trusts		152		1,366
Total	\$	6,834	\$	9,885

⁽¹⁾ Impairment represents the cumulative write-downs of net realizable value subsequent to foreclosure.

In calculating the cash flows to assess the fair value of the securitized mortgage collateral, we estimate the future losses embedded in our loan portfolio. In evaluating the adequacy of these losses, management takes many factors into consideration. For instance, a detailed analysis of historical loan performance data is accumulated and reviewed. This data is analyzed for loss performance and prepayment performance by product type, origination year and securitization issuance. The data is also broken down by collection status. Our estimate of losses for these loans is developed by estimating both the rate of default of the loans and the amount of loss severity in the event of default. The rate of default is assigned to the loans based on their attributes (e.g., original loan-to-value, borrower credit score, documentation type, geographic location, etc.) and collection status. The rate of default is based on analysis of migration of loans from each aging category. The loss severity is determined by estimating the net proceeds from the ultimate sale of the foreclosed property. The results of that analysis are then applied to the current mortgage portfolio and an estimate is created. We believe that pooling of mortgages with similar characteristics is an appropriate methodology in which to evaluate the future loan losses.

Management recognizes that there are qualitative factors that must be taken into consideration when evaluating and measuring losses in the loan portfolios. These items include, but are not limited to, economic indicators that may affect the borrower's ability to pay, changes in value of collateral, political factors, employment and market conditions, competitor's performance, market perception, historical losses, and industry statistics. The assessment for losses is based on delinquency trends and prior loss experience and management's judgment and assumptions regarding various matters, including general economic conditions and loan portfolio composition. Management continually evaluates these assumptions and various relevant factors affecting credit quality and inherent losses.

Results of Operations

For the year ended December 31, 2019 as compared to 2018

	For the Year Ended December 31,									
	2019			2018		Increase Decrease)	% Change			
Revenues	\$	90,628	\$	105,000	\$	(14,372)	(14)%			
Expenses		(96,920)		(249,352)		(152,432)	(61)			
Net interest income		9,330		2,517		6,813	271			
Change in fair value of long-term debt		(1,429)		3,978		(5,407)	(136)			
Change in fair value of net trust assets, including trust REO										
losses		(9,831)		(2,549)		(7,282)	(286)			
Income tax benefit (expense)		245		(5,004)		(5,249)	(105)			
Net loss	\$	(7,977)	\$	(145,410)	\$	(177,929)	(122)%			
Loss per share available to common stockholders—basic	\$	(0.38)	\$	(6.92)	\$	6.54	95 %			
Loss per share available to common stockholders—diluted	\$	(0.38)	\$	(6.92)	\$	6.54	95 %			

	For the Year Ended December 31,									
	2010			Increase			%			
	2019			2018		(Decrease)	Change			
Gain on sale of loans, net	\$	98,830	\$	66,750	\$	32,080	48 %			
Servicing fees, net		12,943		37,257		(24,314)	(65)			
Loss on mortgage servicing rights, net		(24,911)		(3,625)		(21,286)	(587)			
Real estate services fees, net		3,287		4,327		(1,040)	(24)			
Other revenues		479		291		188	65			
Total revenues	\$	90,628	\$	105,000	\$	(14,372)	(14)%			

Gain on sale of loans, net. For the year ended December 31, 2019, gain on sale of loans, net totaled \$98.8 million compared to \$66.8 million in the comparable 2018 period. The \$32.1 million increase for the year ended December 31, 2019 is primarily due to a \$30.6 million increase in mark-to-market gains on LHFS, a \$26.4 million decrease in direct origination expenses and a \$8.9 million increase in gain on sale of loans. Partially offsetting the increase in gain on sale of loans, net was a \$22.4 million reduction of premiums from servicing retained loan sales, an \$11.0 million decrease in realized and unrealized net gains on derivative financial instruments and a \$413 thousand increase in provision for repurchases.

The overall increase in gain on sale of loans, net was due to an increase in margins as well as mortgage loans originated and sold during 2019. For the year ended December 31, 2019, we originated and sold \$4.5 billion and \$4.1 billion of loans, respectively, as compared to \$3.8 billion and \$4.1 billion of loans originated and sold, respectively, during the same period in 2018. During the year ended December 31, 2019, margins increased to approximately 217 bps as compared to 174 bps for the same period in 2018. The significant drop in mortgage interest rates, which began in the first quarter of 2019, led to increased mortgage origination volumes and wider gain on sale margins compared to 2018. The primary driver of margin expansion was an increase in our consumer direct originations, which increased to 77% of total originations during the year ended December 31, 2019 as compared 48% of total originations during the same period in 2018. For the year ended December 31, 2019, NonQM originations were 27% of total originations as compared 34% of total originations during the same period in 2018.

The increase in gain on sale of loans during 2019 was also the result of a significant drop in direct origination expenses partially offset by a reduction in premiums from servicing retained loan sales. During the year ended December 31, 2019, direct origination expenses decreased \$26.4 million to \$24.6 million as compared to \$51.0 million for 2019 as a result of a 48% decrease in originations from our TPO channel in 2019 to \$1.0 billion as compared to \$2.0 billion in originations in 2018. Partially offsetting the increase in gain on sale of loans was a \$22.4 million reduction in premiums from servicing retained loan sales. As previously discussed, during 2018 and 2019, we expanded our whole loan investor base for Fannie Mae eligible loans due to Fannie Mae sufficiently limiting the manner and volume of our deliveries due to the prepayment speeds from our retail channel. As a result in our shift in takeout investor base, during 2019, we increased servicing released loan sales to whole loan investors by 129% or \$2.1 billion as compared to 2018 and decreased servicing retained loan sales 88% or \$2.1 billion in 2019, as compared to 2018. As a result, premiums from servicing retained loan sales decreased by \$22.4 million for the year ended December 31, 2019.

Servicing fees, net. For the year ended December 31, 2019, servicing fees, net was \$12.9 million compared to \$37.3 million in the comparable 2018 period. The decrease in servicing fees, net was the result of the \$10.5 billion in UPB of servicing sales during the fourth quarter of 2018 coupled with servicing portfolio run-off and fewer servicing retained loan sales during 2019. The servicing portfolio average balance decreased 63% to \$5.7 billion for the year ended December 31, 2019 as compared to an average balance of \$15.3 billion for the same period in 2018. For the years ended December 31, 2019 and 2018, we had \$290.7 million and \$2.4 billion, respectively, in servicing retained loan sales.

Loss on mortgage servicing rights, net.

	For the Year Ended December 31,								
	2019	2018	Increase (Decrease)	% Change					
Realized and unrealized losses from hedging instruments	\$ —	\$ (1,445)	\$ 1,445	n/a %					
Gain (loss) on sale of mortgage servicing rights	860	(5,937)	6,797	114					
Changes in fair value:									
Due to changes in valuation market rates, inputs or									
assumptions	(13,021)	28,794	(41,815)	(145)					
Other changes in fair value:									
Scheduled principal prepayments	(2,395)	(9,849)	7,454	76					
Voluntary prepayments	(10,355)	(15,188)	4,833	32					
Total changes in fair value	\$ (25,771)	\$ 3,757	\$ (29,528)	(786)%					
Loss on mortgage servicing rights, net	\$ (24,911)	\$ (3,625)	\$ (21,286)	587 %					

For the year ended December 31, 2019, loss on MSRs was \$24.9 million compared to \$3.6 million in the comparable 2018 period. For the year ended December 31, 2019, we recorded a \$25.8 million loss from change in fair value of MSRs primarily due to changes in fair value associated with changes in market interest rates, inputs and assumptions as well as voluntary and scheduled prepayments. As a result of the aforementioned significant decrease in interest rates during the year ended December 31, 2019, \$23.4 million of the \$25.8 million change in fair value of MSRs was due to prepayments, with \$13.0 million primarily due to an increase in prepayment speed assumptions and \$10.4 million due to voluntary prepayments. Additionally, during 2018, we stopped hedging our mortgage servicing portfolio resulting in a \$1.4 million reduction in realized and unrealized losses from hedging instruments related to MSRs during the year ended December 31, 2019.

Real estate services fees, net. For the year ended December 31, 2019, real estate services fees, net were \$3.3 million compared to \$4.3 million in the comparable 2018 period. The \$1.0 million decrease was primarily the result of a decrease in transactions related to the decline in the number of loans and the UPB of the long-term mortgage portfolio as compared to 2018.

Expenses

	For the Year Ended December 31,							
	2019			2018		ncrease Decrease)	% Change	
Personnel expense	\$	65,191	\$	64,143	\$	1,048	2 %	
Business promotion		9,319		26,936		(17,617)	(65)	
General, administrative and other		22,410		35,339		(12,929)	(37)	
Intangible asset impairment		_		18,347		(18,347)	n/a	
Goodwill impairment				104,587		(104,587)	n/a	
Total expenses	\$	96,920	\$	249,352	\$	(152,432)	(61)%	

Total expenses decreased by \$152.5 million, or 61%, to \$96.9 million for the year ended December 31, 2019 compared to \$249.4 million for the comparable period in 2018. Excluding goodwill and intangible asset impairment, total expenses decreased by \$29.5 million, or 23% for the year ended December 31, 2019. Personnel expense increased \$1.0 million to \$65.2 million for the year ended December 31, 2019. The increase is primarily related to an increase in commission expense and staffing levels as a result of the aforementioned increase in origination volumes, which increased 18% during 2019 as compared to the same period in 2018. Despite the increase in personnel expense as a result of the increase in origination volume during the year, personnel expense decreased to 143 bps of loan fundings as compared to 167 bps of loan funding's for the same period in 2018. As a result of the decrease in mortgage interest rates in 2019, we began increasing overhead during the third quarter to align capacity levels with our increased origination projections. Despite this recent increase in headcount, average headcount decreased 4% for the year ended December 31, 2019 as compared to the same period in 2018.

Business promotion decreased \$17.6 million to \$9.3 million for the year ended December 31, 2019 compared to \$26.9 million for the comparable period of 2018. Business promotion decreased as a result of the shift in consumer direct marketing strategy we made in the latter half of 2018 away from radio and television advertisements to a digital campaign. The shift in strategy allows for a more cost effective approach, increasing the ability to be more price and product competitive to more specific target geographies.

General, administrative and other expenses decreased to \$22.4 million for the year ended December 31, 2019 compared to \$35.3 million for the same period in 2018. The decrease was partially related to a \$7.8 million reduction in legal and professional fees, \$4.8 million of which was the result of the Company successfully resolving, through dismissal or settlement, three long standing litigation matters during 2018, which dated back to origination and securitization activities related to the mortgage crisis of 2008. The decrease in general and administrative and other expense was also attributable to a \$3.2 million decrease in intangible asset amortization, which was fully written-off or amortized in 2018. Additionally, occupancy expense decreased \$1.7 million as a result of the relocation of the retail direct division into our corporate office in the fourth quarter of 2018, which was partially offset by the increase of additional office space at our corporate office entered into in the third quarter of 2019.

We recorded an impairment charge of \$104.6 million related to goodwill and \$18.3 million related to intangible assets during the year ended December 31, 2018. As previously disclosed in our quarterly and annual reports, in the second and third quarters of 2018, we performed impairment tests and determined that the goodwill and intangible assets were impaired. At December 31, 2019 and December 31, 2018, we had no goodwill or intangible assets remaining related to the CCM acquisition. See Note 4.-Goodwill and Intangible Assets of the "Notes to Consolidated Financial Statements" on Form 10-K for the year ended December 31, 2019 for a full description.

Other Income

	For the Year Ended December 3					
		2019		2018		
Interest income	\$	165,198	\$	186,848		
Interest expense		(155,868)		(184,331)		
Net interest income		9,330		2,517		
Change in fair value of long-term debt		(1,429)		3,978		
Change in fair value of net trust assets, including trust REO losses		(9,831)		(2,549)		
Total other (expense) income	\$	(1,930)	\$	3,946		

Net Interest Income

We earn net interest income primarily from mortgage assets which include securitized mortgage collateral and loans held-for-sale, or collectively, "mortgage assets," and, to a lesser extent, interest income earned on cash and cash equivalents. Interest expense is primarily interest paid on borrowings secured by mortgage assets, which include securitized mortgage borrowings and warehouse borrowings and, to a lesser extent, interest expense paid on long-term debt, Convertible Notes and MSR Financing. Interest income and interest expense during the period primarily represents the effective yield, based on the fair value of the trust assets and liabilities.

The following tables summarize average balance, interest and weighted average yield on interest-earning assets and interest-bearing liabilities, for the periods indicated. Cash receipts and payments on derivative instruments hedging

interest rate risk related to our securitized mortgage borrowings are not included in the results below. These cash receipts and payments are included as a component of the change in fair value of net trust assets.

	For the Year Ended December 31,								
		2019		2018					
	Average			Average					
	Balance	Interest	Yield	Balance	Interest	Yield			
<u>ASSETS</u>									
Securitized mortgage collateral	\$ 2,908,792	\$ 135,487	4.66 % \$	3,407,242	\$ 162,432	4.77 %			
Mortgage loans held-for-sale	593,686	29,079	4.90	443,499	23,268	5.25			
Finance receivables	_	_	_	15,929	1,023	6.42			
Other	33,782	632	1.87	30,134	125	0.41			
Total interest-earning assets	\$ 3,536,260	\$ 165,198	4.67 % \$	3,896,804	\$ 186,848	4.79 %			
<u>LIABILITIES</u>			_						
Securitized mortgage borrowings	\$ 2,902,438	\$ 126,088	4.34 % \$	3,399,984	\$ 154,704	4.55 %			
Warehouse borrowings (1)	547,421	23,543	4.30	440,273	20,542	4.67			
MSR financing facilities	200	16	8.00	45,532	2,650	5.82			
Long-term debt	44,468	4,329	9.74	45,540	4,525	9.94			
Convertible notes	24,990	1,886	7.55	24,979	1,885	7.55			
Other	19	6	31.58	173	25	14.45			
Total interest-bearing liabilities	\$ 3,519,536	\$ 155,868	4.43 % §	3,956,481	\$ 184,331	4.66 %			
Net interest spread (2)		\$ 9,330	0.24 %		\$ 2,517	0.13 %			
Net interest margin (3)			0.26 %			0.06 %			

- (1) Warehouse borrowings include the borrowings from mortgage loans held-for-sale and finance receivables.
- (2) Net interest spread is calculated by subtracting the weighted average yield on interest-bearing liabilities from the weighted average yield on interest-earning assets.
- (3) Net interest margin is calculated by dividing net interest spread by total average interest-earning assets.

Net interest spread increased \$6.8 million for the year ended December 31, 2019 primarily attributable to a decrease in the net interest expense as a result of the reduction in utilization of the MSR financing facility during the year ended December 31, 2019, an increase in the net interest spread between loans held-for-sale and finance receivables and their related warehouse borrowings, an increase in the net interest spread on the securitized mortgage collateral and securitized mortgage borrowings and an increase in interest income on mortgage-backed securities (included in "Other"). As a result, net interest margin increased to 0.26% for the year ended December 31, 2019 as compared to 0.06% for the year ended December 31, 2018.

During the year ended December 31, 2019, the yield on interest-earning assets decreased to 4.67% from 4.79% in the comparable 2018 period. The yield on interest-bearing liabilities decreased to 4.43% for the year ended December 31, 2019 from 4.66% for the comparable 2018 period. In connection with the fair value accounting for securitized mortgage collateral and borrowings and long-term debt, interest income and interest expense are recognized using effective yields based on estimated fair values for these instruments. The decrease in yield for securitized mortgage collateral and securitized mortgage borrowings is primarily related to increased prices on mortgage-backed bonds which resulted in a decrease in yield as compared to the previous period.

Change in the fair value of long-term debt

Long-term debt (consisting of junior subordinated notes) is measured based upon an internal analysis which considers our own credit risk and discounted cash flow analyses. Improvements in our financial results and financial condition in the future could result in additional increases in the estimated fair value of the long-term debt, while deterioration in financial results and financial condition could result in a decrease in the estimated fair value of the long-term debt.

In the first quarter of 2018, we adopted ASU 2016-01, which applies when the Company elects the fair value election on their own debt, and effectively bifurcates the market and instrument specific credit risk components of changes in long-term debt. The market portion continues to be a component of net earnings (loss) as the change in fair value of long-term debt, but the instrument specific credit risk portion is a component of accumulated other comprehensive earnings (loss).

During 2019, the fair value of the long-term debt increased by \$578 thousand. The increase in the estimated fair

value of long-term debt during 2019 was the result of a \$1.4 million change in the market specific credit risk as a result of a decrease in the credit spread between LIBOR and the risk free rate as well as an increase due to accretion. Partially offsetting the increase was a \$909 thousand change in the instrument specific credit risk attributable to a change in our credit risk profile.

During 2018, the fair value of the long-term debt decreased as a result of a \$4.0 million change in the market specific credit risk during the quarter partially offset by a \$3.1 million change in the instrument specific credit risk. The slight decrease in the estimated fair value of long-term debt during 2018 was primarily due to a decrease in forward LIBOR as of December 31, 2018, offset by an increase in the instrument specific credit risk attributable to a decline in our credit risk profile and financial condition.

Change in fair value of net trust assets, including trust REO gains (losses)

		Decem				
	2019			2018		
Change in fair value of net trust assets, excluding REO	\$	(3,397)	\$	(1,599)		
Losses from REO		(6,434)		(950)		
Change in fair value of net trust assets, including trust REO losses	\$	(9,831)	\$	(2,549)		

For the Veer Ended

The change in fair value related to our net trust assets (residual interests in securitizations) was a loss of \$9.8 million for the year ended December 31, 2019. The change in fair value of net trust assets, excluding trust REO was due to \$3.4 million in losses from changes in fair value of securitized mortgage borrowings and securitized mortgage collateral primarily associated with an increase in prepayment and loss assumptions partially offset by a decrease in LIBOR during 2019 as compared to 2018. Additionally, the NRV of REO decreased \$6.4 million during the period attributed to higher expected loss severities on properties held in the long-term mortgage portfolio during the year ended December 31, 2019.

The change in fair value related to our net trust assets (residual interests in securitizations) was a loss of \$2.5 million for the year ended December 31, 2018. The change in fair value of net trust assets, excluding trust REO was due to \$1.6 million in losses from changes in fair value of securitized mortgage borrowings and securitized mortgage collateral primarily associated with an increase in LIBOR. Additionally, the NRV of REO decreased \$950 thousand during the period attributed to higher expected loss severities on properties held in the long-term mortgage portfolio during the period.

Income Taxes

On December 22, 2017, the U.S. government enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act (Tax Act). The Tax Act made broad and complex changes to the U.S. tax code by, among other things, reduced the federal corporate income tax rate and business deductions. The Tax Act reduced the U.S. corporate income tax rate from a maximum of 35% to a flat 21% rate, effective January 1, 2018. Under FASB ASC 740, the effects of changes in tax rates and laws were recognized in the period in which the new legislation was enacted.

The SEC staff issued Staff Accounting Bulletin No. 118 (SAB 118) to address the application of U.S. GAAP in situations when a registrant does not have the necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the Tax Reform Legislation. We recognized the provisional tax impact related to the revaluation of deferred tax assets and liabilities and included these amounts in our consolidated financial statements for the year ended December 31, 2017. We completed our accounting during 2018 without any significant adjustments from the provisional amounts.

We recorded income tax (benefit) expense of \$(245) thousand and \$5.0 million for the years ended December 31, 2019 and 2018, respectively. The income tax benefit of \$245 thousand for the year ended December 31, 2019 is primarily the result of a benefit resulting from the intraperiod allocation rules that are applied when there is a pre-tax loss from continuing operations and pre-tax income from other comprehensive income partially offset by state taxes from states where the Company does not have net operating loss carryforwards or state minimum taxes, including AMT. The income tax expense of \$5.0 million for the year ended December 31, 2018 was primarily the result of recording a full valuation allowance on deferred tax assets due to a reduction in future utilization and state income taxes from states where the Company does not have net operating loss carryforwards and state minimum taxes, including AMT.

As of December 31, 2019, we had estimated federal net operating loss (NOL) carryforwards of approximately

\$566.6 million. As of December 31, 2019, the estimated Federal NOL carryforward expiration schedule is as follows (in millions):

Tax Year Established	A	mount	Expiration Date
12/31/2007	\$	173.6	12/31/2027
12/31/2008		3.6	12/31/2028
12/31/2009		101.5	12/31/2029
12/31/2010		89.7	12/31/2030
12/31/2011		44.1	12/31/2031
12/31/2012			12/31/2032
12/31/2013		28.5	12/31/2033
12/31/2014			12/31/2034
12/31/2015		30.5	12/31/2035
12/31/2016		55.0	12/31/2036
12/31/2017		37.7	12/31/2037
12/31/2018		_	n/a
12/31/2019 (1)		2.4	n/a
Total Federal NOLs	\$	566.6	

⁽¹⁾ NOL amounts are estimates until the final tax return is filed in October 2020. Additionally, any NOLs that are generated subsequent to the enactment of the Tax Act will have an indefinite life.

As of December 31, 2019, we had estimated California NOL carryforwards of approximately \$385.2 million, which begin to expire in 2028. We may not be able to realize the maximum benefit due to the nature and tax entities that holds the NOL.

Our deferred tax assets are primarily the result of net operating losses and basis differences on mortgage securities and goodwill. We have recorded a full valuation allowance against our deferred tax assets at December 31, 2019 as it is more likely than not that the deferred tax assets will not be realized. The valuation allowance is based on the management's assessment that it is more likely than not that certain deferred tax assets, primarily net operating loss carryforwards, may not be realized in the foreseeable future due to objective negative evidence that we may not generate sufficient taxable income to realize the deferred tax assets.

We are subject to federal income taxes as a regular (Subchapter C) corporation and file a consolidated U.S. federal income tax return.

A valuation allowance is recognized for a deferred tax asset if, based on the weight of the available evidence, it is more likely than not that some portion of the deferred tax asset will not be realized. In making such judgments, significant weight is given to evidence that can be objectively verified. In determining the adequacy of the valuation allowance, we consider all forms of evidence, including: (1) historic earnings or losses; (2) the ability to realize deferred tax assets through carry back to prior periods; (3) anticipated taxable income resulting from the reversal of taxable temporary differences; (4) tax planning strategies; and (5) anticipated future earnings exclusive of the reversal of taxable temporary differences.

Results of Operations by Business Segment

We have three primary operating segments: Mortgage Lending, Real Estate Services and Long-Term Mortgage Portfolio. Unallocated corporate and other administrative costs, including the cost associated with being a public company

as well as the interest expense related to the convertible notes and capital leases, are presented in Corporate. Segment operating results are as follows:

Mortgage Lending

Condensed Statements of Operations Data

	 For the Year Ended December 31,						
	2019		2018		ncrease ecrease)	% Change	
Gain on sale of loans, net	\$ 98,830	\$	66,750	\$	32,080	48 %	
Servicing fees, net	12,943		37,257		(24,314)	(65)	
Loss on mortgage servicing rights, net	(24,911)		(3,625)		(21,286)	587	
Total revenues	86,862		100,382		(13,520)	(13)	
Other income	6,224		1,100		5,124	466	
Personnel expense	(58,655)		(57,674)		(981)	(2)	
Business promotion	(9,282)		(26,844)		17,562	65	
General, administrative and other	(11,599)		(17,154)		5,555	32	
Intangible asset impairment	_		(18,347)		18,347	n/a	
Goodwill impairment	 		(104,587)		104,587	n/a	
Earnings (loss) before income taxes	\$ 13,550	\$	(123,124)	\$	136,674	111 %	

For the year ended December 31, 2019, gain on sale of loans, net totaled \$98.8 million compared to \$66.8 million in the comparable 2018 period. The \$32.1 million increase for the year ended December 31, 2019 is primarily due to a \$30.6 million increase in mark-to-market gains on LHFS, a \$26.4 million decrease in direct origination expenses and a \$8.9 million increase in gain on sale of loans. Partially offsetting the increase in gain on sale of loans, net was a \$22.4 million reduction of premiums from servicing retained loan sales, an \$11.0 million decrease in realized and unrealized net gains on derivative financial instruments and a \$413 thousand increase in provision for repurchases.

The overall increase in gain on sale of loans, net was due to an increase in margins as well as mortgage loans originated and sold during 2019. For the year ended December 31, 2019, we originated and sold \$4.5 billion and \$4.1 billion of loans, respectively, as compared to \$3.8 billion and \$4.1 billion of loans originated and sold, respectively, during the same period in 2018. During the year ended December 31, 2019, margins increased to approximately 217 bps as compared to 174 bps for the same period in 2018. The significant drop in mortgage interest rates, which began in the first quarter of 2019, led to increased mortgage origination volumes and wider gain on sale margins compared to 2018. The primary driver of margin expansion was an increase in our consumer direct originations, which increased to 77% of total originations during the year ended December 31, 2019 as compared 48% of total originations during the same period in 2018. For the year ended December 31, 2019, NonQM originations were 27% of total originations as compared 34% of total originations during the same period in 2018.

The increase in gain on sale of loans during 2019 was also the result of a significant drop in direct origination expenses partially offset by a reduction in premiums from servicing retained loan sales. During the year ended December 31, 2019, direct origination expenses decreased \$26.4 million to \$24.6 million as compared to \$51.0 million as a result of a 48% decrease in originations from our TPO channel in 2019 to \$1.0 billion as compared to \$2.0 billion in originations in 2018. Partially offsetting the increase in gain on sale of loans was a \$22.4 million reduction in premiums from servicing retained loan sales. As previously discussed, during 2018 and 2019, we expanded our whole loan investor base for Fannie Mae eligible loans due to Fannie Mae sufficiently limiting the manner and volume of our deliveries due to the prepayment speeds from our retail channel. As a result in our shift in takeout investor base, during 2019, we increased servicing released loan sales to whole loan investors by 129% or \$2.1 billion as compared to 2018 and decreased servicing retained loan sales 88% or \$2.1 billion in 2019, as compared to 2018. As a result, premiums from servicing retained loan sales decreased by \$22.4 million.

For the year ended December 31, 2019, servicing fees, net was \$12.9 million compared to \$37.3 million in the comparable 2018 period. The decrease in servicing fees, net was the result of the \$10.5 billion in UPB of servicing sales during the fourth quarter of 2018 coupled with servicing portfolio run-off and fewer servicing retained loan sales during

2019. The servicing portfolio average balance decreased 63% to \$5.7 billion for the year ended December 31, 2019 as compared to an average balance of \$15.3 billion for the same period in 2018. For the years ended December 31, 2019 and 2018, we had \$290.7 million and \$2.4 billion, respectively, in servicing retained loan sales.

For the year ended December 31, 2019, loss on MSRs was \$24.9 million compared to \$3.6 million in the comparable 2018 period. For the year ended December 31, 2019, we recorded a \$25.8 million loss from change in fair value of MSRs primarily due to changes in fair value associated with changes in market interest rates, inputs and assumptions as well as voluntary and scheduled prepayments. As a result of the aforementioned significant decrease in interest rates during the year ended December 31, 2019, \$23.4 million of the \$25.8 million change in fair value of MSRs was due to prepayments, with \$13.0 million primarily due to an increase in prepayment speed assumptions and \$10.4 million due to voluntary prepayments. Additionally, during 2018, we stopped hedging our mortgage servicing portfolio resulting in a \$1.4 million reduction in realized and unrealized losses from hedging instruments related to MSRs during the year ended December 31, 2019.

For the year ended December 31, 2019, other income increased to \$6.2 million as compared to \$1.1 million in the comparable 2018 period. The \$5.1 million increase in other income was primarily due to a \$2.6 million decrease in interest expense related to a decrease in the utilization of the MSR financing facilities during 2019. Net interest spread between loans held-for-sale, finance receivables and their related warehouse borrowing expense increased \$1.8 million during 2019 as compared to 2018. Additionally, interest income increased \$289 thousand on invested cash balances and \$207 thousand on interest received on mortgage-backed securities purchased during 2019.

Personnel expense increased \$1.0 million to \$58.7 million for the year ended December 31, 2019. The increase is primarily related to an increase in commission expense and staffing levels as a result of the aforementioned increase in origination volumes, which increased 18% during 2019 as compared to the same period in 2018. Despite the increase in personnel expense as a result of the increase in origination volume during the quarter, personnel expense decreased to 129 bps of funding's as compared to 150 bps of funding's for the same period in 2018. As a result of the decrease in mortgage interest rates in 2019, we began increasing overhead during the third quarter to align capacity levels with our increased origination projections. Despite this recent increase in headcount, average headcount decreased 7% for the year ended December 31, 2019 as compared to the same period in 2018.

Business promotion decreased \$17.6 million to \$9.3 million for the year ended December 31, 2019 compared to \$26.9 million for the comparable period of 2018. Business promotion decreased as a result of the shift in consumer direct marketing strategy we made in the latter half of 2018 away from radio and television advertisements to a digital campaign. The shift in strategy allows for a more cost effective approach, increasing the ability to be more price and product competitive to more specific target geographies.

General, administrative and other expenses decreased \$5.6 million to \$11.6 million for the year ended December 31, 2019 compared to \$17.2 million for the same period in 2018. The decrease was primarily related to a \$3.2 million decrease in in intangible asset amortization which was fully written-off or amortized in 2018, a \$1.3 million decrease in occupancy expense as a result of the relocation of the retail direct division into our corporate office in the fourth quarter of 2018, a \$737 thousand decrease in legal and professional fees, and a \$277 thousand decrease in other general and administrative expenses.

We recorded an impairment charge of \$104.6 million related to goodwill and \$18.3 million related to intangible assets during the year ended December 31, 2018. As previously disclosed in our quarterly and annual reports, in the second and third quarters of 2018, we performed impairment tests and determined that the goodwill and intangible assets were impaired. At December 31, 2019 and December 31, 2018, we had no goodwill or intangible assets remaining related to the CCM acquisition. See Note 4.-Goodwill and Intangible Assets of the "Notes to Consolidated Financial Statements" on Form 10-K for the year ended December 31, 2019 for a full description.

For the Year Ended Deceml							31,		
		2019		2018		crease crease)	% Change		
Other revenue	\$	260	\$	291	\$	(31)	(11)%		
Personnel expense		(124)		(72)		(52)	(72)%		
General, administrative and other		(407)		(1,366)		959	70		
Total expenses		(531)		(1,438)		907	63		
Net interest income		5,071		3,204		1,867	58		
Change in fair value of long-term debt		(1,429)		3,978		(5,407)	(136)		
Change in fair value of net trust assets, including trust REO									
losses		(9,831)		(2,549)		(7,282)	(286)		
Total other (expense) income		(6,189)		4,633	(10,822)	(234)		
(Loss) earnings before income taxes	\$	(6,460)	\$	3,486	\$	(9,946)	(285)%		

For the year ended December 31, 2019, net interest income totaled \$5.1 million as compared to \$3.2 million for the comparable 2018 period. Net interest income increased \$1.9 million for the year ended December 31, 2019 primarily attributable to a \$1.7 million increase in net interest spread on the long-term mortgage portfolio as well as a \$196 thousand decrease in interest expense on the long-term debt due to an decrease in three-month LIBOR throughout 2019 as compared to 2018.

In the first quarter of 2018, we adopted ASU 2016-01, which effectively bifurcates the market and instrument specific credit risk components of changes in long-term debt. The market portion continues to be a component of net earnings (loss) as the change in fair value of long-term debt, but the instrument specific credit risk portion is a component of accumulated other comprehensive earnings (loss). During 2019, the fair value of the long-term debt increased by \$578 thousand. The increase in the estimated fair value of long-term debt during 2019 was the result of a \$1.4 million change in the market specific credit risk as a result of a decrease in the credit spread between LIBOR and the risk free rate as well as an increase due to accretion. Partially offsetting the increase was a \$909 thousand change in the instrument specific credit risk attributable to a change in our credit risk profile.

The change in fair value related to our net trust assets (residual interests in securitizations) was a loss of \$9.8 million for the year ended December 31, 2019. The change in fair value of net trust assets, excluding trust REO was due to \$3.4 million in losses from changes in fair value of securitized mortgage borrowings and securitized mortgage collateral primarily associated with an increase in prepayment and loss assumptions partially offset by a decrease in LIBOR during 2019 as compared to 2018. Additionally, the NRV of REO decreased \$6.4 million during the period attributed to higher expected loss severities on properties held in the long-term mortgage portfolio during the period.

Real Estate Services

	For the Year Ended December 31,						
					I	ncrease	%
		2019	2018		(Decrease)		Change
Real estate services fees, net	\$	3,287	\$	4,327	\$	(1,040)	(24)%
Personnel expense		(1,124)		(1,734)		610	35
General, administrative and other		(267)		(354)		87	25
Earnings before income taxes	\$	1,896	\$	2,239	\$	(343)	(15)%

For the year ended December 31, 2019, real estate services fees, net were \$3.3 million compared to \$4.3 million in the comparable 2018 period. The \$1.0 million decrease in real estate services fees, net for the years ended December 31, 2019, was the result of a \$938 thousand decrease in real estate and recovery fees and a \$305 thousand decrease in real estate service fees partially offset by a \$203 thousand increase in loss mitigation fees. The overall decrease is primarily the result of a decrease in transactions related to the decline in the number of loans and the UPB of the long-term mortgage portfolio as compared to 2018.

For the year ended December 31, 2019, the \$697 thousand reduction in personnel and general, administrative and other expense was due to a reduction in personnel and personnel related costs as a result of a decrease in transactions related to the decline in the number of loans and the UPB of the long-term mortgage portfolio as compared to 2018.

Corporate

	 For the Year Ended December 31,						
				Ir	icrease	%	
	 2019		2018	(Decrease)		Change	
Interest expense	\$ (1,808)	\$	(1,787)	\$	(21)	(1)%	
Other expenses	(15,400)		(21,220)		5,820	27	
Net loss before income taxes	\$ (17,208)	\$	(23,007)	\$	5,799	25 %	

For the year ended December 31, 2019, other expenses decreased \$5.8 million to \$15.4 million as compared to \$21.2 million for the comparable 2018 period. The decrease was primarily due to \$6.0 million reduction in legal and professional fees associated with the Company successfully revolving, through dismissal or settlement, three long standing litigations matters in 2018, which dated back to origination and securitization activities related to the mortgage crisis of 2008. The decrease in expense was partially offset by a \$247 thousand increase in other general and administration expenses during the year.

Liquidity and Capital Resources

During the year ended December 31, 2019, we funded our operations primarily from mortgage lending revenues and, to a lesser extent, real estate services fees and cash flows from our residual interests in securitizations. Mortgage lending revenues include gains on sale of loans, net, servicing fees, net, proceeds from the sale of mortgage servicing rights and other mortgage related income. We funded mortgage loan originations using warehouse facilities, which are repaid once the loan is sold. We may continue to manage our capital through the financing or sale of mortgage servicing rights. We may also seek to raise capital by issuing debt or equity.

Sources of Liquidity

Cash flows from our mortgage lending operations. We receive loan fees from loan originations. Fee income consists of application and underwriting fees and fees on cancelled loans. These loan fees are offset by the related direct loan origination costs including broker fees related to our wholesale and correspondent channels. In addition, we generally recognize net interest income on loans held for sale from the date of origination through the date of disposition. We sell or securitize substantially all of the loans we originate in the secondary mortgage market, with servicing rights released or retained. Loans are sold on a whole loan basis by entering into sales transactions with third-party investors in which we receive a premium for the loan and related servicing rights, if applicable. The mortgage lending operations sold \$4.1 billion of mortgages through whole loan sales and securitizations during 2019. Additionally, the mortgage lending operations enter into IRLCs and utilize Hedging Instruments and forward delivery commitments to hedge interest rate risk. We may be subject to pair-off gains and losses associated with these instruments. Since we rely significantly upon loan sales to generate cash proceeds to repay warehouse borrowings and to create credit availability, any disruption in our ability to complete loan sales may require us to utilize other sources of financing, which, if available at all, may be on less favorable terms. In addition, delays in the disposition of our mortgage loans increase our risk by exposing us to credit and interest rate risk for this extended period of time.

We receive servicing income net of subservicing cost and other related servicing expenses from our mortgage servicing portfolio. Servicing fees, net decreased to \$12.9 million as a result of the servicing portfolio decreasing to an average balance of \$5.7 billion for the year ended December 31, 2019 as compared to an average balance of \$15.3 billion for the year ended December 31, 2018. Servicing fees, net decreased substantially in 2019 as a result of \$10.5 billion in UPB of servicing sales during the fourth quarter of 2018 coupled with servicing portfolio run-off and fewer servicing retained loan sales during 2019. During 2019 and 2018, we had \$290.7 million and \$2.4 billion, respectively, in servicing retained loan sales.

We have a revolving line of credit to finance our MSR portfolio, which is secured by our MSRs. We are able to borrow up to 60% of the fair market value of FHLMC pledged mortgage servicing rights. At December 31, 2019, we had

no outstanding borrowings under the financing agreement and had approximately \$24.4 million in available liquidity associated with this line given the size of our mortgage servicing portfolio and associated advance rates.

Fees from our real estate service business activities. We earn fees from various real estate business activities, including loss mitigation, real estate disposition, monitoring and surveillance services and real estate brokerage. We provide services to investors, servicers and individual borrowers primarily by focusing on loss mitigation and performance of our long-term mortgage portfolio.

Cash flows from our long-term mortgage portfolio (residual interests in securitizations). We receive residual cash flows on mortgages held as securitized mortgage collateral after distributions are made to investors on securitized mortgage borrowings to the extent required credit enhancements are maintained and performance covenants are complied with for credit ratings on the securitized mortgage borrowings. For the year ended December 31, 2019, our residual interests generated cash flows of \$1.4 million. These cash flows represent the difference between principal and interest payments on the underlying mortgages and are affected by the following:

- servicing and master servicing fees paid;
- premiums paid to mortgage insurers;
- cash payments/receipts on derivatives;
- interest paid on securitized mortgage borrowings;
- principal payments and prepayments paid on securitized mortgage borrowings;
- overcollateralization requirements;
- actual losses, net of any gains incurred upon disposition of other real estate owned or acquired in settlement of defaulted mortgages;
- · unpaid interest shortfall; and
- basis risk shortfall.

Additionally, we act as the master servicer for mortgages included in our long-term mortgage portfolio, which consists of CMO and REMIC securitizations. The master servicing fees we earn are generally 0.03% per annum (3 basis points) on the declining principal balances of these mortgages plus interest income on cash held in custodial accounts until remitted to investors, less any interest shortfall.

Uses of Liquidity

Acquisition and origination of mortgage loans. During 2019, the mortgage lending operations originated or acquired \$4.5 billion of mortgage loans. Capital invested in mortgages is outstanding until we sell the loans. Initial capital invested in mortgage loans includes premiums paid when mortgages are acquired and originated and our capital investment, or "haircut," required upon financing, which is generally determined by the type of collateral provided and the warehouse facility terms. The mortgage loan originations were financed with warehouse borrowings at a haircut generally between 2% to 10% of the outstanding principal balance of the mortgage loans. The haircuts are normally recovered from sales proceeds.

Investment in mortgage servicing rights. As part of our business plan, we have traditionally invested in mortgage servicing rights through the sale of mortgage loans on a servicing retained basis and to a lesser extent the purchase of MSR pools. During 2019, we began to retain less servicing by doing more whole loan sales and capitalized \$2.5 million in mortgage servicing rights from selling \$290.7 million in loans with servicing retained.

Cash flows from financing facilities and other lending relationships. We primarily fund our mortgage originations through warehouse facilities with third-party lenders which are primarily with national and regional banks. At

December 31, 2019, the warehouse facilities borrowing capacity amounted to \$1.7 billion, of which \$701.6 million was outstanding. The warehouse facilities are secured by and used to fund single-family residential mortgage loans until such loans are sold. The warehouse facilities agreements contain certain covenants which we are required to satisfy. At December 31, 2019, we were in compliance with all covenants. In order to mitigate the liquidity risk associated with warehouse borrowings, we attempt to sell or securitize our mortgage loans expeditiously.

Our ability to meet liquidity requirements and the financing needs of our customers is subject to the renewal of our warehouse facilities or obtaining other sources of financing, if required, including additional debt or equity from time to time. Any decision our lenders or investors make to provide available financing to us in the future will depend upon a number of factors, including:

- our compliance with the terms of existing warehouse lines and credit arrangements, including any financial covenants;
- the ability to obtain waivers upon any noncompliance;
- our financial performance;
- industry and market trends in our various businesses;
- the general availability of, and rates applicable to, financing and investments;
- our lenders or investors resources and policies concerning loans and investments; and
- the relative attractiveness of alternative investment or lending opportunities.

Repurchase Reserve. When we sell loans through whole loan sales we are required to make normal and customary representations and warranties about the loans to the purchaser. Our whole loan sale agreements generally require us to repurchase loans if we breach a representation or warranty given to the loan purchaser. In addition, we may be required to repurchase loans as a result of borrower fraud or if a payment default occurs on a mortgage loan shortly after its sale.

From time to time, investors have requested us to repurchase loans or to indemnify them against losses on certain loans which the investors believe either do not comply with applicable representations or warranties or defaulted shortly after its purchase. We record an estimated reserve for these losses at the time the loan is sold, and adjust the reserve to reflect the estimated loss.

Financing Activities

MSR Financing. In February 2018, IMC (Borrower), amended the Line of Credit Promissory Note (FHLMC and GNMA Financing) originally entered into in August 2017, increasing the maximum borrowing capacity of the revolving line of credit to \$50.0 million and extending the term to January 31, 2019. In May 2018, the agreement was amended increasing the maximum borrowing capacity of the revolving line of credit to \$60.0 million, increasing the borrowing capacity up to 60% of the fair market value of the pledged mortgage servicing rights and reducing the interest rate per annum to one-month LIBOR plus 3.0%. As part of the May 2018 amendment, the obligations under the Line of Credit are secured by FHLMC and GNMA pledged mortgage servicing rights (subject to an acknowledge agreement) and is guaranteed by Integrated Real Estate Services, Corp. In April 2019, the maturity of the line was extended until January 31, 2020. At December 31, 2019, there were no outstanding borrowings under the FHLMC and GNMA Financing and approximately \$24.4 million was available for borrowing. In January 2020, the maturity of the line was extended to March 31, 2020.

Long-term Debt (consisting of Junior Subordinated Notes). The Junior Subordinated Notes are redeemable at par at any time with a stated maturity of March 2034 and require quarterly distributions at 3-month LIBOR plus 3.75% per annum. At December 31, 2019, the interest rate was 5.71%. We are current on all interest payments. At December 31, 2019, long-term debt had an outstanding principal balance of \$62.0 million with an estimated fair value of \$45.4 million and is reflected on our consolidated balance sheets as long-term debt.

Convertible Notes. In May 2015, we issued \$25.0 million Convertible Promissory Notes (Convertible Notes). The Convertible Notes mature on or before May 9, 2020 and accrue interest at a rate of 7.5% per annum, paid quarterly. We are currently evaluating various options as to the appropriate settlement of the Convertible Notes.

Operating activities. Net cash (used in) provided by operating activities was \$(377.5) million for 2019 as compared to \$201.0 million for 2018, primarily due to the timing of originations and sales of loans held-for-sale between 2019 and 2018. During 2019 and 2018, the primary sources of cash in operating activities were cash received from fees generated by our mortgage and real estate service business activities, cash received from mortgage lending and excess cash flows from our residual interests in securitizations offset by operating expenses.

Investing activities. Net cash provided by investing activities was \$589.7 million for 2019 as compared to \$727.7 million for 2018. For 2019 and 2018, the primary source of cash from investing activities was provided by principal repayments on our securitized mortgage collateral, the sale of mortgage servicing rights, the sale of mortgage backed securities and proceeds from the liquidation of REO.

Financing activities. Net cash used in financing activities was \$205.3 million for 2019 as compared to \$937.6 million for 2018. For 2019 and 2018, significant uses of cash in financing activities were primarily for principal repayments on securitized mortgage borrowings, partially offset by net borrowings against warehouse agreements.

Inflation. The consolidated financial statements and corresponding notes to the consolidated financial statements have been prepared in accordance with GAAP, which require the measurement of financial position and operating results in terms of historical dollars without considering the changes in the relative purchasing power of money over time due to inflation. For the years ended December 31, 2019 and 2018, inflation had no significant impact on our revenues or net income. Unlike industrial companies, nearly all of our assets and liabilities are monetary in nature. As a result, interest rates have a greater effect on our performance than do the effects of general levels of inflation. Inflation affects our operations primarily through its effect on interest rates, since interest rates normally increase during periods of high inflation and decrease during periods of low inflation.

Our results of operations and liquidity are materially affected by conditions in the markets for mortgages and mortgage-related assets, as well as the broader financial markets and the general economy. Concerns over economic recession, geopolitical issues, unemployment, the availability and cost of financing, the mortgage market and real estate market conditions contribute to increased volatility and diminished expectations for the economy and markets. Volatility and uncertainty in the marketplace may make it more difficult for us to obtain financing or raise capital on favorable terms or at all. Our operations and profitability may be adversely affected if we are unable to obtain cost-effective financing.

It is important for us to sell or securitize the loans we originate and, when doing so, maintain the option to also sell the related MSRs associated with these loans. Some investors have raised concerns about the high prepayment speeds of our loans generated through our retail direct channel and this has resulted and could further result in adverse pricing or delays in our ability to sell or securitize loans and related MSRs on a timely and profitable basis. During the fourth quarter of 2017, Fannie Mae sufficiently limited the manner and volume for our deliveries of eligible loans such that we elected to cease deliveries to them and we expanded our whole loan investor base for these loans. During 2018 and 2019, we completed servicing released loan sales to whole loan investors and expect to continue to utilize these alternative exit strategies for Fannie Mae eligible loans. We continue to take steps to manage our prepayment speeds to be more consistent with our industry comparables and to reestablish the full confidence and delivery mechanisms to our investor base. We remain an approved Seller and Servicer with Fannie Mae and Freddie Mac.

We believe that current cash balances, cash flows from our mortgage lending operations, the sale of mortgage servicing rights, real estate services fees generated from our long-term mortgage portfolio, availability on our warehouse lines of credit, availability on unused FHLMC and GNMA Financing, and residual interest cash flows from our long-term mortgage portfolio are adequate for our current operating needs based on the current operating environment. We believe the mortgage and real estate services market is volatile, highly competitive and subject to increased regulation. Competition in mortgage lending comes primarily from mortgage bankers, commercial banks, credit unions and other finance companies which operate in our market area as well as throughout the United States. We compete for loans principally on the basis of the interest rates and loan fees we charge, the types of loans we originate and the quality of services we provide to borrowers, brokers and sellers. Additionally, performance of the long-term mortgage portfolio is subject to the current real estate market and economic conditions. Cash flows from our residual interests in securitizations are sensitive to delinquencies, defaults and credit losses associated with the securitized loans. Losses in excess of current estimates will

reduce the residual interest cash receipts from our long-term mortgage portfolio.

While we continue to pay our obligations as they become due, the ability to continue to meet our current and long-term obligations is dependent upon many factors, particularly our ability to successfully operate our mortgage lending segment, manage and monetize our MSRs, real estate services segment and realizing cash flows from the long-term mortgage portfolio. Our future financial performance and profitability are dependent in large part upon the ability to continue expanding our mortgage lending platform successfully.

Operational and Market Risks

We are exposed to a variety of operation and market risks which include interest rate risk, credit risk, operational risk, real estate risk, prepayment risk, and liquidity risk.

Interest Rate Risk

Interest Rate Risk—Mortgage Lending. We are exposed to interest rate risks relating to our ongoing mortgage lending operations. We use derivative instruments to manage some of our interest rate risk. However, we do not attempt to hedge interest rate risk completely. Our interest rate risk arises from the financial instruments and positions we hold. This includes mortgage loans held for sale, MSRs and derivative financial instruments. These risks are regularly monitored by executive management that identify and manage the sensitivity of earnings or capital to changing interest rates to achieve our overall financial objectives.

Our principal market exposure is to interest rate risk, specifically changes in long-term Treasury rates and mortgage interest rates due to their impact on mortgage-related assets and commitments. We are also exposed to changes in short-term interest rates, such as LIBOR, on certain variable rate borrowings including our term financing and mortgage warehouse borrowings. The withdrawal and replacement of LIBOR with an alternative benchmark rate may introduce a number of risks for our business and the financial services industry. At this time, it is not possible to predict the effect any discontinuance, modification or other reforms to LIBOR or any other reference rate, or the establishment of alternative reference rates will have on the Company. Refer to "Risk Factors" for additional discussion regarding risks associated with the replacement of LIBOR.

Our business is subject to variability in results of operations in both the mortgage origination and mortgage servicing activities due to fluctuations in interest rates. In a declining interest rate environment, we would expect our mortgage production activities' results of operations to be positively impacted by higher loan origination volumes and gain on sale margins. Furthermore, with declining rates, we would expect the market value of our MSRs to decline due to higher actual and projected loan prepayments related to our loan servicing portfolio. Conversely, in a rising interest rate environment, we would expect a negative impact on the results of operations of our mortgage production activities but a positive impact on the market values of our MSRs. The interaction between the results of operations of our mortgage activities is a core component of our overall interest rate risk strategy.

We utilize a discounted cash flow analysis to determine the fair value of MSRs and the impact of parallel interest rate shifts on MSRs. The primary assumptions in this model are prepayment speeds, discount rates, costs of servicing and default rates. However, this analysis ignores the impact of interest rate changes on certain material variables, such as the benefit or detriment on the value of future loan originations, non-parallel shifts in the spread relationships between MBS, swaps and U.S. Treasury rates and changes in primary and secondary mortgage market spreads. We use a forward yield curve, which we believe better presents fair value of MSRs because the forward yield curve is the market's expectation of future interest rates based on its expectation of inflation and other economic conditions.

Interest rate lock commitments (IRLCs) represent an agreement to extend credit to a mortgage loan applicant, or an agreement to purchase a loan from a third-party originator, whereby the interest rate on the loan is set prior to funding. Our mortgage loans held for sale, which are held in inventory awaiting sale into the secondary market, and our interest rate lock commitments, are subject to changes in mortgage interest rates from the date of the commitment through the sale of the loan into the secondary market. As such, we are exposed to interest rate risk and related price risk during the period from the date of the lock commitment through the earlier of (i) the lock commitment cancellation or expiration date; or (ii) the date of sale into the secondary mortgage market. Loan commitments generally range between 15 and 60 days; and our holding period of the mortgage loan from funding to sale is typically within 15 - 45 days for agency loans and 45 – 75 days for NonQM loans.

We manage the interest rate risk associated with our outstanding IRLCs and mortgage loans held for sale by entering into derivative loan instruments such as forward loan sales commitments or To-Be-Announced mortgage backed securities (TBA Forward Commitments). We expect these derivatives will experience changes in fair value opposite to changes in fair value of the derivative IRLCs and mortgage loans held-for-sale, thereby reducing earnings volatility. We take into account various factors and strategies in determining the portion of the mortgage pipeline (derivative loan commitments) and mortgage loans held for sale we want to economically hedge. Our expectation of how many of our IRLCs will ultimately close is a key factor in determining the notional amount of derivatives used in hedging the position.

Mortgage loans held-for-sale are financed by our warehouse lines of credit which generally carry variable rates. Mortgage loans held for sale are carried on our consolidated balance sheets on average for only 15 to 45 days after closing and prior to being sold. As a result, we believe that any negative impact related to our variable rate warehouse borrowings resulting from a shift in market interest rates would not be material to our consolidated financial statements.

Interest Rate Risk—Securitized Trusts and Long-term Debt. Our earnings from the long-term mortgage portfolio depend largely on our interest rate spread, represented by the relationship between the yield on our interest-earning assets (primarily securitized mortgage collateral) and the cost of our interest-bearing liabilities (primarily securitized mortgage borrowings and long-term debt). Our interest rate spread is impacted by several factors, including general economic factors, forward interest rates and the credit quality of mortgage loans in the long-term mortgage portfolio.

The residual interests in our long-term mortgage portfolio are sensitive to changes in interest rates on securitized mortgage collateral and the related securitized mortgage borrowings. Changes in interest rates can affect the cash flows and fair values of our trust assets and liabilities, as well as our earnings and stockholders' equity.

We are also subject to interest rate risk on our long-term debt (consisting of junior subordinated notes). These interest bearing liabilities include adjustable rate periods based on three-month LIBOR (junior subordinated notes). We do not currently hedge our exposure to the effect of changing interest rates related to these interest-bearing liabilities. Significant fluctuations in interest rates could have a material adverse effect on our business, financial condition, results of operations or liquidity.

Credit Risk

We provide representations and warranties to purchasers and insurers of the loans sold that typically are in place for the life of the loan. In the event of a breach of these representations and warranties, we may be required to repurchase a mortgage loan or indemnify the purchaser, and any subsequent loss on the mortgage loan may be borne by us unless we have recourse to our correspondent seller.

We maintain a reserve for losses on loans repurchased or indemnified as a result of breaches of representations and warranties on our sold loans. Our estimate is based on our most recent data regarding loan repurchases and indemnity payments, actual losses on repurchased loans, and recovery history, among other factors. Our assumptions are affected by factors both internal and external in nature. Internal factors include, among other things, level of loan sales, the expectation of credit loss on repurchases and indemnifications, our success rate at appealing repurchase demands and our ability to recover any losses from third parties. External factors that may affect our estimate includes, among other things, the overall economic condition in the housing market, the economic condition of borrowers, the political environment at investor agencies and the overall U.S. and world economy. Many of the factors are beyond our control and may lead to judgments that are susceptible to change.

Counterparty Credit Risk. We are exposed to counterparty credit risk in the event of non-performance by counterparties to various agreements. We monitor our counterparties and currently do not anticipate losses due to counterparty non-performance. As of December 31, 2019, there were no significant concentrations of credit risk related to our exposure with any individual counterparty.

Credit Risk-Securitized Trusts. We manage credit risk by actively managing delinquencies and defaults through our servicers. Starting with the second half of 2007 we have not retained any additional mortgages in our long-term mortgage portfolio. Our securitized mortgage collateral primarily consists of non-conforming mortgages which when originated were generally within typical Fannie Mae and Freddie Mac guidelines but had loan characteristics, which may have included higher loan balances, higher loan-to-value ratios or lower documentation requirements (including stated-income loans), that made them non-conforming under those guidelines.

Using historical losses, current portfolio statistics and market conditions and available market data, we have estimated future loan losses on the long- term mortgage portfolio, which are included in the fair value adjustment to our securitized mortgage collateral. The credit performance for the loans has been clearly far worse than our initial expectations when the loans were originated. We have seen some restoration of real estate values, however the ultimate level of realized losses will largely be influenced by local real estate conditions in areas where underlying properties are located, including the recovery of the housing market and overall strength of the economy. If market conditions deteriorate in excess of our expectations, we may need to recognize additional fair value reductions to our securitized mortgage collateral, which may also affect the value of the related securitized mortgage borrowings and residual interests.

We monitor our servicers to attempt to ensure that they perform loss mitigation, foreclosure and collection functions according to their servicing practices and each securitization trust's pooling and servicing agreement. We have met with the management of our servicers to assess our borrowers' current ability to pay their mortgages and to make arrangements with selected delinquent borrowers which will result in the best interest of the trust and borrower, in an effort to minimize the number of mortgages which become seriously delinquent. When resolving delinquent mortgages, servicers are required to take timely action. The servicer is required to determine payment collection under various circumstances, which will result in the maximum financial benefit. This is accomplished by either working with the borrower to bring the mortgage current by modifying the loan with terms that will maximize the recovery or by foreclosing and liquidating the property. At a foreclosure sale, the trusts consolidated on our consolidated balance sheets generally acquire title to the property.

Operational Risk

Operational risk is inherent in our business practices and related support functions. Operational risk is the risk of loss resulting from inadequate or failed internal processes or systems, human factors or external events. Operational risk may occur in any of our business activities and can manifest itself in various ways including, but not limited to, errors resulting from business process failures, material disruption in business activities, system breaches and misuse of sensitive information and failures of outsourced business processes. These events could result in non-compliance with laws or regulations, regulatory fines and penalties, litigation or other financial losses, including potential losses resulting from lost client relationships.

Our business is subject to extensive regulation by federal, state and local government authorities, which require us to operate in accordance with various laws, regulations, and judicial and administrative decisions. While we are not a bank, our business subjects us to both direct and indirect banking supervision (including examinations by our clients' regulators), and each client may require a unique compliance model. In recent years, there have been a number of developments in laws and regulations that have required, and will likely continue to require, widespread changes to our business. The frequent introduction of new rules, changes to the interpretation or application of existing rules, increased focus of regulators, and near-zero defect performance expectations have increased our operational risk related to compliance with laws and regulations.

Our operational risk includes managing risks relating to information systems and information security. As a service provider, we actively utilize technology and information systems to operate our business and support business development. We also must safeguard the confidential personal information of our customers, as well as the confidential personal information of the employees and customers of our clients. We consider industry best practices to manage our technology risk, and we continually develop and enhance the controls, processes and systems to protect our information systems and data from unauthorized access.

To monitor and control this risk, we have established policies, procedures and a controls framework that are designed to provide sound and consistent risk management processes and transparent operational risk reporting.

Real Estate Risk

Residential property values are subject to volatility and may be negatively affected by numerous factors, including, but not limited to, national, regional and local economic conditions such as unemployment and interest rate environment; local real estate conditions including housing inventory and foreclosures; and demographic factors. Decreases in property values reduce the value of the collateral securing and the potential proceeds available to a borrower to repay our loans, which could cause us to suffer losses.

Prepayment Risk

Prepayment speed is a measurement of how quickly UPB is reduced. Items reducing UPB include normal monthly loan principal payments, loan refinancing's, voluntary property sales and involuntary property sales such as foreclosures or short sales. Prepayment speed impacts future servicing fees, fair value of mortgage servicing rights and float income. When prepayment speed increases, our servicing fees decrease faster than projected due to the shortened life of a portfolio. Faster prepayment speeds will cause our mortgage servicing rights fair value to decrease.

We historically used prepayment penalties as a method of partially mitigating prepayment risk for those borrowers that have the ability to refinance. The economic downturn, lack of available credit and declines in property values in certain parts of the country have limited some borrowers' ability to refinance. These factors have reduced prepayment risk within our long-term mortgage portfolio. With the seasoning of the long-term mortgage portfolio, prepayment penalties terms have expired, thereby eliminating prepayment penalty income.

Liquidity Risk

We are exposed to liquidity risks relating to our ongoing mortgage lending operations. We primarily fund our mortgage lending originations through warehouse facilities with third-party lenders and MSR financing facilities. Refer to "Liquidity and Capital Resources" for additional information regarding liquidity.

Off Balance Sheet Arrangements

When we sell or broker loans through whole-loan sales, we are required to make normal and customary representations and warranties to the loan originators or purchasers, including guarantees against early payment defaults typically 90 days, and fraudulent misrepresentations by the borrowers. Our agreements generally require us to repurchase loans if we breach a representation or warranty given to the loan purchaser. In addition, we may be required to repurchase loans as a result of borrower fraud or if a payment default occurs on a mortgage loan shortly after its sale. Because the loans are no longer on our consolidated balance sheets, the representations and warranties are considered a guarantee. During 2019, we sold \$4.1 billion of loans subject to representations and warranties. At December 31, 2019, we had \$9.0 million in repurchase reserve as compared to a reserve of \$7.7 million as December 31, 2018.

See disclosures in the notes to the consolidated financial statements under "Commitments and Contingencies" for other arrangements that qualify as off balance sheets arrangements.

Contractual Obligations

As a smaller reporting company, we are not required to provide the information required by this Item.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

As a smaller reporting company, we are not required to provide the information required by this Item.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The information required by this Item 8 is incorporated by reference to Impac Mortgage Holdings, Inc.'s Consolidated Financial Statements and Independent Auditors' Report beginning at page F-1 of this Form 10-K.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

The Company maintains disclosure controls and procedures (as defined in the Securities Exchange Act of 1934 Rules 13a-15(e) or 15d-15(e)) designed to ensure that information required to be disclosed in reports filed or submitted under the Securities Exchange Act of 1934, as amended (Exchange Act), is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the Company's management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

The Company's management, with the participation of its chief executive officer (CEO) and its chief financial officer (CFO), evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2019. Based on that evaluation, the Company's chief executive officer and chief financial officer concluded that, as of that date, the Company's disclosure controls and procedures were effective at a reasonable assurance level.

Management's Report on Internal Control over Financial Reporting

Management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Section 13a-15(f) of the Exchange Act). Internal control over financial reporting is a process designed by, or under the supervision of, the Company's CEO and CFO to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the Company's financial statements for reporting purposes in accordance with accounting principles generally accepted in the United States of America and include those policies and procedures that (i) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the Company; (ii) 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 (iii) 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.

As of December 31, 2019, management conducted an assessment of the effectiveness of the Company's internal control over financial reporting based on the framework established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 Framework) (COSO). Based on the criteria established by COSO, management concluded that the Company's internal control over financial reporting was effective as of December 31, 2019.

Our management, including our chief executive officer and chief financial officer, does not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Controls can also be circumvented by the individual acts of some persons, by collusion of two or more people, or by improper management override of the controls. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with associated policies or procedures. Because of the inherent limitations in a cost-effective control system, there is a risk that material misstatements due to error or fraud may occur and will not be detected on a timely basis.

Squar Milner LLP, the independent registered public accounting firm that audited the consolidated financial statements included in this Annual Report on Form 10-K, has issued an attestation report on the Company's internal control over financial reporting, a copy of which is included herein.

Changes in Internal Control Over Financial Reporting

During the quarter ended December 31, 2019, there were no changes in our internal control over financial reporting that materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of Impac Mortgage Holdings, Inc.

Opinion on Internal Control over Financial Reporting

We have audited Impac Mortgage Holdings, Inc.'s (the Company) internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019 based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2019 and 2018, the related consolidated statements of operations and comprehensive loss, changes in stockholders' equity and cash flows for the years then ended, and the related notes to the consolidated financial statements, and our report dated March 13, 2020 expressed an unqualified opinion.

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 Report on Internal Control over Financial Reporting* appearing under Item 9A. 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 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, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included 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 Limitation 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/ SQUAR MILNER LLP

Irvine, California March 13, 2020

ITEM 9B. OTHER INFORMATION

MSR Financing Facility

On January 27, 2020, the Freddie Mac and Ginnie Mae revolving line of credit was extended to March 31, 2020.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this Item 10 is hereby incorporated by reference to Impac Mortgage Holdings, Inc.'s definitive proxy statement, to be filed pursuant to Regulation 14A within 120 days after the end of Impac Mortgage Holdings, Inc.'s fiscal year.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this Item 11 is hereby incorporated by reference to Impac Mortgage Holdings, Inc.'s definitive proxy statement, to be filed pursuant to Regulation 14A within 120 days after the end of Impac Mortgage Holdings, Inc.'s fiscal year.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this Item 12 including Equity Compensation Plan Information is hereby incorporated by reference to Impac Mortgage Holdings, Inc.'s definitive proxy statement, to be filed pursuant to Regulation 14A within 120 days after the end of Impac Mortgage Holdings, Inc.'s fiscal year.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this Item 13 is hereby incorporated by reference to Impac Mortgage Holdings, Inc.'s definitive proxy statement, to be filed pursuant to Regulation 14A within 120 days after the end of Impac Mortgage Holdings, Inc.'s fiscal year.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this Item 14 is hereby incorporated by reference to Impac Mortgage Holdings, Inc.'s definitive proxy statement, to be filed pursuant to Regulation 14A within 120 days after the end of Impac Mortgage Holdings, Inc.'s fiscal year.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

- (a)(1) Financial Statements Consolidated financial statements are included under Item 8 of Part II of this Form 10-K.
- (a)(2) Financial Statement Schedules All financial statement schedules have been omitted either because they are not applicable or because the required information is included in the consolidated financial statements.
- (a)(3) Exhibits The exhibits listed on the accompanying Exhibit Index are incorporated by reference into this Item 15 of this Annual Report on Form 10-K.

Exhibit Number	Description
2.1	Amended and Restated Asset Purchase Agreement dated as of May 11, 2015 and effective as of March 31, 2015 among Impac Mortgage Holdings, Inc, Impac Mortgage Corp and CashCall, Inc. Schedules and exhibits are omitted pursuant to Item 601(b)(2) of Regulation S-K. The Company agrees to furnish a supplemental copy of any omitted schedules or exhibits to the SEC upon request (incorporated by reference to Exhibit 2.1 of the Company's Form 10-Q filed with the Securities and Exchange Commission on May 14, 2015).
2.1(a)	Amendment No. 1 to Amended and Restated Asset Purchase Agreement (incorporated by reference to Exhibit 2.2(a) of the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 11, 2016).
2.1(b)	Amendment No. 2 to Amended and Restated Asset Purchase Agreement (incorporated by reference to Exhibit 2.2(b) of the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 11, 2016).
3.1(P)	Articles of Amendment and Restatement (<u>Charter</u>) of the Company (incorporated by reference to the corresponding exhibit number to the Company's Registration Statement on Form S-11, as amended (File No. 33-96670), filed with the Securities and Exchange Commission on November 8, 1995).
3.1(a)	Certificate of Correction to the Company's Charter (incorporated by reference to Exhibit 3.1(a) of the Company's 10-K filed with the Securities and Exchange Commission on March 16, 1999).
3.1(b)	Articles of Amendment to the Company's Charter to correct certain sections of Article VII (Restriction Transfer and Redemption of Shares) (incorporated by reference to Exhibit 3.1(b) of the Company's 10-K filed with the Securities and Exchange Commission on March 16, 1999).
3.1(c)	Articles of Amendment to the Company's Charter for change of name of the Company (incorporated by reference to Exhibit 3.1(a) of the Company's Current Report on Form 8-K/A Amendment No. 1, filed with the Securities and Exchange Commission on February 12, 1998).
3.1(d)	Articles of Amendment to the Company's Charter, increasing authorized shares of Common Stock of the Company (incorporated by reference to Exhibit 10 of the Company's Form 8-A/A, Amendment No. 2, filed with the Securities and Exchange Commission on July 30, 2002).
3.1(e)	Articles of Amendment to the Company's Charter, amending and restating Article VII [Restriction or Transfer, Acquisition and Redemption of Shares] (incorporated by reference to Exhibit 7 of the Company's Form 8-A/A, Amendment No. 1, filed with the Securities and Exchange Commission on June 30, 2004).
3.1(f)	Articles Supplementary to Company's Charter designating 9.375 percent Series B Cumulative Redeemable Preferred Stock, liquidation preference \$25.00 per share, par value \$0.01 per share, (incorporated by reference to Exhibit 3.8 of the Company's Form 8-A/A, Amendment No. 1, filed with the Securities and Exchange Commission on June 30, 2004).
3.1(g)	Articles Supplementary to Company's Charter designating 9.125 percent Series C Cumulative Redeemable Preferred Stock, liquidation preference \$25.00 per share, par value \$0.01 per share, (incorporated by reference to Exhibit 3.10 of the Company's Form 8-A filed with the Securities and Exchange Commission on November 19, 2004).
3.1(h)	Articles of Amendment to the Company's Charter, effecting 1-for-10 reverse stock split (incorporated by reference to Exhibit 3.1 of the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on December 30, 2008).
3.1(i)	Articles of Amendment to the Company's Charter, to decrease Common Stock par value (incorporated by reference to Exhibit 3.2 of the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on December 30, 2008).
3.1(j)	Articles of Amendment to the Company's Charter, to amend and restate Series B Preferred Stock (incorporated by reference to Exhibit 3.1 of the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on June 30, 2009).

Exhibit Number	Description
3.1(k)	Articles of Amendment to the Company's Charter, to amend and restate Series C Preferred Stock (incorporated by reference to Exhibit 3.2 of the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on June 30, 2009).
3.1(1)	Articles Supplementary to the Company's Charter to reclassify and designate Series A-1 Junior Participating Preferred Stock (incorporated by reference to Exhibit 3.1 of the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on September 4, 2013).
3.2	Amended and Restated Bylaws, as amended to date.
4.1	Form of Stock Certificate of the Company (incorporated by reference to the corresponding exhibit number to the Company's Registration Statement on Form S-11, as amended (File No. 33-96670), filed with the Securities and Exchange Commission on September 7, 1995).
4.2	Junior Subordinated Indenture between Impac Mortgage Holdings, Inc. and The Bank of New York Mellon Trust Company, National Association, as Trustee, related to Junior Subordinated Note due 2034 in the principal amount of \$30,244,000 (incorporated by reference to exhibit 10.3 of the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on August 10, 2019).
4.3	Junior Subordinated Indenture between Impac Mortgage Holdings, Inc. and The Bank of New York Mellon Trust Company, National Association, as Trustee, related to Junior Subordinated Note due 2034 in the principal amount of \$31,756,000 (incorporated by reference to exhibit 10.4 of the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on August 10, 2019).
4.4	Tax Benefits Preservation Rights Agreement dated as of October 23, 2019 by and between Impac Mortgage Holdings, Inc. and American Stock Transfer & Trust Company, LLC, as Rights Agent (incorporated by referenced to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on October 23, 2019).
4.5	Description of Impac Mortgage Holdings, Inc. securities registered pursuant to Section 12 of the Securities Exchange Act of 1934, as amended.
10.1(a)	Form of 2018 Indemnification Agreement with Officers and Directors (incorporated by reference to Exhibit 10.3 of the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on August 9, 2018).
10.2	Lease dated March 1, 2005 regarding 19500 Jamboree Road, Irvine, California (incorporated by reference to Exhibit 10.8 of the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 31, 2005).
10.2(a)	Amendment to Office Lease (incorporated by reference to Exhibit 10.2 of the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on January 28, 2016).
10.3*	Impac Mortgage Holdings, Inc. 2010 Omnibus Incentive Plan, (as amended) (incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on June 26, 2019).
10.3(a)*	Form of Notice of Grant of Incentive/Non Qualified Stock Option Award Agreement for 2010 Omnibus Incentive Plan (incorporated by reference to Exhibit 99.6 of the Company's Registration Statement on Form S-8 filed with the Securities and Exchange Commission on September 10, 2010).
10.3(b)*	Form of Notice of Grant of Restricted Stock Agreement for 2010 Omnibus Incentive Plan (incorporated by reference to Exhibit 99.7 of the Company's Registration Statement on Form S-8 filed with the Securities and Exchange Commission on September 10, 2010).
10.3(c)*	Form of Stock Option Agreement for 2001 Stock Option, Deferred Stock and Restricted Stock Plan (incorporated by reference to Exhibit 10.2 of the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 9, 2004).
10.4*	Non-Employee Director Deferred Stock Unit Award Program (incorporated by reference to Exhibit 10.6 of the Company's Annual Report on Form 10-K for the year ended December 31, 2010).
10.4(a)*	Form of Notice of Grant Under Non-Employee Director Deferred Stock Unit Award Program (incorporated by reference to Exhibit 10.6(a) of the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 31, 2011).

Exhibit Number	Description
10.5 *	Confidential Separation and Release Agreement dated January 14, 2019 between Ronald Morrison and Impac Mortgage Holdings, Inc. (incorporated by reference to Exhibit 10.8(c) of the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 15, 2019).
10.6	Form of Convertible Promissory Note Due 2020 (incorporated by reference to Exhibit 10.1(a) of the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on August 12, 2015).
10.7	Loan and Security Agreement dated as of February 10, 2017 between Impac Mortgage Corp. and Western Alliance Bank (incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on February 16, 2017).
10.7(a)	Promissory Note dated as of February 10, 2017 issued by Impac Mortgage Corp. to Western Alliance Bank (incorporated by reference to Exhibit 10.1(a) of the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on February 16, 2017).
10.8	Line of Credit Promissory Note with Merchants Bank of Indiana, dated August 17, 2017 (incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on August 22, 2017).
10.9(a)	Security Agreement executed by Impac Mortgage Corp. in favor of Merchants Bank of Indiana, dated August 17, 2017 (incorporated by reference to Exhibit 10.2 of the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on August 22, 2017).
10.9(b)	Amendment dated February 7, 2018 to Line of Credit Promissory Note with Merchants Bank of Indiana. (incorporated by reference from Exhibit 10.15(b) the Registrant's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 16, 2018).
10.9(c)	Amendment dated May 16, 2018 to Line of Credit Promissory Note with Merchants Bank of Indiana (incorporated by reference from Exhibit 10.2 of the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on August 19, 2018.
10.9(d)	Confirmation and Amendment dated April 18, 2019 to Line of Credit Promissory Note with Merchants Bank of Indiana (incorporated by reference from Exhibit 10.2 of the Company's Quarterly report on Form 10-Q filed with the Securities and Exchange Commission on August 9, 2019).
10.10*	Key Executive Employment Agreement effective as of January 1, 2018 between Impac Mortgage Corp, Impac Mortgage Holdings, Inc. and George Mangiaracina (incorporated by reference to Exhibit 10.1 of the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on May 10, 2018).
10.11*	Employment Agreement as of April 1, 2018 between Impac Mortgage Corp. and Rian Furey (incorporated by reference to Exhibit 10.2 of the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on May 10, 2018).
10.11(a)*	Confidential Separation and Release Agreement dated August 14, 2019 between Rian Furey and Impac Mortgage Holdings, Inc. (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on August 19, 2019).
10.12*	Key Executive Employment Agreement dated as of May 14, 2018 between Impac Mortgage Corp., Impac Mortgage Holdings, Inc. and Brian Kuelbs (incorporated by reference to Exhibit 10.1 of the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on August 9, 2018).
21.1	Subsidiaries of the Company (incorporated by reference from the Registrant's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 20, 2014).
23.1	Consent of Squar Milner LLP.
31.1	Certification of Chief Executive Officer pursuant to Item 601(b)(31) of Regulation S-K, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Chief Financial Officer pursuant to Item 601(b)(31) of Regulation S-K, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1**	Certifications of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

Exhibit Number	Description
101	The following financial information from our Annual Report on Form 10-K for the year ended December 31, 2019, formatted in XBRL (Extensible Business Reporting Language): (1) the Condensed Consolidated Balance Sheets, (2) the Condensed Consolidated Statements of Operations and Comprehensive Loss, (3) the Condensed Consolidated Statements of Stockholders' Equity, (4) the Condensed Consolidated Statements of Cash Flows, and (5) Notes to Consolidated Financial Statements, tagged as blocks of text.

^{*} Denotes a management or compensatory plan or arrangement required to be filed as an Exhibit pursuant to Item 601 of Regulation S-K

NOTE: Filings on Form 10-K, 10-Q and 8-K are under SEC File No. 001-14100.

ITEM 16. FORM 10-K SUMMARY

None

^{**} This Exhibit shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, whether made before or after the date hereof and irrespective of any general incorporation language in any filings.

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, in the City of Irvine, State of California, on the 13th day of March 2020.

IMPAC MORTGAGE HOLDINGS, INC.

by /s/ GEORGE A MANGIARACINA

George A Mangiaracina Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1934, this report has been signed by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ GEORGE A. MANGIARACINA George A. Mangiaracina	Chairman of the Board, Chief Executive Officer and Director (Principal Executive Officer)	March 13, 2020
/s/ BRIAN KUELBS Brian Kuelbs	Chief Financial Officer (Principal Financial Officer)	March 13, 2020
/s/ PAUL LICON Paul Licon	Chief Accounting Officer (Principal Accounting Officer)	March 13, 2020
/s/ KATHERINE BLAIR Katherine Blair	Director	March 13, 2020
/s/ THOMAS B. AKIN Thomas B. Akin	Director	March 13, 2020
/s/ RICHARD H. PICKUP Richard Pickup	Director	March 13, 2020
/s/ FRANK P. FILIPPS Frank P. Filipps	Director	March 13, 2020
/s/ STEWART B. KOENIGSBERG STEWART B KOENIGSBERG	Director	March 13, 2020

CONSOLIDATED FINANCIAL STATEMENTS INDEX

Report of Independent Registered Public Accounting Firm	F-2
Consolidated Balance Sheets as of December 31, 2019 and 2018	F-3
Consolidated Statements of Operations and Comprehensive Loss for the years ended December 31, 2019 and 2018	F-4
Consolidated Statements of Changes in Stockholders' Equity for the years ended December 31, 2019, and 2018	F-5
Consolidated Statements of Cash Flows for the years ended December 31, 2019 and 2018	F-6
Notes to Consolidated Financial Statements	F-7

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of Impac Mortgage Holdings, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Impac Mortgage Holdings, Inc. and subsidiaries (the Company) as of December 31, 2019 and 2018, the related consolidated statements of operations and comprehensive loss, changes in stockholders' equity, and cash flows for the years then ended, and the related notes to the consolidated financial statements (collectively, 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, 2019 and 2018, and the results of its operations and its cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

We also have 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, 2019, based on criteria established in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013, and our report dated March 13, 2020, expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

Adoption of New Accounting Standard

Accounting Standards Update (ASU) No. 2016-02

As discussed in Note 1 to the consolidated financial statements, effective January 1, 2019, the Company changed its method of accounting for leases due to the adoption of ASU No. 2016-02, Leases (Topic 842), and the related amendments, using the modified retrospective transition relief method allowed in ASU 2018-11.

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 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 audits 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.

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

/s/ SQUAR MILNER LLP

Irvine, California March 13, 2020

CONSOLIDATED BALANCE SHEETS

(in thousands, except share data)

	December 31, 2019		December 31, 2018	
ASSETS		<u> </u>		<u> </u>
Cash and cash equivalents	\$	24,666	\$	23,200
Restricted cash		12,466		6,989
Mortgage loans held-for-sale		782,143		353,601
Mortgage servicing rights		41,470		64,728
Securitized mortgage trust assets		2,634,746		3,165,590
Other assets		50,788		33,835
Total assets	\$	3,546,279	\$	3,647,943
LIABILITIES				
Warehouse borrowings	\$	701,563	\$	284,137
Convertible notes, net		24,996		24,985
Long-term debt		45,434		44,856
Securitized mortgage trust liabilities		2,619,210		3,148,215
Other liabilities		50,839		35,575
Total liabilities		3,442,042		3,537,768
Commitments and contingencies (See Note 14)				
STOCKHOLDERS' EQUITY				
Series A-1 junior participating preferred stock, \$0.01 par value; 2,500,000 shares authorized; none issued or				
outstanding		_		_
Series B 9.375% redeemable preferred stock, \$0.01 par value; liquidation value \$32,630; 2,000,000 shares				
authorized, 665,592 noncumulative shares issued and outstanding as of December 31, 2019 and				
December 31, 2018 (See Note 9)		7		7
Series C 9.125% redeemable preferred stock, \$0.01 par value; liquidation value \$35,127; 5,500,000 shares				
authorized; 1,405,086 noncumulative shares issued and outstanding as of December 31, 2019 and				
December 31, 2018 (See Note 9)		14		14
Common stock, \$0.01 par value; 200,000,000 shares authorized; 21,255,426 and 21,117,006 shares issued				
and outstanding as of December 31, 2019 and December 31, 2018, respectively		212		211
Additional paid-in capital		1,236,237		1,235,108
Accumulated other comprehensive earnings		24,786		23,877
Net accumulated deficit:		(000 500)		(000 500)
Cumulative dividends declared		(822,520)		(822,520)
Retained deficit		(334,499)		(326,522)
Net accumulated deficit		(1,157,019)		(1,149,042)
Total stockholders' equity	_	104,237	_	110,175
Total liabilities and stockholders' equity	\$	3,546,279	\$	3,647,943

See accompanying notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS (in thousands, except per share data)

	For the Year Ended December 31,			led
		2019		2018
Revenues:				
Gain on sale of loans, net	\$	98,830	\$	66,750
Servicing fees, net		12,943		37,257
Loss on mortgage servicing rights, net		(24,911)		(3,625)
Real estate services fees, net		3,287		4,327
Other		479		291
Total revenues		90,628		105,000
Expenses:				
Personnel expense		65,191		64,143
Business promotion		9,319		26,936
General, administrative and other		22,410		35,339
Intangible asset impairment		_		18,347
Goodwill impairment				104,587
Total expenses		96,920		249,352
Operating loss		(6,292)		(144,352)
Other income (expense):				
Interest income		165,198		186,848
Interest expense		(155,868)		(184,331)
Change in fair value of long-term debt		(1,429)		3,978
Change in fair value of net trust assets, including trust REO losses		(9,831)		(2,549)
Total other (expense) income, net		(1,930)		3,946
Loss before income taxes		(8,222)		(140,406)
Income tax (benefit) expense		(245)		5,004
Net loss	\$	(7,977)	\$	(145,410)
Other comprehensive earnings (loss):				
Change in fair value of instrument specific credit risk of long-term debt		909		(3,141)
Total comprehensive loss	\$	(7,068)	\$	(148,551)
Net loss per common share:				
Basic	\$	(0.38)	\$	(6.92)
Diluted	Ψ	(0.38)	Ψ	(6.92)
Diamo		(0.50)		(0.72)

See accompanying notes to consolidated financial statements

IMPAC MORTGAGE HOLDINGS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY
(in thousands, except share data)

Accumulated OtherTotalRetainedComprehensiveStockholdersDeficitEarnings, net of taxEquity\$ (146,267)\$ 265,147	(27,018) 27,018	(7,827) — $(7,827)$	I		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	(1)	\$ (326,522) \$ 23,877 \$ 110,175	
Cumulative Dividends Declared \$\\$ (822,520)\$							\$ (822,520) \$	
Additional Paid-In Capital \$ 1,233,704			457		<u> </u>		\$ 1,235,108	344 125 660 — — \$ 1,236,237
Common Stock \$ 209				-			\$ 211	1 1
Common Shares Outstanding 20,949,679			104,410	62,917			21,117,006	103,351 35,069 — — — 21,255,426
Preferred Stock \$\\$ \$21\$							\$ 21	\$ 21
Preferred Shares Outstanding 2,070,678							2,070,678	
Balance, December 31, 2017	Reclassification related to adoption of ASU 2016-01 (Note 1)	2016-16 (Note 1) Proceeds and tay benefit from eversice	of stock options	Issuance of deferred stock	Other comprehensive loss	Net loss	Balance, December 31, 2018	Proceeds from exercise of stock options Issuance of restricted stock Stock based compensation Other comprehensive earnings Net loss Balance, December 31, 2019

See accompanying notes to consolidated financial statements

CONSOLIDATED STATEMENTS OF CASH FLOWS (in thousands)

	For the Y Decem		
	2019		2018
CASH FLOWS FROM OPERATING ACTIVITIES: Net loss	\$ (7,977)	\$	(145,410)
(Gain) loss on sale of mortgage servicing rights	(860)	Ф	5,937
Change in fair value of mortgage servicing rights	25,771		(3,757)
Gain on sale of mortgage-backed securities	(136)		` _
Gain on sale of mortgage loans	(84,035)		(88,611)
Change in fair value of mortgage loans held-for-sale	(15,810)		14,762
Change in fair value of derivatives lending, net Provision for repurchases	(4,472) 5,487		2,110 5,074
Origination of mortgage loans held-for-sale	(4,548,750)		(3,839,640)
Sale and principal reduction on mortgage loans held-for-sale	4,217,562		4,103,790
Losses from trust REO	6,434		950
Change in fair value of net trust assets, excluding trust REO	3,397		1,599
Change in fair value of long-term debt	1,429		(3,978)
Accretion of interest income and expense	27,272		33,435
Amortization of intangible and other assets Amortization of debt issuance costs and discount on note payable	572 17		3,807 83
Stock-based compensation	660		947
Impairment of goodwill	_		104,587
Impairment of intangible assets	_		18,347
Excess tax benefit from share based compensation	_		(151)
Change in deferred tax assets, net	_ _		4,315
Net change in other assets	8,400		(12,195)
Net change in other liabilities	(12,444) (377,483)		(5,032) 200,969
Net cash (used in) provided by operating activities	(3//,483)		200,969
CASH FLOWS FROM INVESTING ACTIVITIES:			
Net change in securitized mortgage collateral	565,600		553,953
Proceeds from the sale of mortgage servicing rights	-		112,376
Finance receivable advances to customers	_		(401,357)
Repayments of finance receivables			443,134
Purchase of premises and equipment	(862)		(867)
Purchase of mortgage-backed securities Proceeds from the sale of mortgage-backed securities	(10,346) 11,502		(1,000)
Proceeds from the sale of trust REO	23,804		21,493
Net cash provided by investing activities	589,698		727,732
1 7 8			,
CASH FLOWS FROM FINANCING ACTIVITIES:			
Repayment of MSR financing	(8,000)		(137,133)
Borrowings under MSR financing	8,000		102,000
Repayment of warehouse borrowings	(3,746,311)		(3,877,663)
Borrowings under warehouse agreements Payment of acquisition related contingent consideration	4,163,737		3,586,437 (554)
Repayment of securitized mortgage borrowings	(623,028)		(610,810)
Principal payments on capital lease	(81)		(202)
Tax payments on stock based compensation awards	(59)		(145)
Issuance of restricted stock	125		_
Issuance of deferred stock units	245		1
Proceeds from exercise of stock options	345		458
Net cash used in financing activities Net change in cash, cash equivalents and restricted cash	(205,272) 6,943		(937,611) (8,910)
Cash, cash equivalents and restricted cash at beginning of year	30,189		39,099
Cash, cash equivalents and restricted cash at end of year	\$ 37,132	\$	30,189
,1		_	20,200
SUPPLEMENTARY INFORMATION:			
Interest paid	\$ 116,807	\$	123,734
Taxes (paid) refunded, net	(345)		591
NON-CASH TRANSACTIONS:	Ф. 27.101	e	22.42
Transfer of securitized mortgage collateral to trust REO Mortgage servicing rights retained from issuance of mortgage backed securities and loan sales	\$ 27,186	\$	22,421
Recognition of operating lease right of use assets (net of \$3.8 million of deferred rent)	2,491 20,538		24,879
Recognition of operating lease right of use assets (net of \$5.8 million of deferred fem) Recognition of operating lease liabilities	20,338 24,291		_
Common stock issued upon issuance of deferred stock units	= 1,271		606
1			

See accompanying notes to consolidated financial statements

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (dollars in thousands, except per share data or as otherwise indicated)

Note 1.—Summary of Business and Financial Statement Presentation including Significant Accounting Policies

Business Summary

Impac Mortgage Holdings, Inc. (the Company or IMH) is a Maryland corporation incorporated in August 1995 and has the following direct and indirect wholly-owned subsidiaries: Integrated Real Estate Service Corporation (IRES), Impac Mortgage Corp. (IMC), IMH Assets Corp. (IMH Assets) and Impac Funding Corporation (IFC).

The Company's operations include the mortgage lending operations and real estate services conducted by IRES and IMC and the long-term mortgage portfolio (residual interests in securitizations reflected as net trust assets and liabilities in the consolidated balance sheets) conducted by IMH. IMC's mortgage lending operations include the activities of its division, CashCall Mortgage (CCM).

Financial Statement Presentation

Basis of Presentation

The accompanying consolidated financial statements of IMH and its subsidiaries (as defined above) have been prepared in accordance with accounting principles generally accepted in the United States of America (GAAP). All significant inter-company balances and transactions have been eliminated in consolidation. In addition, certain amounts in the prior periods' consolidated financial statements have been reclassified to conform to the current year presentation.

Management has made a number of material estimates and assumptions relating to the reporting of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period to prepare these consolidated financial statements in conformity with GAAP. Material estimates and assumptions subject to change include the valuation of trust assets and trust liabilities, contingencies, the estimated obligation of repurchase liabilities related to sold loans, the valuation of long-term debt, mortgage servicing rights, mortgage loans held-for-sale and derivative instruments, including interest rate lock commitments (IRLC). Actual results could differ from those estimates and assumptions.

Principles of Consolidation

The accompanying consolidated financial statements include accounts of IMH and its wholly-owned subsidiaries. The usual condition for a controlling financial interest is ownership of a majority of the voting interests of an entity. However, a controlling financial interest may also exist in entities, such as variable interest entities (VIEs), through arrangements that do not involve voting interests.

The VIE framework requires a variable interest holder (counterparty to a VIE) to consolidate the VIE if that party has the power to direct activities of the VIE that most significantly impact the entity's economic performance, will absorb a majority of the expected losses of the VIE, will receive a majority of the residual returns of the VIE, or both, and directs the significant activities of the entity. This party is considered the primary beneficiary of the entity. The determination of whether the Company meets the criteria to be considered the primary beneficiary of a VIE requires an evaluation of all transactions (such as investments, liquidity commitments, derivatives and fee arrangements) with the entity. The assessment of whether or not the Company is the primary beneficiary of the VIE is performed on an ongoing basis.

Significant Accounting Policies

Fair Value Option

The Company has elected the fair value option for mortgage servicing rights, mortgage loans held-for-sale, long-term debt and its consolidated non-recourse securitizations (securitized mortgage collateral and securitized mortgage

borrowings). Elections were made to mitigate income statement volatility caused by differences in the measurement basis of elected instruments.

Cash and Cash Equivalents and Restricted Cash

Cash and cash equivalents consist of cash and highly liquid investments with maturities of three months or less at the date of acquisition. The carrying amount of cash and cash equivalents approximates fair value.

Cash balances that have restrictions as to the Company's ability to withdraw funds are considered restricted cash. At December 31, 2019 and 2018, restricted cash totaled \$12.5 million and \$7.0 million, respectively. The restricted cash is the result of the terms of the Company's warehouse borrowing agreements. In accordance with the terms of the Master Repurchase Agreements related to the warehouse borrowings, the Company is required to maintain cash balances with the lender as additional collateral for the borrowings (See Note 6.—Debt).

Mortgage Loans Held-for-Sale

Mortgage loans held-for-sale (LHFS) are accounted for using the fair value option, with changes in fair value recorded in gain on sale of loans, net in the accompanying consolidated statements of operations and comprehensive loss. In accordance with Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 825, *Financial Instruments*, loan origination fees and expenses are recognized in earnings as incurred and not deferred.

Revenue derived from the Company's mortgage lending activities includes loan fees collected at the time of origination and gain or loss from the sale of LHFS. Loan fees consist of fee income earned on all loan originations, including loans closed and held-for-sale. Loan fees are recognized as earned and consist of amounts collected for application and underwriting fees, fees on cancelled loans and discount points. The related direct loan origination costs are recognized when incurred and consists of broker fees and commissions. Gain or loss from the sale and mark-to-market adjustments of LHFS includes both realized and unrealized gains and losses and are included in gain on sale of loans, net in the accompanying consolidated statements of operations and comprehensive loss. The valuation of LHFS approximates a whole-loan price, which includes the value of the related mortgage servicing rights.

The Company primarily sells its LHFS to government sponsored entities and investors. The Company evaluates its loan sales for sales treatment. To the extent the transfer of loans qualifies as a sale, the Company derecognizes the loans and records a realized gain or loss on the sale date. In the event the Company determines that the transfer of loans does not qualify as a sale, the transfer would be treated as a secured borrowing. Interest on loans is recorded as income when earned and deemed collectible. LHFS are placed on nonaccrual status when any portion of the principal or interest is 90 days past due or earlier if factors indicate that the ultimate collectability of the principal or interest is not probable. Interest received from loans on nonaccrual status is recorded as income when collected. Loans return to accrual status when the principal and interest become current and it is probable that the amounts are fully collectible.

Mortgage Servicing Rights

The Company accounts for mortgage loan sales in accordance with FASB ASC 860, *Transfers and Servicing*. Upon sale of mortgage loans on a service-retained basis, the LHFS are removed from the consolidated balance sheets and mortgage servicing rights (MSRs) are recorded as an asset for servicing rights retained. The Company elects to measure MSRs at fair value as prescribed by FASB ASC 860-50-35, and as such, servicing assets or liabilities are valued using discounted cash flow modeling techniques using assumptions regarding future net servicing cash flow, including prepayment rates, discount rates, servicing cost and other factors. Changes in estimated fair value are reported in the accompanying consolidated statements of operations and comprehensive loss within loss on mortgage servicing rights, net.

When the Company sells mortgage servicing rights, the Company records a gain or loss on such sale based on the selling price of the mortgage servicing rights less the carrying value and transaction costs. Gains and losses are reported in the accompanying consolidated statements of operations and comprehensive loss within loss on mortgage servicing rights, net.

Consolidated Non-recourse Securitizations

Securitized Mortgage Collateral

The Company's long-term mortgage portfolio primarily includes adjustable rate and, to a lesser extent, fixed rate non-conforming mortgages and commercial mortgages that were acquired and originated by our mortgage and commercial operations prior to 2008.

Non-conforming mortgages may not have certain documentation or verifications that are required by government sponsored entities and, therefore, in making our credit decisions, we were more reliant upon the borrower's credit score and the adequacy of the underlying collateral.

Historically, the Company securitized mortgages in the form of collateralized mortgage obligations (CMO) or real estate mortgage investment conduits (REMICs). These securitizations are evaluated for consolidation based on the provisions of FASB ASC 810-10-25. Amounts consolidated are included in trust assets and liabilities as securitized mortgage collateral, real estate owned, derivative assets, securitized mortgage borrowings and derivative liabilities in the accompanying consolidated balance sheets.

The Company accounts for securitized mortgage collateral at fair value, with changes in fair value during the period reflected in earnings. Fair value measurements are based on the Company's estimated cash flow models, which incorporate assumptions, inputs of other market participants and quoted prices for the underlying bonds. The Company's assumptions include its expectations of inputs that other market participants would use. These assumptions include judgments about the underlying collateral, prepayment speeds, credit losses, investor yield requirements, forward interest rates and certain other factors.

Interest income on securitized mortgage collateral is recorded using the effective yield for the period based on the previous quarter-end's estimated fair value. Securitized mortgage collateral is generally not placed on nonaccrual status as the servicer advances the interest payments to the trust regardless of the delinquency status of the underlying mortgage loan, until it becomes apparent to the servicer that the advance is not collectible.

Real Estate Owned

Real estate owned (REO) on the consolidated balance sheets are primarily assets within the securitized trusts but are recorded as a separate asset for accounting and reporting purposes and are within the long-term mortgage portfolio. REO, which consists of residential real estate acquired in satisfaction of loans, is carried at net realizable value, which includes the estimated fair value of the residential real estate less estimated selling and holding costs. Adjustments to the loan carrying value required at the time of foreclosure affect the carrying amount of REO. Subsequent write-downs in the net realizable value of REO are included in change in fair value of net trust assets, including trust REO (losses) gains in the consolidated statements of operations and comprehensive loss.

Securitized Mortgage Borrowings

The Company records securitized mortgage borrowings in the accompanying consolidated balance sheets for the consolidated CMO and REMIC securitized trusts within the long-term mortgage portfolio. The debt from each issuance of a securitized mortgage borrowing is payable from the principal and interest payments on the underlying mortgages collateralizing such debt, as well as the proceeds from liquidations of REO. If the principal and interest payments are insufficient to repay the debt, the shortfall is allocated first to the residual interest holders (generally owned by the Company) then, if necessary, to the certificate holders (e.g. third party investors in the securitized mortgage borrowings) in accordance with the specific terms of the various respective indentures. Securitized mortgage borrowings typically are structured as one-month LIBOR "floaters" and fixed rate securities with interest payable to certificate holders monthly. The maturity of each class of securitized mortgage borrowing is directly affected by the amount of net interest spread, overcollateralization and the rate of principal prepayments and defaults on the related securitized mortgage collateral. The actual maturity of any class of a securitized mortgage borrowing can occur later than the stated maturities of the underlying mortgages.

When the Company issued securitized mortgage borrowings, the Company generally sought an investment grade rating for the Company's securitized mortgages by nationally recognized rating agencies. To secure such ratings, it was

often necessary to incorporate certain structural features that provide for credit enhancement. This generally included the pledge of collateral in excess of the principal amount of the securities to be issued, a bond guaranty insurance policy for some or all of the issued securities, or additional forms of mortgage insurance. These securitization transactions are non-recourse to the Company and the total loss exposure is limited to the Company's initial net economic investment in each trust, which is referred to as a residual interest.

The Company accounts for securitized mortgage borrowings at fair value, with changes in fair value during the period reflected in earnings. Fair value measurements are based on the Company's estimated cash flow models, which incorporate assumptions, inputs of other market participants and quoted prices for the underlying bonds. The Company's assumptions include its expectations of inputs that other market participants would use. These assumptions include judgments about the underlying collateral, prepayment speeds, credit losses, investor yield requirements, forward interest rates and certain other factors. Interest expense on securitized mortgage borrowings are recorded quarterly using the effective yield for the period based on the previous quarter-end's estimated fair value.

Leases

On January 1, 2019, the Company adopted Accounting Standards Update (ASU) 2016-02, "Leases (Topic 842)", using the modified retrospective transition approach and elected the practical expedients transition option to recognize the adjustment in the period of adoption rather than in the earliest period presented. On January 1, 2019, the Company recognized right of use (ROU) assets of \$19.7 million (net of the reversal of \$3.8 million deferred rent liability) and lease liabilities of \$23.4 million which are included in other assets and other liabilities, respectively, in the accompanying consolidated balance sheets. (See Note 14.— Commitments and Contingencies).

The Company has four operating leases for office space expiring at various dates through 2024. The Company determines if a contract is a lease at the inception of the arrangement and reviews all options to extend, terminate, or purchase its ROU assets at the inception of the lease and accounts for these options when they are reasonably certain of being exercised. Regarding the discount rate, Topic 842 requires the use of the rate implicit in the lease whenever this rate is readily determinable. When the Company cannot readily determine the rate implicit in the lease, the Company determines its incremental borrowing rate by using the rate of interest that it would have to pay to borrow on a collateralized basis over a similar term. As a practical expedient permitted under Topic 842, the Company has elected to account for the lease and non-lease components as a single lease component for all leases of which it is the lessee. Leases with an initial term of 12 months or less are not recorded in the consolidated balance sheets and lease expense for these leases is recognized on a straight-line basis over the lease term. For operating leases existing prior to January 1, 2019, the rate used for the remaining lease term was determined as of the date of adoption.

Goodwill and Intangible Assets

Goodwill arises from the acquisition method of accounting for business combinations and represents the excess of the purchase price over the fair value of the net assets and other identifiable intangible assets acquired. Other intangible assets with definite lives include trademarks, customer relationships, and non-compete agreements. Goodwill, trademarks and other intangible assets are tested annually for impairment or more frequently if events and circumstances indicate that the asset might be impaired. The carrying value of these intangible assets could be impaired if a significant adverse change in the use, life, or brand strategy of the asset is determined, or if a significant adverse change in the legal and regulatory environment, business or competitive climate occurs that would adversely impact the asset.

Goodwill and other intangible assets deemed to have indefinite lives generated from purchase business combinations are not subject to amortization but are instead tested for impairment no less than annually. Impairment exists when the carrying value exceeds its implied fair value. An impairment loss, if any, is measured as the excess of carrying value over the implied fair value and would be recorded in the consolidated statements of operations and comprehensive loss. Intangible assets with definite lives are amortized over their estimated lives using an amortization method that reflects the pattern in which the economic benefits of the asset are consumed.

As discussed in Note 4.—Goodwill and Intangible Assets, the Company recorded impairment charges for goodwill and intangible assets for the year ended December 31, 2018.

Business Combinations

Business combinations are accounted for under the acquisition method of accounting in accordance with FASB ASC Topic 805, *Business Combinations*. Under the acquisition method, the acquiring entity in a business combination recognizes 100 percent of the acquired assets and assumed liabilities, regardless of the percentage owned, at their estimated fair values as of the date of acquisition. Any excess of the purchase price over the fair value of net assets and other identifiable intangible assets acquired is recorded as goodwill. To the extent the fair value of net assets acquired, including other identifiable assets, exceeds the purchase price, a bargain purchase gain is recognized. Assets acquired and liabilities assumed which involve contingencies must also be recognized at their estimated fair value, provided such fair value can be determined during the measurement period. Acquisition-related costs, including severance, conversion and other restructuring charges, such as abandoned space accruals, are expensed as incurred. Results of operations of an acquired business are included in the consolidated statements of operations and comprehensive loss from the date of acquisition.

Derivative Instruments

In accordance with FASB ASC 815-10 *Derivatives and Hedging—Overview*, the Company records all derivative instruments at fair value. The Company has accounted for all its derivatives as non-designated hedge instruments or free-standing derivatives.

The mortgage lending operation enters into IRLCs with consumers to originate mortgage loans at a specified interest rate. These IRLCs are accounted for as derivative instruments. The fair values of IRLCs utilize current secondary market prices for underlying loans and estimated servicing value with similar coupons, maturities and credit quality, subject to the anticipated loan funding probability (pull-through rate). The fair value of IRLCs is subject to change primarily due to changes in interest rates and the estimated pull-through rate. The Company reports IRLCs within other assets and other liabilities at fair value with changes in fair value being recorded in the accompanying consolidated statements of operations and comprehensive loss within gain on sale of loans, net.

The Company hedges the changes in fair value associated with changes in interest rates related to IRLCs and uncommitted LHFS by using forward delivery commitments on mortgage-backed securities, including Fannie Mae and Ginnie Mae mortgage-backed securities known as to-be-announced mortgage-backed securities (TBA MBS or Hedging Instruments) as well as forward delivery commitments on whole loans. The Hedging Instruments and forward delivery loan commitments are used to fix the forward sales price that will be realized upon the sale of mortgage loans into the secondary market and are accounted for as derivative instruments. The fair value of Hedging Instruments and forward delivery loan commitments are subject to change primarily due to changes in interest rates. The Company reports Hedging Instruments and forward delivery loan commitments within other assets and other liabilities at fair value with changes in fair value being recorded in the accompanying consolidated statements of operations and comprehensive loss within gain on sale of loans, net.

The Company hedges the changes in fair value associated with changes in interest rates related to MSRs by using TBA MBS or Hedging Instruments. The Hedging Instruments are typically entered into at the time the MSR is created and are accounted for as derivative instruments. The fair value of Hedging Instruments is subject to change primarily due to changes in interest rates. The Company reports Hedging Instruments within other assets and other liabilities at fair value with changes in fair value being recorded in the accompanying consolidated statements of operations and comprehensive loss within loss on sale of mortgage servicing rights, net.

The fair value of IRLCs and Hedging Instruments are represented as derivative assets, lending, net and derivative liabilities, lending, net in Note 10.—Fair Value of Financial Instruments.

Long-term Debt

Long-term debt (junior subordinated notes) is reported at fair value. These securities are measured based upon an analysis prepared by management, which considers the Company's own credit risk and discounted cash flow analysis. Unrealized gains and losses are recognized in earnings in the accompanying consolidated statements of operations and comprehensive loss within change in fair value of long-term debt.

Repurchase Reserve

The Company sells mortgage loans in the secondary market, including U.S. government sponsored entities, and issues mortgage-backed securities through Ginnie Mae and Fannie Mae. When the Company sells or issues securities, it makes customary representations and warranties to the purchasers about various characteristics of each loan such as the 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 laws. In the event of a breach of its representations and warranties, the Company may be required to either repurchase the mortgage loans with the identified defects or indemnify the investor or insurer for any loss. In addition, the Company may be required to repurchase loans as a result of borrower fraud or if a payment default occurs on a mortgage loan shortly after its sale. Also, the Company's loss may be reduced by proceeds from the sale or liquidation of the repurchased loan. The Company's loss may be reduced by any recourse it has to correspondent lenders that, in turn, had sold such mortgage loans to the Company 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 lender.

The Company records a provision for losses relating to such 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 and the potential severity of loss in the event of defaults including any loss on sale or liquidation of the repurchased loan and the probability of reimbursement by the correspondent loan seller. The Company establishes a liability at the time loans are sold and continually updates its estimated repurchase liability. The level of the repurchase liability for representations and warranties is difficult to estimate and requires considerable management judgment. The level of mortgage loan repurchase losses is dependent on economic factors, investor demands for loan repurchases and other external conditions that may change over the lives of the underlying loans.

Revenue Recognition for Fees from Services

The Company follows FASB ASC 606, Revenue Recognition, which provides guidance on the application of GAAP to selected revenue recognition issues related to our real estate services fees. Under ASC 606, the Company must identify the contract with a customer, identify the performance obligations in the contract, determine the transaction price, allocate the transaction price to the performance obligations in the contract, and recognize revenue when (or as) the Company satisfies a performance obligation.

The Company's primary sources of revenue are derived from financial instruments that are not within the scope of ASC 606. The Company has evaluated the nature of its contracts with customers and determined that further disaggregation of revenue from contracts with customers into more granular categories beyond what is presented in the Consolidated Statements of Operations and Comprehensive Loss, was not necessary. The Company generally fully satisfies its performance obligations on its contracts with customers as services are rendered and the transaction prices are typically fixed; charged either on a periodic basis or based on activity. Because performance obligations are satisfied as services are rendered and the transaction prices are fixed, the Company has made no significant judgments in applying the revenue guidance prescribed in ASC 606 that affect the determination of the amount and timing of revenue from contracts with customers. The revenues from these services are recognized in income in the period when services are rendered and collectability is reasonably certain.

Advertising Costs

Advertising costs are expensed as incurred and are included in business promotion expense. For the years ended December 31, 2019 and 2018, business promotion expense was \$9.3 million and \$26.9 million, respectively.

Stock-Based Compensation

The Company accounts for stock-based compensation in accordance with FASB ASC 718 Compensation—Stock Compensation. Accordingly, the Company measures the cost of stock-based awards using the grant-date fair value of the award and recognizes that cost over the requisite service period.

The fair value of each stock option granted under the Company's stock-based compensation plan is estimated on the date of grant using an option-pricing model and assumptions noted in Note 15.—Share Based Payments and Employee

Benefit Plans. The risk-free interest rate is based on the U.S. Treasury rate with a term equal to the expected term of the option grants on the date of grant.

FASB ASC 718 requires forfeitures to be estimated at the time of grant and prospectively revised, if necessary, in subsequent periods if actual forfeitures differ from initial estimates. Stock-based compensation expense is recorded net of estimated forfeitures for the years ended December 31, 2019 and 2018, such that the expense was recorded only for those stock-based awards that were expected to vest during such periods. Refer to Note 15.—Share Based Payments and Employee Benefit Plans.

Income Taxes

In accordance with FASB ASC 740, *Income Taxes*, the Company records income tax expense as well as deferred tax assets and liabilities. Current income tax expense approximates taxes to be paid or refunded for the current period and includes income tax expense related to uncertain tax positions. The Company determines deferred income taxes using the balance sheet method. Under this method, the net deferred tax asset or liability is based on the tax effects of the differences between the book and tax bases of assets and liabilities, and recognizes enacted changes in tax rates and laws in the period in which they occur. Deferred income tax expense results from changes in deferred tax assets and liabilities between periods. Deferred tax assets are recognized subject to management's judgment that realization is "more likely than not." Uncertain tax positions that meet the more likely than not recognition threshold are measured to determine the amount of benefit to recognize. An uncertain tax position is measured at the largest amount of benefit that management believes has a greater than 50% likelihood of realization upon settlement.

The Company is subject to federal income taxes as a regular (Subchapter C) corporation and files a consolidated U.S. federal income tax return on qualifying subsidiaries. The Company files federal and various states income tax returns in the U.S.

In prior periods when the Company was taxed as a real estate investment trust (REIT), it recorded a deferred charge to eliminate the expense recognition of income taxes paid on inter-company profits that result from the sale of mortgage loans from the taxable REIT subsidiaries to IMH. The deferred charge was included in other assets in the consolidated balance sheets and was amortized and or impaired as a component of income tax expense in the consolidated statements of operations and comprehensive loss over the estimated life of the mortgages retained in the securitized mortgage collateral. With the adoption of ASU 2016-16, "Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory," on January 1, 2018, the deferred charge was eliminated with a \$7.8 million cumulative effect adjustment to opening retained earnings and is no longer a component of income tax expense.

Loss per Common Share

Basic loss per common share is computed on the basis of the weighted average number of shares outstanding for the year divided into net loss for the year. Diluted loss per common share is computed on the basis of the weighted average number of shares and dilutive common equivalent shares outstanding for the year divided by net loss for the year, unless anti-dilutive. Refer to Note 11.—Reconciliation of Loss Per Share.

Accounting Pronouncements Adopted

In January 2016, the FASB issued ASU 2016-01, "Financial Instruments-Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities." The amendments in ASU 2016-01, among other things, requires equity investments (except those accounted for under the equity method of accounting, or those that result in consolidation of the investee) to be measured at fair value with changes in fair value recognized in net income; requires public business entities to use the exit price notion when measuring the fair value of financial instruments for disclosure purposes; requires separate presentation of financial assets and financial liabilities by measurement category and form of financial asset (i.e., securities or loans and receivables); requires separate presentation in other comprehensive income for the portion of the total change in the fair value of a liability resulting from a change in the instrument-specific credit risk when the entity has elected to measure the liability at fair value in accordance with the fair value option for financial instruments and eliminates the requirement for public business entities to disclose the method(s) and significant assumptions used to estimate the fair value that is required to be disclosed for financial instruments measured at amortized cost. The update is effective for interim and annual reporting periods beginning after December 15, 2017 on a modified retrospective basis, using a cumulative-effect adjustment to the balance sheet as of the beginning of the year adopted. The

Company adopted this guidance on January 1, 2018, which resulted in a \$27.0 million reclass, net of tax, between opening retained earnings and other comprehensive earnings (loss) within stockholders' equity.

In January 2017, the FASB issued ASU 2017-04, "Intangibles - Goodwill and Other (Topic 350): Simplifying the Accounting for Goodwill Impairment." ASU 2017-04 amends Topic 350 to simplify the subsequent measurement of goodwill by eliminating Step 2 from the goodwill impairment test. This update requires the performance of an annual, or interim, goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount. An impairment charge should be recognized for the amount by which the carrying amount exceeds the reporting unit's fair value. However, the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. The guidance is effective for annual periods beginning after December 15, 2019, including interim periods within those periods, with early adoption permitted. The Company early adopted this guidance prospectively on June 30, 2018. See Note 4.-Goodwill and Intangible Assets for further discussion on goodwill impairment testing.

In February 2016, the FASB issued ASU 2016-02, "Leases (Topic 842)", and subsequent amendments to the initial guidance: ASU 2017-13, ASU 2018-10, ASU 2018-11, ASU 2018-20 and ASU 2019-01 (collectively, Topic 842). Topic 842 requires companies to generally recognize on the balance sheet operating and financing lease liabilities and corresponding ROU assets. The Company adopted ASU 2016-02 on January 1, 2019 and applied the practical expedients included therein, as well as utilized the transition method included in ASU 2018-11. By applying ASU 2016-02 at the adoption date, as opposed to at the beginning of the earliest period presented, the presentation of financial information for periods prior to January 1, 2019 remained unchanged in accordance with Leases (Topic 840). On January 1, 2019, the Company recognized ROU assets of \$19.7 million (net of the reversal of \$3.8 million deferred rent liability) and lease liabilities of \$23.4 million in the consolidated balance sheets. There was no impact to retained earnings upon adoption of Topic 842. For additional information related to the impact of the new guidance, see Note 14.—Commitments and Contingencies.

In August 2017, the FASB issued ASU 2017-12, "Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities." This ASU improves certain aspects of the hedge accounting model including making more risk management strategies eligible for hedge accounting and simplifying the assessment of hedge effectiveness. ASU 2017-12 is effective for all annual periods beginning after December 15, 2018 and interim periods within those fiscal years. Early adoption is permitted and requires a prospective adoption with a cumulative-effect adjustment to retained earnings as of the beginning of the fiscal year of adoption for existing hedging relationships. The Company adopted this guidance on January 1, 2019, and the adoption of this ASU did not have a material impact on the Company's consolidated financial statements.

In February 2018, the FASB issued ASU 2018-02, "Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income." This ASU allows a reclassification from accumulated other comprehensive earnings (AOCE) to retained earnings for the stranded tax effects caused by the revaluation of deferred taxes resulting from the newly enacted corporate tax rate in the Tax Cuts and Jobs Act (the Tax Act) which was signed into law in the fourth quarter of 2017. The ASU is effective in years beginning after December 15, 2018, including interim periods within those fiscal years. The Company adopted this guidance on January 1, 2019, and the adoption of this ASU had no impact on the Company's consolidated financial statements.

In June 2018, the FASB issued ASU 2018-07, "Compensation — Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting", which expands the scope of Topic 718 to include all share-based payment transactions for acquiring goods and services from nonemployees. This ASU specifies that Topic 718 apply to all share-based payment transactions in which the grantor acquires goods and services to be used or consumed in its own operations by issuing share-based payment awards. ASU 2018-07 also clarifies that Topic 718 does not apply to share-based payments used to effectively provide (1) financing to the issuer or (2) awards granted in conjunction with selling goods or services to customers as part of a contract accounted for under ASC 606. ASU 2018-07 is effective for public business entities for fiscal years beginning after December 15, 2018, with early adoption permitted. The Company adopted this guidance on January 1, 2019, and the adoption of this ASU did not have a material impact on the Company's consolidated financial statements.

Recent Accounting Pronouncements Not Yet Effective

In August 2018, the FASB issued ASU 2018-13, "Fair Value Measurement (Topic 820)." The ASU eliminates disclosures such as the amount of and reasons for transfers between Level 1 and Level 2 of the fair value hierarchy. The

ASU adds new disclosure requirements for Level 3 measurements. This ASU is effective for public business entities for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years, with early adoption permitted for any eliminated or modified disclosures. The Company does not expect the adoption of this ASU to have a material impact on its consolidated financial statements.

In August 2018, the FASB issued ASU 2018-15, "Intangibles-Goodwill and Other- Internal-Use Software (Subtopic 350-40)." This ASU addresses customer's accounting for implementation costs incurred in a cloud computing arrangement that is a service contract and also adds certain disclosure requirements related to implementation costs incurred for internal-use software and cloud computing arrangements. The amendment aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal-use software license). This ASU is effective for public business entities for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years, with early adoption permitted. The amendments in this ASU can be applied either retrospectively or prospectively to all implementation costs incurred after the date of adoption. The Company does not expect the adoption of this ASU to have a material impact on its consolidated financial statements.

In December 2019, FASB issued ASU 2019-12, *Simplifying the Accounting for Income Taxes*. The amendments in ASU 2019-12 simplify the accounting for income taxes by removing certain exceptions to the general principles in ASC Topic 740, *Income Taxes*. The amendments also improve consistent application of and simplify GAAP for other areas of Topic 740 by clarifying and amending existing guidance. This ASU is effective for public business entities for fiscal years and interim periods beginning after December 15, 2020. The Company does not expect the adoption of this ASU to have a material impact on its consolidated financial statements.

Note 2.—Mortgage Loans Held-for-Sale

A summary of the unpaid principal balance (UPB) of mortgage loans held-for-sale by type is presented below:

	December 31, 2019		De	December 31, 2018	
Government (1)	\$	51,019	\$	39,522	
Conventional (2)		436,040		53,148	
Non-qualified mortgages (NonQM)		274,834		256,491	
Fair value adjustment (3)		20,250		4,440	
Total mortgage loans held-for-sale	\$	782,143	\$	353,601	

⁽¹⁾ Includes all government-insured loans including Federal Housing Administration (FHA), Veterans Affairs (VA) and United States Department of Agriculture (USDA).

As of December 31, 2019, the Company had \$4.5 million in UPB of mortgage loans held-for-sale that were in nonaccrual status as the loans were 90 days or more delinquent. The carrying value of these nonaccrual loans as of December 31, 2019 were \$4.2 million. As of December 31, 2018, there were \$2.3 million in UPB of mortgage loans held-for-sale that were in nonaccrual status as the loans were 90 days or more delinquent. The carrying value of these nonaccrual loans as of December 31, 2018 were \$1.8 million.

⁽²⁾ Includes loans eligible for sale to Federal National Mortgage Association (Fannie Mae or FNMA) and Federal home Loan Mortgage Corporation (Freddie Mac or FHLMC).

⁽³⁾ Changes in fair value are included in gain on sale of loans, net on the accompanying consolidated statements of operations and comprehensive loss.

Gain on sale of loans, net in the consolidated statements of operations and comprehensive loss is comprised of the following for the years ended December 31, 2019 and 2018:

	For the Year Ended December 31,					
		2019		2018		
Gain on sale of mortgage loans	\$	111,787	\$	102,899		
Premium from servicing retained loan sales		2,491		24,879		
Unrealized gains (losses) from derivative financial instruments		4,472		(2,025)		
Realized (losses) gains from derivative financial instruments		(5,627)		11,878		
Mark to market gain (loss) on LHFS		15,810		(14,762)		
Direct origination expenses, net		(24,616)		(51,045)		
Provision for repurchases		(5,487)		(5,074)		
Total gain on sale of loans, net	\$	98,830	\$	66,750		

Note 3.—Mortgage Servicing Rights

The Company retains MSRs from its sales and securitization of certain mortgage loans or as a result of purchase transactions. MSRs are reported at fair value based on the expected income derived from the net projected cash flows associated with the servicing contracts. The Company receives servicing fees, less subservicing costs, on the UPB of the underlying mortgage loans. The servicing fees are collected from the monthly payments made by the mortgagors, or if delinquent, when the underlying real estate is foreclosed upon and liquidated. The Company may receive other remuneration from rights to various mortgagor-contracted fees, such as late charges, collateral reconveyance charges and nonsufficient fund fees, and the Company is generally entitled to retain the interest earned on funds held pending remittance (or float) related to its collection of mortgagor principal, interest, tax and insurance payments.

The following table summarizes the activity of MSRs for the years ended December 31, 2019 and 2018:

	Dec	cember 31, 2019	December 31, 2018		
Balance at beginning of year	\$	64,728	\$	154,405	
Additions from servicing retained loan sales		2,491		24,879	
Reductions from bulk sales				(118,313)	
Other		22		_	
Changes in fair value (1)		(25,771)		3,757	
Fair value of MSRs at end of year	\$	41,470	\$	64,728	

⁽¹⁾ Changes in fair value are included within loss on mortgage servicing rights, net in the accompanying consolidated statements of operations and comprehensive loss.

At December 31, 2019 and 2018, the UPB of the mortgage servicing portfolio was comprised of the following:

	D	December 31, 2019		ecember 31, 2018
Government insured	\$	105,442	\$	51,157
Conventional		4,826,407		6,165,129
NonQM				1,848
Total loans serviced (1)	\$	4,931,849	\$	6,218,134

⁽¹⁾ No collateral was pledged as part of the MSR Financing at December 31, 2019 and December 31, 2018.

The table below illustrates hypothetical changes in the fair value of MSRs, caused by assumed immediate changes to key assumptions that are used to determine fair value. See Note 10.—Fair Value of Financial Instruments for a description of the key assumptions used to determine the fair value of MSRs.

Mortgage Servicing Rights Sensitivity Analysis	December 31, 2019		December 31, 2018	
Fair value of MSRs	\$	41,470	\$	64,728
Prepayment Speed:				
Decrease in fair value from 10% adverse change		(1,850)		(1,419)
Decrease in fair value from 20% adverse change		(3,631)		(2,918)
Decrease in fair value from 30% adverse change		(5,325)		(4,475)
Discount Rate:				
Decrease in fair value from 10% adverse change		(1,330)		(2,345)
Decrease in fair value from 20% adverse change		(2,579)		(4,532)
Decrease in fair value from 30% adverse change		(3,753)		(6,575)

Sensitivities are hypothetical changes in fair value and cannot be extrapolated because the relationship of changes in assumptions to changes in fair value may not be linear. Also, the effect of a variation in a particular assumption is calculated without changing any other assumption, whereas a change in one factor may result in changes to another. Accordingly, no assurance can be given that actual results would be consistent with the results of these estimates. As a result, actual future changes in MSR values may differ significantly from those displayed above.

Loss on mortgage servicing rights, net is comprised of the following for the years ended December 31, 2019 and 2018:

	<u></u>	For the Y Decem	ed
		2019	2018
Change in fair value of mortgage servicing rights	\$	(25,771)	\$ 3,757
Gain (loss) on sale of mortgage servicing rights		860	(5,937)
Realized and unrealized losses from hedging instruments			(1,445)
Loss on mortgage servicing rights, net	\$	(24,911)	\$ (3,625)

Servicing fees, net is comprised of the following for the years ended December 31, 2019 and 2018:

		December 31,				
		2018				
Contractual servicing fees	\$	15,147	\$	43,065		
Late and ancillary fees		180		603		
Subservicing and other costs		(2,384)		(6,411)		
Servicing fees, net	\$	12,943	\$	37,257		

For the Veer Ended

Note 4.—Goodwill and Intangible assets

In the first quarter of 2015, the Company acquired CCM and recorded \$104.6 million of goodwill and intangible assets of \$33.1 million. The Company reviewed its goodwill and intangible assets for impairment at least annually as of December 31 or more frequently if facts and circumstances indicated that it is more likely than not that the fair value of a reporting unit that has goodwill was less than its carrying value. In the second and third quarters of 2018, the Company performed impairment tests and determined that the goodwill and intangible assets were impaired. As a result, an impairment charge of \$74.7 million related to goodwill and \$13.5 million related to intangible assets was recorded during the quarter ended June 30, 2018, and an additional \$29.9 million and \$4.9 million, respectively, was recorded during the quarter ended September 30, 2018. At December 31, 2019 and 2018, the Company had no goodwill or intangible assets remaining related to the CCM acquisition.

The following table presents the changes in the carrying amount of goodwill for the period indicated:

Balance at December 31, 2017	\$ 104,587
Impairment charges	(104,587)
Balance at December 31, 2018	\$

The following table presents the net carrying amount of the intangible assets acquired as part of the CCM acquisition as of December 31, 2018:

As of December 31, 2018:	Carr	Gross ying Amount	ccumulated mortization	Impa	Aggregate irment Charges	Car	Net rying Amount
Intangible assets:							
Trademark	\$	17,251	\$ (3,801)	\$	(13,450)	\$	_
Customer relationships		10,170	(5,273)		(4,897)		_
Non-compete agreement		5,701	 (5,701)				
Total intangible assets acquired	\$	33,122	\$ (14,775)	\$	(18,347)	\$	_

Note 5.—Other Assets

Other assets consisted of the following:

	Dec	2019	Dec	cember 31, 2018
Right of use asset (See Note 14)	\$	17,169	\$	_
Accounts receivable, net		14,265		16,840
Derivative assets – lending (See Note 8)		7,791		3,351
Prepaid expenses		3,125		3,252
Accrued interest receivable		2,131		1,505
Servicing advances		2,109		3,468
Loans eligible for repurchase from Ginnie Mae		1,686		204
Premises and equipment, net		1,250		1,109
Other		1,110		2,168
Real estate owned – outside trusts		152		1,366
Developed software, net		<u> </u>		572
Total other assets	\$	50,788	\$	33,835

Accounts Receivable, net

Accounts receivable are primarily holdbacks from MSR sales, which are generally collected within six months of the sale date, cash due to the Company related to hedging instruments and fees earned for real estate services rendered, generally collected one month in arrears. Accounts receivable are stated at their carrying value, net of \$280 thousand and \$434 thousand reserve for doubtful accounts as of December 31, 2019 and 2018, respectively.

Servicing Advances

The Company is required to advance certain amounts to meet its contractual loan servicing requirements. The Company advances principal, interest, property taxes and insurance for borrowers that have insufficient escrow accounts, plus any other costs to preserve the properties. Also, the Company will advance funds to maintain, repair and market foreclosed real estate properties. The Company is entitled to recover advances from the borrowers for reinstated and performing loans or from proceeds of liquidated properties. Servicer advances totaled \$2.1 million and \$3.5 million at December 31, 2019 and 2018, respectively, and are all considered fully collectible.

Loans Eligible for Repurchase from Ginnie Mae

The Company routinely sells loans in Ginnie Mae guaranteed MBS by pooling eligible loans through a pool custodian and assigning rights to the loans to Ginnie Mae. When these Ginnie Mae loans are initially pooled and securitized, the Company meets the criteria for sale treatment and de-recognizes the loans. The terms of the Ginnie Mae MBS program allow, but do not require, the Company to repurchase mortgage loans when the borrower has made no payments for three consecutive months. When the Company has the unconditional right, as servicer, to repurchase Ginnie Mae pool loans it has previously sold and are more than 90 days past due, the Company then re-recognizes the loans on its consolidated balance sheets in other assets, at their UPB and records a corresponding liability in other liabilities in the consolidated balance sheets. At December 31, 2019 and 2018, loans eligible for repurchase from GNMA totaled \$1.7 million and \$204 thousand, respectively. As part of the Company's repurchase reserve, the Company records a repurchase provision to provide for estimated losses from the sale or securitization of all mortgage loans, including these loans.

The loans eligible for repurchase from GNMA are in the Company's servicing portfolio. The Company monitors the delinquency of the servicing portfolio and directs the subservicer to mitigate losses on delinquent loans. In the fourth quarter of 2018, the Company sold approximately \$3.9 billion in UPB of GNMA MSRs substantially reducing the loans eligible for repurchase from GNMA.

D. 21

Premises and Equipment, net

	December 31,			
		2019		2018
Premises and equipment (1)	\$	5,829	\$	17,793
Less: Accumulated depreciation (1)		(4,579)		(16,684)
Total premises and equipment, net	\$	1,250	\$	1,109

⁽¹⁾ During the year ended December 31, 2019, the Company wrote off \$12.8 million of fixed assets that had been fully depreciated.

The Company recognized \$721 thousand and \$620 thousand of depreciation expense within general, administrative and other expense in the accompanying consolidated statements of operations and comprehensive loss, for the years ended December 31, 2019 and 2018, respectively.

Developed Software, net

As part of the acquisition of CCM, the purchase price of other assets acquired are listed below as of December 31, 2019 and 2018:

As of December 31, 2019:	-			mulated rtization	Net Carrying Amount	Remaining Life	
Other assets: Developed software	\$	2,719	\$	(2,719)	S —	_	
As of December 31, 2018:	Com	Gross		ccumulated	Net		
Other assets:	Cari	rying Amoui	it Ai	nortization	Carrying Amoun	<u>-</u>	
Developed software	\$	2,719	9 \$	(2,147)	\$ 572		

The Company recognized \$572 thousand of amortization expense associated with developed software within general, administrative and other expense in the accompanying consolidated statements of operations for both years ended December 31, 2019 and 2018. As of December 31, 2019, the Company had no capitalized developed software remaining.

Note 6.—Debt

The following table shows contractual future debt maturities as of December 31, 2019:

		Payments Due by Period						
	·	Less Than	One to	Three to	More Than			
	Total	One Year	Three Years	Five Years	Five Years			
Warehouse borrowings	\$ 701,563	\$ 701,563	\$ —	\$ —	\$ —			
2015 Convertible notes	25,000	25,000	_	_	_			
Long-term debt	62,000	_	_	_	62,000			
Total debt obligations	\$ 788,563	\$ 726,563	\$ —	\$ —	\$ 62,000			

Warehouse Borrowings

The Company, through its subsidiaries, enters into Master Repurchase Agreements with lenders providing warehouse facilities. The warehouse facilities are used to fund, and are secured by, residential mortgage loans that are held for sale. In accordance with the terms of the Master Repurchase Agreements, the Company is required to maintain cash balances with the lender as additional collateral for the borrowings which are included in restricted cash in the accompanying consolidated balance sheets. At December 31, 2019, the Company was in compliance with all financial covenants from its lenders.

The following table presents certain information on warehouse borrowings for the periods indicated:

	N	Aaximum	Balance Outstanding at Allov		Allowable				
		Sorrowing Capacity	De	cember 31, 2019	Dec	cember 31, 2018	Advance Rates (%)	Rate Range	Maturity Date
Short-term borrowings:									
Repurchase agreement 1 (1)	\$	75,000	\$	25,953	\$	84,897	80 - 98	1ML + 2.00 - 4.00%	April 1, 2020
Repurchase agreement 2		100,000		72,971		47,108	90 - 98	1ML + 2.00 - 3.25%	May 28, 2020
Repurchase agreement 3 (1)		425,000		250,722		35,920	90 - 97	1ML + 2.25%	March 17, 2020
Repurchase agreement 4		200,000		119,838		80,141	100	1ML + 1.75%	July 30, 2020
Repurchase agreement 5 (1)		300,000		72,666		23,370	100	Note Rate - 0.50%	March 31, 2020
Repurchase agreement 6		600,000		159,413		12,701	95 - 98	1ML + 1.75%	June 25, 2020
Total warehouse borrowings	\$	1,700,000	\$	701,563	\$	284,137			

⁽¹⁾ These lines are in the process of being renewed.

The following table presents certain information on warehouse borrowings for the periods indicated:

	December 31,			
		2019		2018
Maximum outstanding balance during the year	\$	971,595	\$	650,342
Average balance outstanding for the year		547,421		440,273
UPB of underlying collateral (mortgage loans)		763,309		343,724
Weighted average interest rate for period		4.30 %	o	4.67 %

For the year ended

MSR Financings

In February 2018, IMC (Borrower), amended the Line of Credit Promissory Note (FHLMC and GNMA Financing) originally entered into in August 2017, increasing the maximum borrowing capacity of the revolving line of credit to \$50.0 million and extending the term to January 31, 2019. In May 2018, the agreement was amended increasing the maximum borrowing capacity of the revolving line of credit to \$60.0 million, increasing the borrowing capacity up to 60% of the fair market value of the pledged mortgage servicing rights and reducing the interest rate per annum to one-month LIBOR plus 3.0%. As part of the May 2018 amendment, the obligations under the line of credit are secured by FHLMC and GNMA pledged mortgage servicing rights (subject to an acknowledge agreement) and is guaranteed by IRES. In April 2019, the maturity of the line was extended to January 31, 2020. At December 31, 2019, there were no outstanding borrowings under the FHLMC and GNMA Financing and approximately \$24.4 million was available for borrowing. In January 2020,

the maturity of the line was extended to March 31, 2020.

The following table presents certain information on MSR Financings for the periods indicated:

		or tne year en December 31	
	2019		2018
Maximum outstanding balance during the year	\$ 5.	,000 \$	67,000
Average balance outstanding for the year		200	45,532
Weighted average rate for period (1)	:	8.00 %	5.82 %

⁽¹⁾ As part of the agreement, the Company paid an origination fee to the lender which was deferred and amortized on a straight-line basis as an adjustment to the yield over the term of the agreement.

Convertible Notes

In May 2015, the Company issued \$25.0 million Convertible Promissory Notes (2015 Convertible Notes). The 2015 Convertible Notes mature on or before May 9, 2020 and accrues interest at a rate of 7.5% per annum, to be paid quarterly. The Company had approximately \$50 thousand in transaction costs which were deferred and amortized over the life of the 2015 Convertible Notes.

Noteholders may convert all or a portion of the outstanding principal amount of the 2015 Convertible Notes into shares of the Company's common stock (Conversion Shares) at a rate of \$21.50 per share, subject to adjustment for stock splits and dividends (the Conversion Price). The Company has the right to convert the entire outstanding principal of the 2015 Convertible Notes into Conversion Shares at the Conversion Price if the market price per share of the common stock, as measured by the average volume-weighted closing stock price per share of the common stock on the NYSE AMERICAN (or any other U.S. national securities exchange then serving as the principal such exchange on which the shares of Common Stock are listed), reaches the level of \$30.10, for any twenty (20) trading days in any period of thirty (30) consecutive trading days after the Closing Date. Upon conversion of the 2015 Convertible Notes by the Company, the entire amount of accrued and unpaid interest (and all other amounts owing) under the 2015 Convertible Notes are immediately due and payable. To the extent the Company pays any cash dividends on its shares of common stock prior to conversion of the 2015 Convertible Notes, upon conversion of the 2015 Convertible Notes, the noteholders will also receive such dividends on an as-converted basis less the amount of interest paid by the Company prior to such dividend.

Long-term Debt

The Company carries its Long-term Debt (Junior Subordinated Notes) at estimated fair value as more fully described in Note 10.—Fair Value of Financial Instruments. The following table shows the remaining principal balance and fair value of junior subordinated notes issued as of December 31, 2019 and 2018:

December 31

	Determber 51,		
	2019	2018	
Junior Subordinated Notes (1)	\$ 62,000	\$ 62,000	
Fair value adjustment	(16,566)	(17,144)	
Total Junior Subordinated Notes	\$ 45,434	\$ 44,856	

⁽¹⁾ Stated maturity of March 2034; requires quarterly interest payments at a variable rate of 3-month LIBOR plus 3.75% per annum. At December 31, 2019, the interest rate was 5.71%.

Note 7.—Securitized Mortgage Trusts

Securitized Mortgage Trust Assets

Securitized mortgage trust assets are comprised of the following at December 31, 2019 and 2018:

	December 31,	December 31,		
	2019	2018		
Securitized mortgage collateral, at fair value	\$ 2,628,064	\$ 3,157,071		
REO, at net realizable value (NRV)	6,682	8,519		
Total securitized mortgage trust assets	\$ 2,634,746	\$ 3,165,590		

Securitized Mortgage Collateral

Securitized mortgage collateral consisted of the following:

	December 31, 2019	December 31, 2018
Mortgages secured by residential real estate	\$ 2,649,997	\$ 3,245,606
Mortgages secured by commercial real estate	210,536	294,599
Fair value adjustment	(232,469)	(383,134)
Total securitized mortgage collateral, at fair value	\$ 2,628,064	\$ 3,157,071

As of December 31, 2019, the Company was also a master servicer of mortgages for others of approximately \$268.1 million in UPB that were primarily collateralizing REMIC securitizations, compared to \$328.7 million at December 31, 2018. Related fiduciary funds are held in trust for investors in non-interest bearing accounts and are not included in the Company's consolidated balance sheets. The Company may also be required to advance funds or cause loan servicers to advance funds to cover principal and interest payments not received from borrowers depending on the status of their mortgages.

Real Estate Owned

The Company's REO consisted of the following:

	December 31,				
	 2019		2018		
REO	\$ 21,195	\$	17,813		
Impairment (1)	 (14,361)		(7,928)		
Ending balance	\$ 6,834	\$	9,885		
REO inside trusts	\$ 6,682	\$	8,519		
REO outside trusts	 152		1,366		
Total	\$ 6,834	\$	9,885		

⁽¹⁾ Impairment represents the cumulative write-downs of net realizable value subsequent to foreclosure.

Securitized Mortgage Trust Liabilities

Securitized mortgage trust liabilities, which are recorded at estimated fair market value as more fully described in Note 10., are comprised of the following at December 31, 2019 and 2018:

	December 31,	December 31,
	2019	2018
Securitized mortgage borrowings	\$ 2,619,210	\$ 3,148,215

Securitized Mortgage Borrowings – Non-recourse

Selected information on securitized mortgage borrowings for the periods indicated consisted of the following (dollars in millions):

Securitized

		borro	tgage wings			
			ling as of	Dow	as of Interest Do	tos (0/)
		Decem	ber 31,	Kan	ge of Interest Ra Interest Rate	Interest Rate
	Original Issuance			Fixed Interest	Margins over One-Month	Margins after Contractual
Year of Issuance	Amount	2019	2018	Rates	LIBOR (1)	Call Date (2)
2002	\$ 3,876.1	\$ 3.9	\$ 4.8	5.25 - 12.00	0.27 - 2.75	0.54 - 3.68
2003	5,966.1	26.8	35.9	4.34 - 12.75	0.27 - 3.00	0.54 - 4.50
2004	17,710.7	354.3	557.0	3.58 - 5.56	0.25 - 2.50	0.50 - 3.75
2005	13,387.7	1,581.7	1,752.9	_	0.24 - 2.90	0.48 - 4.35
2006	5,971.4	2,018.0	2,113.2	6.25	0.10 - 2.75	0.20 - 4.13
2007	3,860.5	1,121.1	1,265.1	_	0.06 - 2.00	0.12 - 3.00
Subtotal contractual principal balance (3)		5,105.8	5,728.9			
Fair value adjustment		(2,486.6)	(2,580.7)			
Total securitized mortgage borrowings		\$ 2,619.2	\$ 3,148.2			

⁽¹⁾ One-month LIBOR was 1.76% as of December 31, 2019.

As of December 31, 2019, expected principal reductions of the securitized mortgage borrowings, which is based on contractual principal payments and expected prepayment and loss assumptions for securitized mortgage collateral, was as follows (dollars in millions):

	Payments Due by Period											
		Total	Less Than One Year		One to Three Years		Three to Five Years		More Than Five Years			
Securitized mortgage borrowings (1)	\$	5,105.8	\$	490.3	\$	728.1	\$	479.8	\$	3,407.6		

⁽¹⁾ Represents the outstanding balance in accordance with trustee reporting.

Change in fair value of net trust assets, including trust REO losses

Changes in fair value of net trust assets, including trust REO losses are comprised of the following for the years ended December 31, 2019 and 2018:

For the Veer Ended

	December 31,					
		2019		2018		
Change in fair value of net trust assets, excluding REO	\$	(3,397)	\$	(1,599)		
Losses from REO		(6,434)		(950)		
Change in fair value of net trust assets, including trust REO losses	\$	(9,831)	\$	(2,549)		

Note 8.—Derivative Instruments

Derivative Assets and Liabilities, Lending

The mortgage lending operation enters into IRLCs with prospective borrowers to originate mortgage loans at a specified interest rate and Hedging Instruments and forward delivery loan commitments to hedge the fair value changes associated with changes in interest rates relating to its mortgage loan origination operations. The fair value of IRLCs, Hedging Instruments and forward delivery loan commitments related to mortgage loan origination are included in other assets or liabilities in the consolidated balance sheets. As of December 31, 2019, the estimated fair value of IRLCs was an

⁽²⁾ Interest rate margins are generally adjusted when the unpaid principal balance is reduced to less than 10-20% of the original issuance amount, or if certain other triggers are met.

⁽³⁾ Represents the outstanding balance in accordance with trustee reporting.

asset of \$7.8 million while Hedging Instruments were a liability of \$651 thousand. Forward delivery commitments had no fair value as they were marked within LHFS to the price of the trades. As of December 31, 2018, the estimated fair value of IRLCs was an asset of \$3.4 million while Hedging Instruments and forward delivery loan commitments were liabilities of \$440 thousand and \$243 thousand, respectively.

The following table includes information for the derivative assets and liabilities, lending for the periods presented:

						Total Gain	s (Los	sses)	
		Notional	Amou	nt		For the Ye	e Year Ended		
	De	ecember 31,	December 31,			,			
		2019		2018		2019		2018	
Derivative – IRLC's (1)	\$	419,035	\$	183,595	\$	4,440	\$	(1,006)	
Derivative – TBA MBS (2)		485,459		88,018		(5,595)		9,658	
Derivative – Forward delivery loan commitment (3)		232,530		150,000		_		(243)	

⁽¹⁾ Amounts included in gain on sale of loans, net within the accompanying consolidated statements of operations and comprehensive loss.

Note 9.—Redeemable Preferred Stock

At December 31, 2019, the Company has outstanding \$67.8 million liquidation preference of Series B and Series C Preferred Stock. The holders of each series of Preferred Stock, which are non-voting and redeemable at the option of the Company, retain the right to a \$25.00 per share liquidation preference in the event of a liquidation of the Company and the right to receive dividends on the Preferred Stock if any such dividends are declared.

As disclosed within Note 14.—Commitments and Contingencies, on July 16, 2018, the court entered its Judgement Order and Memorandum Opinion on the matter entitled Timm, v. Impac Mortgage Holdings, Inc., a purported class action purportedly on behalf of holders of the Company's 9.375% Series B Cumulative Redeemable Preferred Stock (Preferred B) and 9.125% Series C Cumulative Redeemable Preferred Stock (Preferred C). The court entered judgement in favor of the Company on all claims related to the Preferred C holders. The judgment also declared (among other items disclosed in Note 14) that two-thirds of the Preferred B holders were required to approve the 2009 amendments to the Preferred B Articles Supplementary, which was not obtained, rendering the 2009 amendments to the Preferred B Articles Supplementary invalid and leaving the 2004 Preferred B Articles Supplementary in effect. As a result of the Judgement Order, all rights of the Preferred B holders under the 2004 Articles are deemed reinstated. Subject to an appeal, the Company has cumulative undeclared dividends in arrears of approximately \$16.0 million, or approximately \$24.02 per outstanding share of Preferred B, increasing the liquidation value to approximately \$49.02 per share. Additionally, every quarter the cumulative undeclared dividends in arrears will increase by \$0.5859 per share, or approximately \$390 thousand. As the Company prevailed on all claims related to the Preferred C holders, based on the court's ruling there are no Preferred C dividends owed. The liquidation preference, inclusive of the cumulative undeclared dividends in arrears, is only payable upon voluntary or involuntary liquidation, dissolution or winding up of the Company's affairs.

Note 10.—Fair Value of Financial Instruments

The use of fair value to measure the Company's financial instruments is fundamental to its consolidated financial statements and is a critical accounting estimate because a substantial portion of its assets and liabilities are recorded at estimated fair value.

FASB ASC 825 requires disclosure of the estimated fair value of certain financial instruments and the methods and significant assumptions used to estimate such fair values. The Company uses exit price notion when measuring the

⁽²⁾ Amounts included in gain on sale of loans, net and loss on mortgage servicing rights, net within the accompanying consolidated statements of operations and comprehensive loss.

⁽³⁾ As of December 31, 2019 and 2018, \$232.5 million and \$50.0 million, respectively, in mortgage loans have been allocated to forward delivery loan commitments and are recorded at fair value within LHFS in the accompanying consolidated balance sheets. As of December 31, 2018, \$100.0 million of forward loan commitments remained unallocated and are recorded at fair value within other liabilities in the accompanying consolidated balance sheets.

fair values of financial instruments for disclosure purposes. The following table presents the estimated fair value of financial instruments included in the consolidated financial statements as of the dates indicated:

		Decemb	er 31, 2019		December 31, 2018						
	Carrying	Es	timated Fair	Value	Carrying	Es	timated Fair Value				
	Amount	Level 1	Level 2	Level 3	Amount	Level 1	Level 2	Level 3			
Assets											
Cash and cash equivalents	\$ 24,666	\$ 24,666	\$ —	\$ —	\$ 23,200	\$ 23,200	\$ —	\$ —			
Restricted cash	12,466	12,466	_	_	6,989	6,989	_	_			
Mortgage loans held-for-sale	782,143	_	782,143	_	353,601	_	353,601	_			
Mortgage servicing rights	41,470	_	_	41,470	64,728	_	_	64,728			
Derivative assets, lending, net (1)	7,791	_	_	7,791	3,351	_	_	3,351			
Mortgage-backed securities	_	_	_	_	1,000	_	1,000	_			
Securitized mortgage collateral	2,628,064	_	_	2,628,064	3,157,071	_	_	3,157,071			
Liabilities											
Warehouse borrowings	\$ 701,563	\$ —	\$ 701,563	\$ —	\$ 284,137	\$ —	\$ 284,137	\$ —			
Convertible notes	24,996	_	_	24,996	24,985	_	_	24,985			
Long-term debt	45,434	_	_	45,434	44,856	_	_	44,856			
Securitized mortgage borrowings	2,619,210	_	_	2,619,210	3,148,215	_	_	3,148,215			
Derivative liabilities, lending, net (2)	651	_	651	_	683	_	683	_			

- (1) Represents IRLCs and are included in other assets in the accompanying consolidated balance sheets.
- (2) Represents Hedging Instruments and are included in other liabilities in the accompanying consolidated balance sheets.

The fair value amounts above have been estimated by management using available market information and appropriate valuation methodologies. Considerable judgment is required to interpret market data to develop the estimates of fair value in both inactive and orderly markets. Accordingly, the estimates presented are not necessarily indicative of the amounts that could be realized in a current market exchange. The use of different market assumptions and/or estimation methodologies may have a material effect on the estimated fair value amounts.

For the consolidated non-recourse securitizations, the fair value of the financial liabilities of the consolidated non-recourse securitizations (securitized mortgage borrowings) is more observable than the fair value of the financial assets of the consolidated non-recourse securitizations (securitized mortgage collateral). As a result, the financial liabilities of the consolidated non-recourse securitizations are being measured at fair value and the financial assets are being measured in consolidation as: (1) the sum of the fair value of the securitized mortgage borrowings and the fair value of the beneficial interests retained by the Company less (2) the carrying value of any REO. The resulting amount is allocated to securitized mortgage collateral.

For securitized mortgage collateral and securitized mortgage borrowings, the underlying Alt-A (non-conforming) residential and commercial loans and mortgage-backed securities market have experienced significant declines in market activity, along with a lack of orderly transactions. The Company's methodology to estimate fair value of these assets and liabilities include the use of internal pricing techniques such as the net present value of future expected cash flows (with observable market participant assumptions, where available) discounted at a rate of return based on the Company's estimates of market participant requirements. The significant assumptions utilized in these internal pricing techniques, which are based on the characteristics of the underlying collateral, include estimated credit losses, estimated prepayment speeds and appropriate discount rates.

Refer to *Recurring Fair Value Measurements* below for a description of the valuation methods used to determine the fair value of securitized mortgage collateral and borrowings, derivative assets and liabilities, long-term debt, mortgage servicing rights, loans held-for-sale.

The carrying amounts of cash and cash equivalents and restricted cash approximates fair value.

Warehouse borrowings carrying amounts approximate fair value due to the short-term nature of the liabilities and do not present unanticipated interest rate or credit concerns.

Convertible notes are recorded at amortized cost, which approximates fair value due to the short duration to maturity.

MSR financings carrying amount approximates fair value as the underlying facility bears interest at a rate that is periodically adjusted based on a market index.

Fair Value Hierarchy

The application of fair value measurements may be on a recurring or nonrecurring basis depending on the accounting principles applicable to the specific asset or liability or whether management has elected to carry the item at its estimated fair value.

FASB ASC 820-10-35 specifies a hierarchy of valuation techniques based on whether the inputs to those techniques are observable or unobservable. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect the Company's market assumptions. These two types of inputs create the following fair value hierarchy:

- Level 1—Quoted prices (unadjusted) in active markets for identical instruments or liabilities that an entity has the ability to assess at measurement date.
- Level 2—Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; inputs other than quoted prices that are observable for an asset or liability, including interest rates and yield curves observable at commonly quoted intervals, prepayment speeds, loss severities, credit risks and default rates; and market-corroborated inputs.
- Level 3—Valuations derived from valuation techniques in which one or more significant inputs or significant value drivers are unobservable.

This hierarchy requires the Company to use observable market data, when available, and to minimize the use of unobservable inputs when estimating fair value.

As a result of the lack of observable market data resulting from inactive markets, the Company has classified its securitized mortgage collateral and borrowings, derivative assets (IRLCs), convertible notes and long-term debt as Level 3 fair value measurements. Level 3 assets and liabilities measured at fair value on a recurring basis were approximately 77% and 99% and 99%, respectively, of total assets and total liabilities measured at estimated fair value at December 31, 2019 and 2018.

Recurring Fair Value Measurements

The Company assesses its financial instruments on a quarterly basis to determine the appropriate classification within the fair value hierarchy, as defined by FASB ASC Topic 810. Transfers between fair value classifications occur when there are changes in pricing observability levels. Transfers of financial instruments among the levels occur at the beginning of the reporting period. There were no material transfers between Level 1, Level 2 or Level 3 classified instruments during the year ended December 31, 2019.

The following tables present the Company's assets and liabilities that are measured at estimated fair value on a recurring basis, including financial instruments for which the Company has elected the fair value option at December 31, 2019 and 2018, based on the fair value hierarchy:

		Recurring Fair Value Measurements											
		D	ecember 31,	2019		D	2018						
	Le	vel 1	Level 2	Level 3	Level 1		Level 2	Level 3					
Assets													
Mortgage loans held-for-sale	\$	_	\$ 782,143	\$ —	\$	_	\$ 353,601	\$ —					
Mortgage-backed securities		_	_	_			1,000	_					
Derivative assets, lending, net (1)		_	_	7,791		_	_	3,351					
Mortgage servicing rights		_	_	41,470		_	_	64,728					
Securitized mortgage collateral		_	_	2,628,064		_	_	3,157,071					
Total assets at fair value	\$		\$ 782,143	\$ 2,677,325	\$		\$ 354,601	\$ 3,225,150					
Liabilities													
Securitized mortgage borrowings	\$	_	\$ —	\$ 2,619,210	\$	_	\$ —	\$ 3,148,215					
Long-term debt		_	_	45,434		_	_	44,856					
Derivative liabilities, lending, net (2)		_	651	_		_	683	_					
Total liabilities at fair value	\$		\$ 651	\$ 2,664,644	\$		\$ 683	\$ 3,193,071					

⁽¹⁾ At December 31, 2019, derivative assets, lending, net included \$7.8 million in IRLCs and is included in other assets in the accompanying consolidated balance sheets. At December 31, 2018, derivative assets, lending, net included \$3.4 million in IRLCs and is included in other assets in accompanying consolidated balance sheets.

The following tables present reconciliation for all assets and liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3) for the years ended the years ended December 31, 2019 and 2018:

			ring Fair Valu ar Ended Dece	e Measurements mber 31, 2019	
Friender Describer 21, 2019	Securitized mortgage collateral	Securitized mortgage borrowings	Mortgage servicing rights	Interest rate lock commitments, net	Long- term debt
Fair value, December 31, 2018	\$ 3,157,071	\$ (3,148,215)	\$ 64,728	\$ 3,351	\$ (44,856)
Total gains (losses) included in earnings:					
Interest income (1)	11,279	_	_	_	_
Interest expense (1)		(38,127)		_	(425)
Change in fair value	52,499	(55,896)	(25,771)	4,440	(1,429)
Change in instrument specific credit risk	_	_	_	_	1,276 (2)
Total gains (losses) included in earnings	63,778	(94,023)	(25,771)	4,440	(578)
Transfers in and/or out of Level 3	_	`		_	
Purchases, issuances and settlements:					
Purchases	_	_	_	_	_
Issuances	_	_	2,491	_	_
Settlements	(592,785)	623,028	22	_	_
Fair value, December 31, 2019	\$ 2,628,064	\$ (2,619,210)	\$ 41,470	\$ 7,791	\$ (45,434)
Unrealized (losses) gains still held (3)	\$ (232,469)	\$ 2,486,615	\$ 41,470	\$ 7,791	\$ 16,566

⁽¹⁾ Amounts primarily represent accretion to recognize interest income and interest expense using effective yields based on estimated fair values for trust assets and trust liabilities. Net interest income, including cash received and paid, was \$9.4 million for the year ended December 31, 2019. The difference between accretion of interest income and expense and the amounts of interest income and expense recognized in the consolidated statements of operations and comprehensive loss is primarily from contractual interest on the securitized mortgage collateral and borrowings.

⁽²⁾ At December 31, 2019 and 2018, derivative liabilities, lending, net are included in other liabilities in the accompanying consolidated balance sheets.

⁽²⁾ Amount represents the change in instrument specific credit risk in other comprehensive earnings in the consolidated statements of operations and comprehensive loss as required by the adoption of ASU 2016-01.

⁽³⁾ Represents the amount of unrealized gains (losses) relating to assets and liabilities classified as Level 3 that are still held and reflected in the fair values at December 31, 2019.

Level 3 Recurring Fair Value Measurements	
For the Year Ended December 31, 2018	

Fair value, December 31, 2017	Securitized mortgage collateral \$ 3,662,008	Securitized mortgage borrowings (3,653,265)	Mortgage servicing rights \$ 154,405	Interest rate lock commitments, net \$ 4,357	Long- term debt \$ (44,982)	Contingent consideration \$ (554)
Total gains (losses) included in earnings:						
Interest income (1)	28,165	_	_	_	_	_
Interest expense (1)	_	(60,889)	_	_	(711)	_
Change in fair value	43,272	(44,871)	3,757	(1,006)	3,978	_
Change in instrument specific credit risk					(3,141)(2)	
Total gains (losses) included in earnings	71,437	(105,760)	3,757	(1,006)	126	
Transfers in and/or out of Level 3	_	_	_	_	_	_
Purchases, issuances and settlements:						
Purchases	_	_	_	_	_	_
Issuances	_	_	24,879	_	_	_
Settlements	(576,374)	610,810	(118,313)			554
Fair value, December 31, 2018	\$ 3,157,071	\$ (3,148,215)	\$ 64,728	\$ 3,351	\$ (44,856)	\$
Unrealized (losses) gains still held (3)	\$ (383,134)	\$ 2,580,638	\$ 64,728	\$ 3,351	\$ 17,144	\$

- (1) Amounts primarily represent accretion to recognize interest income and interest expense using effective yields based on estimated fair values for trust assets and trust liabilities. Net interest income, including cash received and paid, was \$7.7 million for the year ended December 31, 2018. The difference between accretion of interest income and expense and the amounts of interest income and expense recognized in the consolidated statements of operations and comprehensive loss is primarily from contractual interest on the securitized mortgage collateral and borrowings.
- (2) Amount represents the change in instrument specific credit risk in other comprehensive earnings in the consolidated statements of operations and comprehensive loss as required by the adoption of ASU 2016-01.
- (3) Represents the amount of unrealized gains (losses) relating to assets and liabilities classified as Level 3 that were still held and reflected in the fair values at December 31, 2018.

The following table presents quantitative information about the valuation techniques and unobservable inputs applied to Level 3 fair value measurements for financial instruments measured at fair value on a recurring and non-recurring basis at December 31, 2019.

		stimated	Valuation	Unobservable	Range of	Weighted
Financial Instrument	F	air Value	Technique	Input	Inputs	Average
Assets and liabilities backed by real estate						
Securitized mortgage collateral, and	\$	2,628,064	DCF	Prepayment rates	2.5 - 34.6 %	9.1 %
Securitized mortgage borrowings	(2,619,210)			Default rates	0.02 - 3.9 %	1.6 %
				Loss severities	6.3 - 91.7 %	55.4 %
				Discount rates	2.9 - 25.0 %	3.8 %
Other assets and liabilities						
Mortgage servicing rights	\$	41,470	DCF	Discount rate	9.0 - 13.0 %	9.2 %
				Prepayment rates	8.0 - 88.8 %	15.2 %
Derivative assets - IRLCs, net		7,791	Market pricing	Pull-through rate	21.1 - 99.9 %	76.3 %
Long-term debt		(45,434)	DCF	Discount rate	9.0 %	9.0 %

DCF = Discounted Cash Flow

For assets and liabilities backed by real estate, a significant increase in discount rates, default rates or loss severities would result in a significantly lower estimated fair value. The effect of changes in prepayment speeds would have differing effects depending on the seniority or other characteristics of the instrument. For other assets and liabilities, a significant increase in discount rates would result in a significantly lower estimated fair value. A significant increase or decrease in pull-through rate assumptions would result in a significant increase or decrease in the fair value of IRLCs. The Company believes that the imprecision of an estimate could be significant.

The following tables present the changes in recurring fair value measurements included in net losses for the years ended December 31, 2019 and 2018:

						Recurring	g Fa	air Value l	Mea	surements			
					Ch	anges in F	`air	Value Inc	lude	ed in Net Lo	SS		
					1	For the Ye	ar I	Ended Dec	emb	er 31, 2019)		
								Change in	ı Fai	r Value of			
	Iı	nterest	I	nterest	N	et Trust	L	ong-term	Oth	er Income	G	ain on Sale	
	Inc	come (1)	Ex	pense (1)		Assets		Debt	an	d Expense	of	Loans, net	Total
Securitized mortgage collateral	\$	11,279	\$	_	\$	52,499	\$	_	\$		\$	_	\$ 63,778
Securitized mortgage borrowings		_		(38,127)		(55,896)		_		_		_	(94,023)
Long-term debt		_		(425)		_		(1,429)		_		_	(1,854)
Mortgage servicing rights (2)		_		_		_		_		(25,771)		_	(25,771)
Mortgage loans held-for-sale		_		_		_		_		_		15,810	15,810
Derivative assets — IRLCs		_		_		_		_		_		4,440	4,440
Derivative liabilities — Hedging Instruments												32	32
Total	\$	11,279	\$	(38,552)	\$	(3,397)(3) \$	(1,429)	\$	(25,771)	\$	20,282	\$ (37,588)

- (1) Amounts primarily represent accretion to recognize interest income and interest expense using effective yields based on estimated fair values for trust assets and trust liabilities.
- (2) Included in loss on mortgage servicing rights, net in the consolidated statements of operations and comprehensive loss.
- (3) For the year ended December 31, 2019, change in the fair value of trust assets, excluding REO was \$3.4 million.

						Recurring	F	air Value	Mea	surements			
					Cl	hanges in F	air	Value Inc	clude	ed in Net Lo	SS		
						For the Yea	ır l	Ended Dec	ceml	ber 31, 2018			
								Change in	ı Fai	r Value of			
	Iı	iterest	- 1	nterest	erest Net Trust Long-term		Oth	ner Income	Ga	in on Sale			
	Inc	ome (1)	Ex	pense (1)		Assets		Debt	an	d Expense	of I	Loans, net	Total
Securitized mortgage collateral	\$	28,165	\$		\$	43,272	\$		\$		\$		\$ 71,437
Securitized mortgage borrowings		_		(60,889)		(44,871)		_		_		_	(105,760)
Long-term debt		_		(711)		_		3,978		_		_	3,267
Mortgage servicing rights (2)		_		_		_		_		3,757		_	3,757
Mortgage loans held-for-sale		_		_		_		_		_		(14,762)	(14,762)
Derivative assets — IRLCs		_		_		_		_		_		(1,006)	(1,006)
Derivative liabilities — Hedging Instruments										(85)		(1,019)	(1,104)
Total	\$	28,165	\$	(61,600)	\$	(1,599) (3)	\$	3,978	\$	3,672	\$	(16,787)	\$ (44,171)

- (1) Amounts primarily represent accretion to recognize interest income and interest expense using effective yields based on estimated fair values for trust assets and trust liabilities.
- (2) Included in loss on mortgage servicing rights, net in the consolidated statements of operations and comprehensive loss.
- (3) For the year ended December 31, 2018, change in the fair value of trust assets, excluding REO was \$1.6 million.

The following is a description of the measurement techniques for items recorded at estimated fair value on a recurring basis.

Mortgage servicing rights—The Company elected to carry its mortgage servicing rights arising from its mortgage loan origination operation at fair value. The fair value of mortgage servicing rights is based upon a discounted cash flow model. The valuation model incorporates assumptions that market participants would use in estimating the fair value of servicing. These assumptions include estimates of prepayment speeds, discount rate, cost to service, escrow account earnings, contractual servicing fee income, prepayment and late fees, among other considerations. Mortgage servicing rights are considered a Level 3 measurement at December 31, 2019 and 2018.

Mortgage loans held-for-sale—The Company elected to carry its mortgage LHFS originated or acquired from its mortgage lending operation at fair value. Fair value is based on quoted market prices, where available, prices for other traded mortgage loans with similar characteristics, and purchase commitments and bid information received from market participants. Given the meaningful level of secondary market activity for mortgage loans, active pricing is available for similar assets and accordingly, the Company classifies its mortgage LHFS as a Level 2 measurement at December 31, 2019 and 2018.

Mortgage-backed securities—The Company invested in mortgage-backed securities collateralized by NonQM loans originated by the Company and sold to third party investors. Fair value is based on prices for other traded mortgage-backed securities with similar characteristics and bid information received from market participants. Given the market

pricing for other traded mortgage-backed securities, active pricing is available for similar assets and accordingly, the Company classifies mortgage-backed securities as a Level 2 measurement at December 31, 2018.

Securitized mortgage collateral—The Company elected to carry its securitized mortgage collateral at fair value. These assets consist primarily of non-conforming mortgage loans securitized between 2002 and 2007. Fair value measurements are based on the Company's internal models used to compute the net present value of future expected cash flows, with observable market participant assumptions, where available. The Company's assumptions include its expectations of inputs that other market participants would use in pricing these assets. These assumptions include judgments about the underlying collateral, prepayment speeds, estimated future credit losses, forward interest rates, investor yield requirements and certain other factors. As of December 31, 2019, securitized mortgage collateral had an unpaid principal balance of \$2.9 billion, compared to an estimated fair value on the Company's consolidated balance sheets of \$2.6 billion. The aggregate unpaid principal balance exceeds the fair value by \$0.3 billion at December 31, 2019. As of December 31, 2019, the unpaid principal balance of loans 90 days or more past due was \$0.4 billion compared to an estimated fair value of \$0.2 billion. The aggregate unpaid principal balances of loans 90 days or more past due exceed the fair value by \$0.2 billion at December 31, 2019. Securitized mortgage collateral is considered a Level 3 measurement at December 31, 2019 and 2018.

Securitized mortgage borrowings—The Company elected to carry all of its securitized mortgage borrowings at fair value. These borrowings consist of individual tranches of bonds issued by securitization trusts and are primarily backed by non-conforming mortgage loans. Fair value measurements include the Company's judgments about the underlying collateral and assumptions such as prepayment speeds, estimated future credit losses, forward interest rates, investor yield requirements and certain other factors. As of December 31, 2019, securitized mortgage borrowings had an outstanding principal balance of \$2.9 billion, net of \$2.2 billion in bond losses, compared to an estimated fair value of \$2.6 billion. The aggregate outstanding principal balance exceeds the fair value by \$0.3 billion at December 31, 2019. Securitized mortgage borrowings are considered a Level 3 measurement at December 31, 2019 and 2018.

Contingent consideration—Contingent consideration was applicable to the acquisition of CCM and was estimated and recorded at fair value at the acquisition date as part of purchase price consideration. In the fourth quarter of 2017, the earn-out period ended and the remaining \$554 thousand in contingent consideration payments were paid during the three months ended March 31, 2018. The Company has no further obligations related to contingent consideration as of December 31, 2018.

Long-term debt—The Company elected to carry its remaining long-term debt (consisting of junior subordinated notes) at fair value. These securities are measured based upon an analysis prepared by management, which considered the Company's own credit risk, including settlements with trust preferred debt holders and discounted cash flow analysis. As of December 31, 2019, long-term debt had an unpaid principal balance of \$62.0 million compared to an estimated fair value of \$45.4 million. The aggregate unpaid principal balance exceeds the fair value by \$16.6 million at December 31, 2019. The long-term debt is considered a Level 3 measurement at December 31, 2019 and 2018.

Derivative assets and liabilities, Lending—The Company's derivative assets and liabilities are carried at fair value as required by GAAP and are accounted for as free standing derivatives. The derivatives include IRLCs with prospective residential mortgage borrowers whereby the interest rate on the loan is determined prior to funding and the borrowers have locked in that interest rate. These commitments are determined to be derivative instruments in accordance with GAAP. The derivatives also include hedging instruments (typically TBA MBS) used to hedge the fair value changes associated with changes in interest rates relating to its mortgage lending originations as well as mortgage servicing rights. The Company hedges the period from the interest rate lock (assuming a fall-out factor) to the date of the loan sale. The estimated fair value of IRLCs are based on underlying loan types with similar characteristics using the TBA MBS market, which is actively quoted and validated through external sources. The data inputs used in this valuation include, but are not limited to, loan type, underlying loan amount, note rate, loan program, expected sale date of the loan, and current market interest rates. These valuations are adjusted at the loan level to consider the servicing release premium and loan pricing adjustments specific to each loan. For all IRLCs, the base value is then adjusted for the anticipated Pull-through Rate. The anticipated Pull-through Rate is an unobservable input based on historical experience, which results in classification of IRLCs as a Level 3 measurement at December 31, 2019 and 2018. The fair value of the Hedging Instruments is based on the actively quoted TBA MBS market using observable inputs related to characteristics of the underlying MBS stratified by product, coupon and settlement date. Therefore, the Hedging Instruments are classified as a Level 2 measurement at December 31, 2019 and 2018.

Nonrecurring Fair Value Measurements

The Company is required to measure certain assets and liabilities at estimated fair value from time to time. These fair value measurements typically result from the application of specific accounting pronouncements under GAAP. The fair value measurements are considered nonrecurring fair value measurements under FASB ASC 820-10.

The following table presents financial and non-financial assets and liabilities measured using nonrecurring fair value measurements at December 31, 2019 and 2018, respectively:

	Nonrecurring Fair Value Measurements										
	D	ecember 31, 2019)	December 31, 2018							
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3					
REO (1)	\$	\$ 6,834	\$ —	\$ —	\$ 9,885	\$ —					

(1) Balance represents REO at December 31, 2019 and December 31, 2018 which has been impaired subsequent to foreclosure.

The following table presents total losses on financial and non-financial assets and liabilities measured using nonrecurring fair value measurements for the years ended December 31, 2019 and 2018, respectively:

	 Total Losses (1)						
	For the Year Ended December						
	2019		2018				
REO (2)	\$ (6,434)	\$	(950)				
Intangible assets	_		(18,347)				
Goodwill	_		(104,587)				

(1) Total losses reflect losses from all nonrecurring measurements during the period.

REO is adjusted to the estimated fair value of the residential real estate less estimated selling and holding costs, offset by expected contractual mortgage insurance proceeds to be received, if any. Subsequently, REO is recorded at the lower of carrying value or estimated fair value less costs to sell. REO balance representing REOs which have been impaired subsequent to foreclosure are subject to nonrecurring fair value measurement and included in the nonrecurring fair value measurements tables. Fair values of REO are generally based on observable market inputs, and considered Level 2 measurements at December 31, 2019 and 2018.

Intangible assets— The methodology used to determine the fair value as well as measure potential impairment of trademarks includes assumptions with inherent uncertainty, including projected sales volumes and related projected revenues, long-term growth rates, royalty rates that a market participant might assume and judgments regarding the factors to develop an applied discount rate. The carrying value of intangible assets is at risk of impairment if future projected usage, revenues or long-term growth rates are lower than those currently projected, or if factors used in the development of a discount rate result in the application of a higher discount rate. As the results of the Company's testing indicated that the carrying value of certain intangible assets would not be recoverable, and as a result the Company recorded intangible asset impairment of approximately \$18.3 million during the year ended December 31, 2018. Intangible assets were considered Level 3 nonrecurring fair value measurements for the year ended December 31, 2018, and as of December 31, 2019 and 2018, the Company had no intangible assets remaining.

Goodwill— For goodwill, the determination of fair value of a reporting unit involves, among other things, application of various approaches, which include developing forecasts of future cash flows with a number of assumptions including but not limited to, origination and margin projections, growth and terminal value projections, and judgements regarding the factors to develop discount rates and cost of capital. The Company reviewed its goodwill for impairment at least annually as of December 31 or more frequently if facts and circumstances indicate that it is more likely than not that the fair value of a reporting unit that has goodwill is less than its carrying value. The Company compared the fair value of its net assets using three methodologies (two income approaches and one market approach), to the carrying value and determined that its goodwill was impaired. As a result, the Company recorded an impairment charge of \$104.6 million

⁽²⁾ For the years ended December 31, 2019 and 2018, the Company recorded \$6.4 million and \$950 thousand, respectively, of losses related to changes in the NRV of REO. Losses represent impairment of the NRV attributable to an increase in state specific loss severities on REO held during the period which resulted in a decrease to NRV.

related to goodwill during the year ended December 31, 2018. Goodwill was considered a Level 3 nonrecurring fair value measurement for the year ended December 31, 2018, and as of December 31, 2019 and December 31, 2018, the Company had no goodwill remaining.

Note 11.—Reconciliation of Loss Per Share

The following table presents the computation of basic and diluted loss per common share, including the dilutive effect of stock options, restricted stock, restricted stock units, deferred stock units, convertible notes and cumulative redeemable preferred stock outstanding for the periods indicated, when dilutive:

	For the Year Ended				
		Decem	ber 31	,	
		2019		2018	
Numerator for basic loss per share: Net loss	\$	(7,977)	\$	(145,410)	
Numerator for diluted loss per share: Net loss Interest expense attributable to convertible notes (1)	\$	(7,977)	\$	(145,410)	
Net loss plus interest expense attributable to convertible notes	\$	(7,977)	\$	(145,410)	
Denominator for basic loss per share (2):					
Basic weighted average common shares outstanding during the period		21,189		21,026	
Denominator for diluted loss per share (2):					
Basic weighted average common shares outstanding during the period Net effect of dilutive convertible notes (1)		21,189		21,026	
Net effect of dilutive stock options and DSU's					
Diluted weighted average common shares		21,189		21,026	
Net loss per common share:					
Basic	\$	(0.38)	\$	(6.92)	
Diluted	\$	(0.38)	\$	(6.92)	

⁽¹⁾ Adjustments to diluted loss per share for the convertible notes for the years ended December 31, 2019 and 2018, were excluded from the calculation, as they were anti-dilutive.

The anti-dilutive stock options, restricted stock awards (RSA), restricted stock units (RSU) and deferred stock units (DSU) outstanding for the years ending December 31, 2019 and 2018 were 1.1 million and 1.0 million shares in the aggregate, respectively. Additionally, for the years ended December 2019 and 2018, there were 1.2 million shares attributable to the 2015 convertible notes that were anti-dilutive.

In addition to the potential dilutive effects of stock options, restricted stock, restricted stock units, deferred stock units and convertible notes listed above, see Note 9.—Redeemable Preferred Stock, for a description of cumulative undeclared dividends in arrears which would also become dilutive in the event the Company is not successful in its appeal of the original court ruling.

Note 12.—Income Taxes

The Company is subject to federal income taxes as a regular (Subchapter C) corporation and files a consolidated U.S. federal income tax return.

On December 22, 2017, the U.S. government enacted comprehensive tax legislation commonly referred to as the Tax Act. The Tax Act made broad and complex changes to the U.S. tax code by, among other things, reducing the federal corporate income tax rate and business deductions and eliminates federal alternative minimum tax (AMT). The Tax Act reduced the U.S. corporate income tax rate from a maximum of 35% to a flat 21% rate, effective January 1, 2018. Under

⁽²⁾ Share amounts presented in thousands.

FASB ASC 740, the effects of changes in tax rates and laws were recognized in the period in which the new legislation was enacted.

Income taxes for the years ended December 31, 2019 and 2018 were as follows:

	For the year ended December 31,							
		2019		2018				
Current income taxes:								
Federal	\$	(362)	\$	_				
State		117		689				
Total current income tax (benefit) expense		(245)		689				
Deferred income taxes:		_						
Federal		_		3,757				
State				558				
Total deferred income tax expense	·	_		4,315				
Total income tax (benefit) expense	\$	(245)	\$	5,004				

The Company recorded income tax (benefit) expense of \$(245) thousand and \$5.0 million for the years ended December 31, 2019 and 2018, respectively. The income tax benefit of \$245 thousand for the year ended December 31, 2019 is primarily the result of a benefit resulting from the intraperiod allocation rules that are applied when there is a pre-tax loss from continuing operations and pre-tax income from other comprehensive income partially offset by state taxes from states where the Company does not have net operating loss carryforwards or state minimum taxes. The income tax expense of \$5.0 million for the year ended December 31, 2018 was primarily the result of recording a full valuation allowance on deferred tax assets due to a reduction in future utilization and state income taxes from states where the Company does not have net operating loss carryforwards and state minimum taxes, including AMT.

Deferred tax assets are recognized subject to management's judgment that realization is "more likely than not". A valuation allowance is recognized for a deferred tax asset if, based on the weight of the available evidence, it is more likely than not that some portion of the deferred tax asset will not be realized. In making such judgments, significant weight is given to evidence that can be objectively verified. As of each reporting date, the Company considers new evidence, both positive and negative, that could impact management's view with regard to future realization of deferred tax assets. Significant judgment is required in assessing future earnings trends, the availability of tax planning strategies, recent pretax losses and the timing of reversals of temporary differences. The Company's evaluation is based on current tax laws as well as management's expectation of future performance.

The Company's deferred tax assets are primarily the result of net operating losses and basis differences on mortgage securities and goodwill. The Company has recorded a full valuation allowance against its deferred tax assets at December 31, 2019 as it is more likely than not that the deferred tax assets will not be realized. The valuation allowance is based on the management's assessment that it is more likely than not that certain deferred tax assets, primarily net operating loss carryforwards, may not be realized in the foreseeable future due to objective negative evidence.

Deferred tax assets are comprised of the following temporary differences between the financial statement carrying value and the tax basis of assets:

	For the year ended December 31,					
		2019		2018		
Deferred tax assets:						
Federal and state net operating losses	\$	163,676	\$	164,435		
Mortgage securities		49,927		51,356		
Depreciation and amortization		29,127		31,501		
Capital loss carryover		169		168		
Compensation and other accruals		3,535		4,571		
Repurchase reserve		2,765		2,350		
Total gross deferred tax assets		249,199		254,381		
Deferred tax liabilities:						
Fair value adjustments on long-term debt		(4,391)		(4,620)		
Mortgage servicing rights		(11,549)		(18,443)		
Total gross deferred tax liabilities		(15,940)		(23,063)		
Valuation allowance		(233,259)		(231,318)		
Total net deferred tax assets	\$		\$			

The following is a reconciliation of income taxes to the expected statutory federal corporate income tax rates for the years ended December 31, 2019 and 2018:

	For the year ended December 31,					
		2019		2018		
Expected income tax expense	\$	(1,727)	\$	(29,485)		
State tax expense, net of federal benefit		106		301		
State rate change		(269)		35		
Change in valuation allowance		1,425		33,718		
Other		220		435		
Total income tax (benefit) expense	\$	(245)	\$	5,004		

At December 31, 2019, the Company had accumulated other comprehensive earnings of \$24.8 million, which was net of tax of \$11.3 million.

As of December 31, 2019, the Company had estimated federal net operating loss (NOL) carryforwards of approximately \$566.6 million. Federal net operating loss carryforwards begin to expire in 2027. As of December 31, 2019, the Company had estimated California NOL carryforwards of approximately \$385.2 million, which begin to expire in 2028. The Company may not be able to realize the maximum benefit due to the nature and tax entities that holds the NOL.

On October 23, 2019, the Company adopted a Tax Benefits Preservation Rights Agreement (Rights Plan) to help preserve the value of certain deferred tax benefits, including those generated by net operating losses (collectively, Tax Benefits). In general, the Company may "carry forward" net operating losses in certain circumstances to offset current and future taxable income, which will reduce federal and state income tax liability, subject to certain requirements and restrictions. The Company's ability to use these Tax Benefits would be substantially limited and impaired if it were to experience an "ownership change" for purposes of Section 382 of the Internal Revenue Code of 1986, as amended (the Code) and the Treasury Regulations promulgated thereunder. Generally, the Company will experience an "ownership change" if the percentage of the shares of Common Stock owned by one or more "five-percent shareholders" increases by more than 50 percentage points over the lowest percentage of shares of Common Stock owned by such stockholder at any time during the prior three year on a rolling basis. As such, the Rights Plan has a 4.99% "trigger" threshold that is intended to act as a deterrent to any person or entity seeking to acquire 4.99% or more of the outstanding Common Stock without the prior approval of the Board. The Rights Plan also has certain ancillary anti-takeover effects. The rights accompany each share of common stock of the Company and are evidenced by ownership of common stock. The rights are not exercisable except upon the occurrence of certain change of control events. Once triggered, the rights would entitle the stockholders, other than a person qualifying as an "Acquiring Person" pursuant to the rights plan, to certain "flip in", "flip over" and exchange rights. The rights issued under the Rights Plan may be redeemed by the board of directors at a nominal redemption price of \$0.001 per right, and the board of directors may amend the rights in any respect until the rights are

triggered. The Rights Plan will expire at the Company's 2020 annual meeting of stockholders if the stockholders do not approve the Rights Plan. Otherwise, the Rights Plan will generally expire on the three-year anniversary of its adoption.

The Company files numerous tax returns in various jurisdictions. While the Company is subject to examination by various taxing authorities, the Company believes there are no unresolved issues or claims likely to be material to its financial position. The Company classifies interest and penalties on taxes as provision for income taxes. As of December 31, 2019 and 2018, the Company has no material uncertain tax positions. The Company has state AMT credits in the amount of \$404 thousand as of December 31, 2019.

Note 13.—Segment Reporting

The Company has three primary reporting segments which include mortgage lending, real estate services and long-term mortgage portfolio. Unallocated corporate and other administrative costs, including the costs associated with being a public company, are presented in Corporate and other.

The following table presents selected balance sheet data by reporting segment as of the dates indicated:

Balance Sheet Items as of December 31, 2019:	0 0		Real Estate Services		Long-term Portfolio		Corporate and other		Coı	nsolidated_
Cash and cash equivalents	\$	23,647	\$	4	\$		\$	1,015	\$	24,666
Restricted cash		12,466		_		_		_		12,466
Mortgage loans held-for-sale		782,143		_		_		_		782,143
Mortgage servicing rights		41,470		_		_		_		41,470
Trust assets		_		_	2,6	634,746				2,634,746
Other assets (1)		29,121		2		66		21,599		50,788
Total assets		888,847		6	2,6	534,812		22,614		3,546,279
Total liabilities		723,965		_	2,6	664,946		53,131		3,442,042

Balance Sheet Items as of December 31, 2018:	Mortgage Lending	Real Estate Services	Long-term Portfolio	Corporate and other	Consolidated		
Cash and cash equivalents	\$ 21,679	\$ 124	\$	\$ 1,397	\$ 23,200		
Restricted cash	6,989	_	_		6,989		
Mortgage loans held-for-sale	353,601	_	_		353,601		
Mortgage servicing rights	64,728	_	_	_	64,728		
Trust assets	_	_	3,165,590	_	3,165,590		
Other assets (1)	28,737	2	79	5,017	33,835		
Total assets	475,734	126	3,165,669	6,414	3,647,943		
Total liabilities	304,013	1,103	3,193,395	39,257	3,537,768		

⁽¹⁾ All segment asset balances exclude intercompany balances.

The following table presents selected statement of operations information by reporting segment for the years ended December 31, 2019 and 2018:

Statement of Operations Items for the Year Ended December 31, 2019:	Mortgage Lending	_	Real Estate Services		ng-term ortfolio	orporate nd other	Co	nsolidated
Gain on sale of loans, net	\$ 98,830	\$	_	\$		\$ 	\$	98,830
Servicing fees, net	12,943		_		_			12,943
Loss on mortgage servicing rights, net	(24,911)		_		_	_		(24,911)
Real estate services fees, net	_		3,287		_	_		3,287
Other revenue	157		_		260	62		479
Other operating expense	(79,536)		(1,391)		(531)	(15,462)		(96,920)
Other income (expense)	6,067		_		(6,189)	(1,808)		(1,930)
Net earnings (loss) before income tax expense	\$ 13,550	\$	1,896	\$	(6,460)	\$ (17,208)		(8,222)
Income tax benefit	 			-				(245)
Net loss							\$	(7,977)

Statement of Operations Items for the Year Ended December 31, 2018:	Mortgage Lending		I	Real Estate Services	e Long-teri Portfolio		1		Consolidated	
Gain on sale of loans, net	\$	66,750	\$	_	\$		\$		\$	66,750
Servicing fees, net		37,257		_		_		_		37,257
Loss on mortgage servicing rights, net		(3,625)		_		_		_		(3,625)
Real estate services fees, net		_		4,327		_		_		4,327
Other revenue		_		_		291		_		291
Intangible asset impairment		(18,347)		_		_		_		(18,347)
Goodwill impairment		(104,587)		_		_		_	(1	104,587)
Other operating expense		(101,672)		(2,088)		(1,438)		(21,220)	()	126,418)
Other income (expense)		1,100		_		4,633		(1,787)		3,946
Net (loss) earnings before income tax expense	\$	(123,124)	\$	2,239	\$	3,486	\$	(23,007)	\$ (1	140,406)
Income tax expense										5,004
Net loss									\$ (1	145,410)

Note 14.—Commitments and Contingencies

Legal Proceedings

The Company is a defendant in or a party to a number of legal actions or proceedings that arise in the ordinary course of business. In some of these actions and proceedings, claims for monetary damages are asserted against the Company. In view of the inherent difficulty of predicting the outcome of such legal actions and proceedings, the Company generally cannot predict what the eventual outcome of the pending matters will be, what the timing of the ultimate resolution of these matters will be, or what the eventual loss related to each pending matter may be, if any.

In accordance with applicable accounting guidance, the Company establishes an accrued liability for litigation when those matters present loss contingencies that are both probable and estimable. In any case, there may be exposure to losses in excess of any such amounts whether accrued or not. Any estimated loss is subject to significant judgment and is based upon currently available information, a variety of assumptions, and known and unknown uncertainties. The matters underlying the estimated loss will change from time to time, and actual results may vary significantly from the current estimate. Therefore, an estimate of possible loss represents what the Company believes to be an estimate of possible loss only for certain matters meeting these criteria. It does not represent the Company's maximum loss exposure.

Based on the Company's current understanding of pending legal actions and proceedings, management does not believe that judgments or settlements arising from pending or threatened legal matters, individually or in the aggregate, will have a material adverse effect on the consolidated financial position, operating results or cash flows of the Company. However, in light of the inherent uncertainties involved in these matters, some of which are beyond the Company's control, and the very large or indeterminate damages sought in some of these matters, an adverse outcome in one or more of these matters could be material to the Company's results of operations or cash flows for any particular reporting period.

The legal matters summarized below are ongoing and may have an effect on the Company's business and future financial condition and results of operations:

On December 7, 2011, a purported class action was filed in the Circuit Court of Baltimore City entitled Timm, v. Impac Mortgage Holdings, Inc, et al. alleging on behalf of holders of the Company's 9.375% Series B Cumulative Redeemable Preferred Stock (Preferred B) and 9.125% Series C Cumulative Redeemable Preferred Stock (Preferred C) who did not tender their stock in connection with the Company's 2009 completion of its Offer to Purchase and Consent Solicitation that the Company failed to achieve the required consent of the Preferred B and C holders, the consents to amend the Preferred stock were not effective because they were given on unissued stock (after redemption), the Company tied the tender offer with a consent requirement that constituted an improper "vote buying" scheme, and that the tender offer was a breach of a fiduciary duty. The action seeks the payment of two quarterly dividends for the Preferred B and C holders, the unwinding of the consents and reinstatement of the cumulative dividend on the Preferred B and C stock, and the election of two directors by the Preferred B and C holders. The action also seeks punitive damages and legal expenses. On July 16, 2018, the Court entered a Judgement Order whereby it (1) declared and entered judgment in favor of all defendants on all claims related to the Preferred C holders and all claims against all individual defendants thereby affirming the validity of the 2009 amendments to the Series B Articles Supplementary; (2) declared its interpretation of the voting provision language in the Preferred B Articles Supplementary to mean that consent of two-thirds of the Preferred B

stockholders was required to approve the 2009 amendments to the Preferred B Articles Supplementary, which consent was not obtained, thus rendering the amendments invalid and leaving the 2004 Preferred B Articles Supplementary in effect; (3) ordered the Company to hold a special election within sixty days for the Preferred B stockholders to elect two directors to the Board of Directors pursuant to the 2004 Preferred B Articles Supplementary (which Directors will remain on the Company's Board of Directors until such time as all accumulated dividends on the Preferred B have been paid or set aside for payment); and, (4) declared that the Company is required to pay three quarters of dividends on the Preferred B stock under the 2004 Articles Supplementary (approximately, \$1.2 million, but did not order the Company to make any payment at this time). The Court declined to certify any class pending the outcome of appeals and certified its Judgment Order for immediate appeal. On October 2, 2019, the appellate court held oral argument for all appeals in the matter. On February 5, 2020, the Special Court of Appeals requested that the parties provide a supplemental memorandum explaining the appealability of the original circuit court opinion which the Company responded to on February 21, 2020. To date, the Court has yet to opine on the appealability issue or the oral arguments and related briefs.

On April 30, 2012, a purported class action was filed entitled Marentes v. Impac Mortgage Holdings, Inc., alleging that certain loan modification activities of the Company constitute an unfair business practice, false advertising and marketing, and that the fees charged are improper. The complaint seeks unspecified damages, restitution, injunctive relief, attorney's fees and prejudgment interest. On August 22, 2012, the plaintiffs filed an amended complaint adding Impac Funding Corporation as a defendant and on October 2, 2012, the plaintiffs dismissed Impac Mortgage Holdings, Inc., without prejudice. On January 11, 2019, the trial court determined that the plaintiffs were unable to prove their case and ordered that judgment be entered in favor of the defendant. On April 19, 2019, the plaintiffs filed their Notice of Appeal and the plaintiffs filed their opening brief on October 31, 2019. The Company filed its response on February 19, 2020.

In October 2011 and November 2012, the Company received letters from Countrywide Securities Corporation (Countrywide), Merrill Lynch, Pierce, Fenner & Smith Incorporated (Merrill Lynch), and UBS Securities LLC (UBS) claiming indemnification relating to mortgage-backed securities bonds issued, originated or sold by Impac Secured Assets Corporation (ISAC), IFC, IMH Assets Corp. and the Company. The claims seek indemnification from claims asserted against Countrywide, Merrill Lynch, and UBS in specified legal actions entitled American International Group Inc. v. Bank of America Corp., et al., in the United States District Court for the Southern District of New York and Federal Home Loan Bank of Boston v. Ally Financial, Inc., et al., in the United States District Court for the District of Massachusetts. The notices each seek indemnification for all losses, liabilities, damages and legal fees and costs incurred in those actions. In October 2012, January 2013, and December 2014, Deutsche Bank issued indemnification demands for claims asserted against them in the Superior Court of New York in cases entitled Royal Park Investments SA/NV v. Merrill Lynch, et al. and Dealink Funding Ltd. v. Deutsche Bank and in the Circuit Court for the City of Richmond, Virginia, in a case entitled Commonwealth of VA, et al. v. Barclays Capital Inc, et al. In July 2018, the Company received an additional indemnification notice from Deutsche Bank as a result of a case filed against Deutsche Bank in Orange County Superior Court in 2016, entitled BlackRock Balanced Capital Portfolio (FI) et al. v. Deutsche Bank. In February of 2013, the Company also received a notice of intent to seek indemnification on behalf of Deutsche Bank AG, Deutsche Bank Securities, Inc., DB Structured Products, Inc., ACE Securities Corp and Deutsche Alt-A Securities, Inc. The claims relate to actions filed against those entities in the Superior Court of New York.

On April 20, 2017, a purported class action was filed in the United States District Court, Central District of California, entitled Nguyen v. Impac Mortgage Corp. dba CashCall Mortgage et al. The plaintiffs contend the defendants did not pay purported class members overtime compensation or provide meal and rest breaks, as required by law. The action seeks to invalidate any waiver signed by a purported class member of their right to bring a class action and seeks damages, restitution, penalties, attorney's fees, interest, and an injunction against unfair, deceptive, and unlawful activities. On August 23, 2018, the court (1) granted the defendants motion to compel arbitration as to all claims, except for the plaintiffs' claims under California's Private Attorneys General Act (PAGA); (2) ordered the plaintiffs to submit their claims (other than PAGA claims) to arbitration on an individual, non-class, non-collective, and non-representative basis; (3) dismissed all class and collective claims with prejudice to the plaintiffs and without prejudice to putative class members; and (4) stayed all claims that were compelled to arbitration, as well as the PAGA claims.

On September 18, 2018, a purported class action was filed in the Superior Court of California, Orange County, entitled McNair v. Impac Mortgage Corp. dba CashCall Mortgage. The plaintiff contends the defendant did not pay the plaintiff and purported class members overtime compensation, provide required meal and rest breaks, or provide accurate wage statements. The action seeks damages, restitution, penalties, interest, attorney's fees, and all other appropriate injunctive, declaratory, and equitable relief. On March 8, 2019, a First Amended Complaint was filed, which added a

claim alleging PAGA violations. On March 12, 2019, the parties filed a stipulation with the court stating (1) the plaintiff's individual claims should be arbitrated pursuant to the parties' arbitration agreement, (2) the class claims should be struck from the First Amended Complaint, and (3) the plaintiff will proceed solely with regard to her PAGA claims. This case was consolidated with Batres v. Impac Mortgage Corp. dba CashCall Mortgage discussed below with a scheduled trial date of September 8, 2020.

On December 27, 2018, a purported class action was filed in the Superior Court of California, Orange County, entitled Batres v. Impac Mortgage Corp. dba CashCall Mortgage. The plaintiff contends the defendant did not pay the plaintiff and purported class members overtime compensation, provide required meal and rest breaks, or provide accurate wage statements. The action seeks damages, restitution, penalties, interest, attorney's fees, and all other appropriate injunctive, declaratory, and equitable relief. On March 14, 2019, the plaintiff filed an amended complaint alleging only a violation of the California Labor Code Private Attorneys General Act seeking penalties, attorneys' fees, and such other appropriate relief. This case was consolidated with the McNair v. Impac Mortgage Corp. dba CashCall Mortgage discussed above with a scheduled trial date of September 8, 2020.

On July 3, 2019, a representative action was filed in the Superior Court of California, Orange County, entitled Law v. Impac Mortgage Corp. dba CashCall Mortgage under the California Labor Code Private Attorneys General Act. The plaintiff contends the defendant did not pay its employees overtime compensation, provide required meal and rest breaks, or provide accurate wage statements as required by law. The action seeks penalties, attorneys' fees, and such other appropriate relief.

The Company is a party to other litigation and claims which are normal in the course of its operations. While the results of such other litigation and claims cannot be predicted with certainty, the Company believes the final outcome of such matters will not have a material adverse effect on our financial condition or results of operations. The Company believes that it has meritorious defenses to the above claims and intends to defend these claims vigorously and as such the Company believes the final outcome of such matters will not have a material adverse effect on its financial condition or results of operations. Nevertheless, litigation is uncertain and the Company may not prevail in the lawsuits. An adverse judgment in any of these matters could have a material adverse effect on the Company's financial position and results of operations.

Lease Commitments

The following table presents the operating lease balances within the consolidated balance sheets, weighted average remaining lease term, and weighted average discount rates related to the Company's operating leases as of December 31, 2019:

Lease Assets and Liabilities	Classification	December 31, 2019
Assets Operating lease ROU assets	Other assets	\$ 17,169
Liabilities Operating lease liabilities	Other liabilities	\$ 20,582
Weighted average remaining lease term Weighted average discount rate		4.6 4.8 %

The Company leases office space and certain office equipment under long-term leases expiring at various dates through 2024. Future minimum commitments under non-cancelable leases are as follows:

Year 2020	\$ 5,138
Year 2021	4,593
Year 2022	4,721
Year 2023	4,867
Year 2024	 3,729
Total lease commitments	23,048
Less: imputed interest	 (2,466)
Total operating lease liability	\$ 20,582

During the year ended December 31, 2019, cash paid for operating leases was \$4.7 million. Total operating lease expense for the years ended December 31, 2019 and 2018 was \$4.2 million and \$6.0 million, respectively. Operating lease expense includes short-term leases and sublease income, both of which are immaterial.

Interest expense on capital equipment leases was \$1 thousand and \$9 thousand for the years ended December 31, 2019 and 2018, respectively.

As of December 31, 2019, the Company had no additional operating or financing leases that had not yet commenced.

Repurchase Reserve

The provision for repurchases represents an estimate of losses to be incurred on the repurchase of loans or indemnification of purchaser's losses related to loan sales. Certain sale contracts and U.S. government-sponsored enterprise (GSE) standards require the Company to repurchase a loan or indemnify the purchaser or insurer for losses if a borrower fails to make initial loan payments or if the accompanying mortgage loan fails to meet certain customary representations and warranties.

In the event of a breach of the representations and warranties, the Company may be required to either repurchase the loan or indemnify the purchaser for losses it sustains on the loan. In addition, an investor may request that the Company refund a portion of the premium paid on the sale of mortgage loans if a loan is prepaid within a certain amount of time from the date of sale. The Company records a reserve for estimated losses associated with loan repurchases, purchaser indemnification and premium refunds. The provision for repurchase losses is charged against gain on sale of loans, net in the consolidated statements of operations and comprehensive loss. A release of repurchase reserves is recorded when the Company's assessment reveals that previously recorded reserves are no longer needed.

Loans sold to Ginnie Mae are insured by the FHA or are guaranteed by the VA. As servicer, the Company may elect to repurchase delinquent loans in accordance with Ginnie Mae guidelines; however, the loans continue to be insured. The Company may also indemnify the FHA and VA for losses related to loans not originated in accordance with their guidelines.

A selling representation and warranty framework was introduced by the GSEs in 2013 and enhanced in 2014 that helps address concerns of loan sellers with respect to loan repurchase risk. Under the framework, a GSE will not exercise its remedies, including the issuance of repurchase requests, for breaches of certain selling representations and warranties if a mortgage meets certain eligibility requirements. For loans sold to GSEs on or after January 1, 2013, repurchase risk for Home Affordable Refinance Program (HARP) loans is lowered if the borrower stays current on the loan for 12 months and representation and warranty risks are limited for non-HARP loans that stay current for 36 months.

The Company regularly evaluates the adequacy of repurchase reserves based on trends in repurchase and indemnification requests, actual loss experience, settlement negotiation, estimated future loss exposure and other relevant factors including economic conditions. The Company sold \$4.1 billion of loans for both the years ended December 31, 2019 and 2018, which are subject to repurchase representations and warranties. The Company believes its reserve balances as of December 31, 2019 are sufficient to cover future loss exposure associated with repurchase contingencies.

The following table summarizes the repurchase reserve activity (included in other liabilities in the accompanying consolidated balance sheets) related to previously sold loans for the years ended December 31, 2019 and 2018 is as follows:

	Dece	December 31, 2019		
Beginning balance	\$	7,657	\$	6,020
Provision for repurchases		5,487		5,074
Settlements		(4,175)		(3,437)
Total repurchase reserve	\$	8,969	\$	7,657

Concentration of Risk

The aggregate unpaid principal balance of loans in the Company's long-term mortgage portfolio secured by properties in California and Florida was \$1.4 billion and \$321.9 million, or 49% and 11%, respectively, at December 31, 2019.

The Company does not have a significant concentration of risk to any individual client except for the U.S. government and its agencies relating to its concentration of loan sales. The Company also has geographic concentration risk because 81% of the Company's mortgage loan originations were from California.

Note 15.—Share Based Payments and Employee Benefit Plans

The Company maintains a stock-based incentive compensation plan, the terms of which are governed by the 2010 Omnibus Incentive Plan (the 2010 Incentive Plan). The 2010 Incentive Plan provides for the grant of stock appreciation rights, restricted stock units, performance shares and other stock and cash-based incentive awards. Employees, directors, consultants or other persons providing services to the Company or its affiliates are eligible to receive awards pursuant to the 2010 Incentive Plan. In connection with the adoption of the 2010 Incentive Plan, the Company's 2001 Stock Plan, which was scheduled to expire in March 2011, was frozen. Further, all outstanding awards under the 2001 Stock Plan, as well as the Company's previous 1995 Stock Option, Deferred Stock and Restricted Stock Plan (together with the 2001 Stock Plan, the "Prior Plans"), were assumed by the 2010 Incentive Plan. In 2019, the shareholders voted on and approved an amendment to the 2010 Omnibus Incentive Plan to increase the shares subject to the plan by 500,000 shares. As of December 31, 2019, the aggregate number of shares reserved under the 2010 Incentive Plan is 3,200,000 shares (including all outstanding awards assumed from Prior Plans), and there were 1,230,953 shares available for grant as stock options, restricted stock and deferred stock awards. The Company issues new shares of common stock to satisfy stock option exercises.

The fair value of options granted, which is amortized to expense over the option service period, is estimated on the date of grant with the following weighted average assumptions:

For the year ended December 31,

	2019	2018
Risk-free interest rate	2.23 - 2.51%	2.69 - 2.76%
Expected lives (in years)	4.74 - 5.06	5.21 - 5.50
Expected volatility	56.14 - 56.57%	45.65 - 46.34%
Expected dividend yield	0.00%	0.00%
Fair value per share	\$ 1.61 - 1.85	\$ 4.04 - 4.35

The following table summarizes activity, pricing and other information for the Company's stock options for the years presented below:

	For the year ended December 31,						
	2	019		2018			
	Weighted- Average					eighted- Average	
	Number of Shares	E	Exercise Number of Price Shares				
Options outstanding at the beginning of the year	1,001,469	\$	13.16	1,582,754	\$	13.61	
Options granted	592,500		3.66	90,000		9.52	
Options exercised	(103,351)		3.34	(104,410)		4.39	
Options forfeited/cancelled	(576,148)		13.20	(566,875)		15.46	
Options outstanding at the end of the year	914,470		8.10	1,001,469		13.16	
Options exercisable at the end of the year	328,933	\$	14.36	765,302	\$	13.41	

The aggregate intrinsic value in the following table represents the total pre-tax intrinsic value, based on the Company's closing stock price of \$5.26 and \$3.78 per common share as of December 31, 2019 and 2018, respectively. Aggregate intrinsic value represents the amount of proceeds the option holders would have received had all option holders exercised their options and sold the stock as of that date.

	As of December 31,						
	2019				2018		
	Weighted- Average Remaining Life (Years)	Aggregate Intrinsic Value (in thousands)		Weighted- Average Remaining Life (Years)	In V	gregate trinsic /alue nousands)	
Options outstanding at end of year	7.78	\$	838	5.07	\$	102	
Options exercisable at end of year	5.55	\$	25	3.91	\$	102	

As of December 31, 2019, there was approximately \$889 thousand of total unrecognized compensation cost related to stock option compensation arrangements granted under the plan, net of estimated forfeitures. That cost is expected to be recognized over the remaining weighted average period of 1.9 years.

For the years ended December 31, 2019 and 2018, the aggregate grant-date fair value of stock options granted was approximately \$1.1 million and \$436 thousand, respectively.

For the years ended December 31, 2019 and 2018, total stock-based compensation expense was \$660 thousand and \$947 thousand, respectively.

Additional information regarding stock options outstanding as of December 31, 2019 is as follows:

	S	Stock Options Outstanding Options Exercisable			Options Exercisable		isable
Exercise Price Range	Number Outstanding	Weighted- Average Remaining Contractual Life in Years		Weighted- Average Exercise Price	Number Exercisable		Weighted- Average Exercise Price
\$ 2.73 - 3.21	39,863	7.25	\$	3.10	9,863	\$	2.76
3.22 - 3.74	170,000	9.10		3.59	_		_
3.75 - 5.38	310,000	9.16		3.75	_		_
5.39 - 9.85	105,832	7.21		8.48	52,500		7.47
9.86 - 17.39	132,958	6.03		12.48	110,753		12.24
17.40 - 20.49	78,917	6.22		17.40	78,917		17.40
20.50	76,900	5.02		20.50	76,900		20.50
\$ 2.73 - 20.50	914,470	7.78	\$	8.10	328,933	\$	14.36

In addition to the options granted, the Company has granted deferred stock units (DSU), which vest between one and three year periods. The fair value of each DSU was measured on the date of grant using the grant date price of the Company's stock. In 2019, the Company granted thirty thousand deferred stock units. For the year ended December 31, 2019, the aggregate grant-date fair value of DSU's granted was approximately \$113 thousand.

The following table summarizes activity, pricing and other information for the Company's DSU's for the years presented below:

	For the year ended December 31,							
	2	019		2	018			
		Weighted- Average Grant Date Fair Value		0				eighted- verage
	Number of					ant Date		
	Shares					ir Value		
DSU's outstanding at the beginning of the year	24,500	\$	10.11	100,750	\$	10.41		
DSU's granted	30,000		3.75			_		
DSU's issued	_		_	(62,917)		9.63		
DSU's forfeited/cancelled				(13,333)		14.64		
DSU's outstanding at the end of the year	54,500	\$	6.61	24,500	\$	10.11		

As of December 31, 2019, there was approximately \$96 thousand of total unrecognized compensation cost related to the DSU compensation arrangements granted under the plan. This cost is expected to be recognized over a weighted average period of 1.9 years.

The following table summarizes activity, pricing and other information for the Company's restricted stock units (RSU) for the years presented below:

	Number of Shares	 Weighted- Average Grant Date Fair Value
RSU's outstanding at beginning of the year	_	\$ _
RSU's granted	75,000	3.75
RSU's issued	_	_
RSU's forfeited/cancelled	_	_
RSU's outstanding at end of the year	75,000	\$ 3.75

For the year ended December 31, 2019, the aggregate grant-date fair value of RSU's granted was approximately \$281 thousand. As of December 31, 2019, there was approximately \$202 thousand of total unrecognized compensation cost related to the RSU compensation arrangements granted under the plan. This cost is expected to be recognized over a weighted average period of 2.2 years.

The following table summarizes activity, pricing and other information for the Company's restricted stock awards (RSA) for the years presented below:

	Number of Shares	 Weighted- Average Grant Date Fair Value
RSA's outstanding at beginning of the year		\$ _
RSA's granted	35,069	3.57
RSA's issued	_	_
RSA's forfeited/cancelled	_	_
RSA's outstanding at end of the year	35,069	\$ 3.57

For the year ended December 31, 2019, total RSA expense was \$125 thousand. At December 31, 2019, there was no unrecognized compensation cost related to the RSA compensation arrangements granted under the plan as the amounts were accrued as part of an executive stay bonus in accordance with the executive's employment agreement.

401(k) Plan

After meeting certain employment requirements, employees can participate in the Company's 401(k) plan. Under the 401(k) plan, employees may contribute up to 25% of their salaries, pursuant to certain restrictions. The Company matches 50% of the first 4% of employee contributions. Additional contributions may be made at the discretion of the board of directors. During the year ended December 31, 2019 and 2018, the Company recorded compensation expense of approximately \$751 thousand and \$459 thousand for basic matching contributions, respectively. There were no discretionary matching contributions recorded during the years ended December 31, 2019 or 2018.

Note 16.—Related Party Transactions

In May 2015, the Company issued the 2015 Convertible Notes to purchasers, some of which are related parties. See Note 6.—Debt—Convertible Notes.

Note 17.—Subsequent Events

In February 2020, the Company granted approximately 245,000 RSUs, 30,000 stock options and 15,000 DSUs.

In late February through the date of this filing, the U.S. financial markets have experienced significant volatility and negative pressures which have caused, among other things, unprecedented declines in interest rates to record low levels. The ultimate impact and duration on global and financial markets and the effects on the Company are difficult to evaluate at this time as they present material uncertainty due to the potential effects on personnel and business continuity or disruption, valuation of financial assets and liabilities and potential severe disruption to financial markets or deteriorations in credit and financing conditions.

Subsequent events have been evaluated through the date of this filing.

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 333-169316, 333-185195, 333-193489, 333-213037, 333-220393, 333-227015 and 333-235404) and on Form S-3 (No. 333-235405) of Impac Mortgage Holdings, Inc. (the Company) of our reports dated March 13, 2020 with respect to the consolidated balances sheets of the Company as of December 31, 2019 and 2018, and the related consolidated statements of operations and comprehensive loss, changes in stockholders' equity, and cash flows for the years then ended, and the effectiveness of the Company's internal control over financial reporting as of December 31, 2019 included in this Annual Report (Form 10-K) for the year ended December 31, 2019.

/s/ SQUAR MILNER LLP

Irvine, California March 13, 2020

CERTIFICATION

- I, George A. Mangiaracina, certify that:
- 1. I have reviewed this report on Form 10-K of Impac Mortgage Holdings, Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
 - c. evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation;
 - d. disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ GEORGE A. MANGIARACINA George A. Mangiaracina Chief Executive Officer March 13, 2020

CERTIFICATION

- I, Brian Kuelbs, certify that:
- 1. I have reviewed this report on Form 10-K of Impac Mortgage Holdings, Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
 - c. evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation;
 - d. disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ BRIAN KUELBS Brian Kuelbs Chief Financial Officer March 13, 2020

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the annual report of Impac Mortgage Holdings, Inc. (the Company) on Form 10-K for the period ending December 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the Report), each of the undersigned, in the capacities and on the dates indicated below, hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to his knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ GEORGE A. MANGIARACINA George A. Mangiaracina Chief Executive Officer March 13, 2020

/s/ BRIAN KUELBS Brian Kuelbs Chief Financial Officer March 13, 2020



Impac Mortgage Holdings, Inc. 19500 Jamboree Road Irvine, CA 92612