MGIC

MGIC Investment Corporation

Annual Report

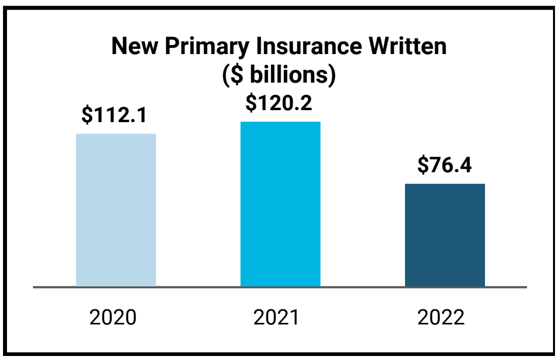
2022

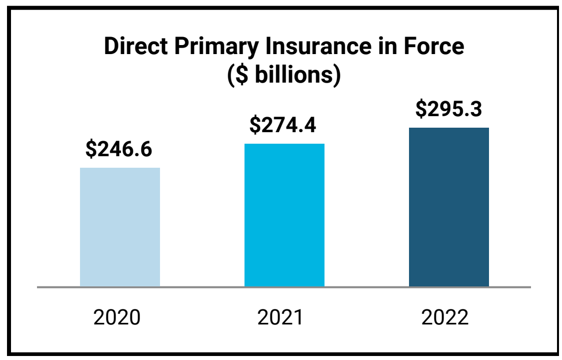
Our Business

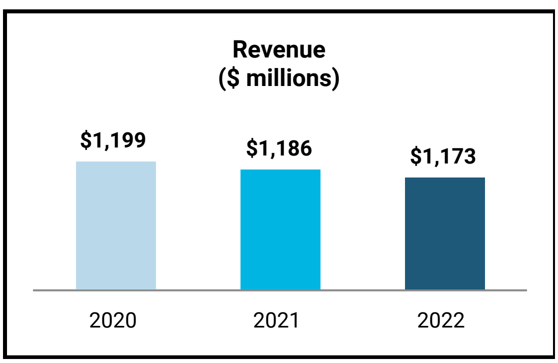
We are a holding company and through wholly-owned subsidiaries, including Mortgage Guaranty Insurance Corporation, we provide private mortgage insurance, other mortgage credit risk management solutions, and ancillary services.

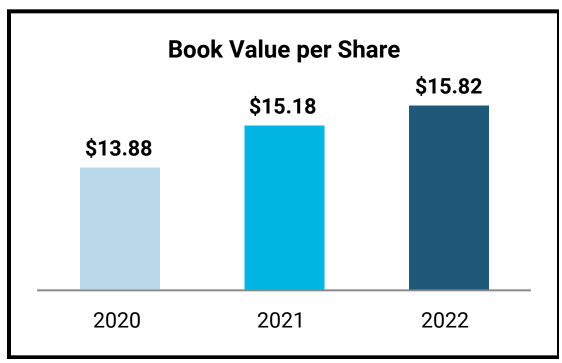
Financial Summary

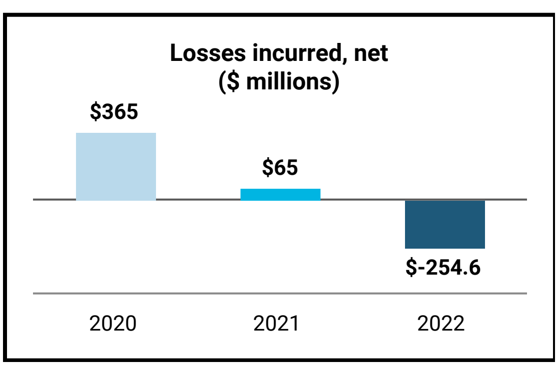
		2020		2021		2022
Net income ($ millions)	$	446.1	$	635.0	$	865.3
Diluted income per share ($)	$	1.29	$	1.85	$	2.79
Adjusted net operating income [1] ($ millions)	$	456.8	$	658.6	$	904.8
Adjusted net operating income per diluted share [1] ($)	$	1.32	$	1.91	$	2.91

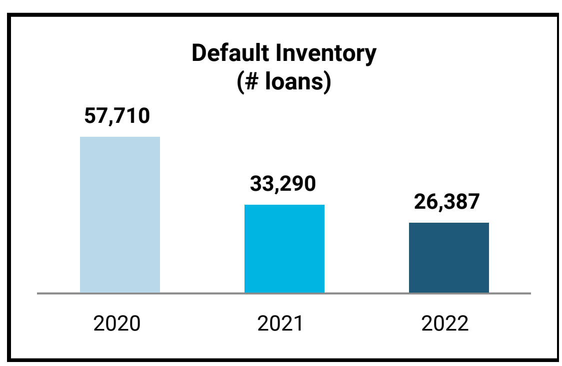












[1] We believe that use of the Non-GAAP measures of adjusted net operating income and adjusted net operating income per diluted share facilitate the evaluation of the company's core financial performance thereby providing relevant information. For a description of how we calculate these measures and for a reconciliation of these measure to their nearest comparable GAAP measures, see "Explanation and Reconciliation of our use of Non-GAAP Financial Measures" in Management's Discussion and Analysis of Financial Condition and Results of Operations.

To Our Shareholders:

In 2022, MGIC celebrated its 65th year of providing critical, uninterrupted support to the housing market by helping over 13 million individuals and families achieve their dream of affordable and sustainable homeownership. We take pride in knowing what we do matters.

I am pleased to report our 2022 financial results were the best in our 65-year company history. Importantly, we delivered these exceptional financial results while providing meaningful capital returns to our shareholders. During 2022, we continued to demonstrate the benefits of our transformed business model and the strength and flexibility of our capital position. Below are a few highlights of 2022:

- Earned $865 million of net income ($2.79 per diluted share) for the year, a 36% increase as compared to $635 million ($1.85 per diluted share) in 2021.
- Finished the year with $76 billion of primary new insurance written (NIW); the third largest year for NIW in our 65-year history.
- Increased primary insurance in force (IIF) by 7.6%. Persistency increased to approximately 80%, up from approximately 63% year over year. IIF and Persistency are two key drivers of future revenue.
- Returned approximately $500 million of capital to our shareholders through a combination of common stock repurchases and common stock dividends. Additionally, we increased the quarterly dividend by 25% in the third quarter of 2022.
- Repurchased $89 million of our 2063 Junior Convertible Debentures, repaid MGIC's Federal Home Loan Bank Advance, and redeemed our senior notes due in 2023, reducing our leverage ratio to approximately 12% from 20%.
- Expanded our reinsurance program by securing quota share reinsurance covering most of our NIW in 2022 and 2023, and by executing excess of loss reinsurance transactions through the capital markets and the traditional reinsurance market. These transactions reduce the volatility of losses in weaker economic environments and provide diversification and flexibility in our sources of capital.

In addition to providing strong financial results, we are committed to responsible corporate stewardship and believe it is integral to our continued success. To help articulate our values, we publish annually on our website a Corporate Sustainability Report ("CSR"). Our sustainability strategy focuses on initiatives that promote the long-term sustainability of MGIC's business. In the CSR, you will see how this strategy bears out across all areas of the work we do at MGIC, from our internal focus on Diversity, Equity and Inclusion and the employee experience, to our external emphasis on community involvement.

Looking ahead, we have the right team in place and have confidence in our transformed business model. Our strength and flexibility position us to navigate the changing economic environment and the credit performance of our insurance in force portfolio continues to be strong. We remain focused on executing and delivering on our business strategies in 2023 and beyond, creating long-term success for the company and creating value for all our stakeholders. We look forward to the new challenges and new accomplishments that 2023 will bring.

I want to thank all of our stakeholders - from our customers to our policyholders, investors, and business partners for your continued support, trust, and confidence in MGIC. I also want to thank all MGIC's talented co-workers - thank you for your dedication, integrity, and ongoing support to our stakeholders, your local communities, and to your fellow coworkers. We are truly one team and each of you make a difference and are part of our success!

Thank you, again, for your continued trust and confidence and for investing in MGIC.

Tim Mattke
Chief Executive Officer

From left: **Sal Miosi,** President and Chief Operating Officer
Steve Thompson, Executive Vice President and Chief Risk Officer
Tim Mattke, Chief Executive Officer
Paula Maggio, Executive Vice President, General Counsel and Secretary
Nathan Colson, Executive Vice President and Chief Financial Officer
Jay Hughes, Executive Vice President - Sales and Business Development

Management's Discussion and Analysis of Financial Condition and Results of Operations

We have reproduced below the "Management's Discussion and Analysis of Financial Condition and Results of Operations," "Risk Factors" and "Financial Statements and Supplementary Data" that appeared in our Annual Report on Form 10-K for the year ended December 31, 2022, filed with the Securities and Exchange Commission on February 22, 2023. Except for certain cross-references, we have not changed what appears below in those sections from what was in our Form 10-K. As a result, those sections are not updated to reflect any events or changes in circumstances that have occurred since our Annual Report on Form 10-K was filed with the SEC.

INTRODUCTION

As used below, "we" and "our" refer to MGIC Investment Corporation's consolidated operations or to MGIC Investment Corporation, as a separate entity, as the context requires. References to "we" and "our" in the context of debt obligations refer to MGIC Investment Corporation. See the "Glossary of terms and acronyms" for definitions and descriptions of terms used throughout this annual report. The Risk Factors discuss trends and uncertainties affecting us and are an integral part of the MD&A.

The following is a discussion and analysis of the financial conditions and results of operations for the years ended December 31, 2022 and 2021, including comparisons between 2022 and 2021. Comparisons between 2021 and 2020 have been omitted from this Annual Report, but can be found in "Item 7 - Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report on Form 10-K for the year ended December 31, 2021 filed with the SEC.

Forward Looking and Other Statements

As discussed under "Forward Looking Statements and Risk Factors" in this Annual Report, actual results may differ materially from the results contemplated by forward looking statements. We are not undertaking any obligation to update any forward looking statements or other statements we may make in the following discussion or elsewhere in this document even though these statements may be affected by events or circumstances occurring after the forward looking statements or other statements were made. Therefore, no reader of this document should rely on these statements being current as of any time other than the time at which this document was filed with the Securities and Exchange Commission.

OVERVIEW

This Overview of the MD&A highlights selected information and may not contain all of the information that is important to readers of this Annual Report. Hence, this Overview is qualified by the information that appears elsewhere in this Annual Report, including the other portions of the MD&A.

Through MGIC, the principal subsidiary of MGIC Investment Corporation, we serve lenders throughout the United States helping families achieve homeownership sooner by making affordable low-down-payment mortgages a reality through the use of private mortgage insurance. At December 31, 2022 MGIC had $295.3 billion of primary IIF.

Summary of financial results of MGIC Investment Corporation

	Year Ended December 31,		
(in millions, except per share data)	**2022**	2021	Change
Selected statement of operations data			
Net premiums earned	**$ 1,007.1**	$ 1,014.4	(1)%
Investment income, net of expenses	**167.5**	156.4	7 %
Losses incurred, net	**(254.6)**	64.6	N/M
Other underwriting and operating expenses, net	**236.7**	198.4	19 %
Loss on debt extinguishment	**40.2**	36.9	9 %
Income before tax	**1,090.0**	801.8	36 %
Provision for income taxes	**224.7**	166.8	35 %
Net income	**865.3**	635.0	36 %
Diluted income per share	**$ 2.79**	$ 1.85	51 %
Non-GAAP Financial Measures (1)			
Adjusted pre-tax operating income	**$ 1,140.0**	$ 831.7	37 %
Adjusted net operating income	**904.8**	658.6	37 %
Adjusted net operating income per diluted share	**$ 2.91**	$ 1.91	52 %

(1) See "Explanation and Reconciliation of our use of Non-GAAP Financial Measures."

SUMMARY OF 2022 FINANCIAL RESULTS

Net income of $865.3 million for 2022 increased by $230.4 million when compared to the prior year, and diluted income per share of $2.79 increased by 51% when compared to the prior year. The increase in net income primarily reflects a decrease in losses incurred, partially offset by a higher provision for income taxes and other underwriting and operating expenses, net. Diluted income per share increased due to an increase in net income and a decrease in the number of diluted weighted average shares outstanding.

Adjusted net operating income for 2022 was $904.8 million (2021: $658.6 million) and adjusted net operating income per diluted share was $2.91 (2021: $1.91). Adjusted net operating income for 2022 and 2021 included adjustments for a loss on debt extinguishment and net realized investment gains (losses).

Losses incurred, net were $(254.6) million, a decrease of $319.1 million compared with losses incurred of $64.6 million for the prior year. While new delinquency notices added approximately $149.6 million to losses incurred in 2022, our re-estimation of loss reserves on previously received delinquency notices resulted in favorable development of approximately $404.1 million, primarily related to a decrease in the estimated claim rate on delinquencies. The favorable development primarily resulted from greater than expected cure rates, as borrower reinstatements and servicer mitigation efforts resulted in more cures than originally estimated. Additionally, home price appreciation experienced in recent years has allowed borrowers to cure their delinquencies through the sale of their property. In 2021, new delinquency notices added approximately $124.6 million to losses incurred, while our re-estimation of loss reserves on previously received delinquency notices resulted in $60 million of favorable loss development primarily due to the decrease in the claim rate on delinquencies received prior to the COVID-19 pandemic. This was offset by the recognition of a probable loss of $6.3 million related to litigation of our claims paying practices and adverse development on LAE reserves and reinsurance.

The increase in our provision for income taxes to $224.7 million in 2022 compared to $166.8 million in 2021 was primarily due to an increase in income before tax. Our effective tax rate for 2022 was 20.6% compared to 20.8% for 2021.

Other underwriting and operating expenses, net increased to $236.7 million in 2022 from $198.4 million in 2021 primarily due to higher expenses related to our technology investments, particularly in data and analytics, and an increase in pension expense. Pension expenses increased in 2022 as a result of settlement accounting charges during 2022.

BUSINESS ENVIRONMENT

Economic conditions

Due to higher interest rates and higher home prices in 2022, there was a decrease in home purchases in 2022 after a strong 2021. Higher interest rates also decreased refinance activity during 2022, after a robust 2021. This resulted in a decrease in our NIW, to $76.4 billion in 2022 when compared to $120.2 billion in 2021.

The level of interest rates, and home prices may change in the future. For the possible effects of such changes, see our risk factors titled "*If the volume of low down payment home mortgage originations declines, the amount of insurance that we write could decline*," "*Downturns in the domestic economy or declines in home prices may result in more homeowners defaulting and our losses increasing, with a corresponding decrease in our returns,*" and "*Changes in interest rates, house prices or mortgage insurance cancellation requirements may change the length of time that our policies remain in force*."

Mortgage insurance market

The past several years of favorable housing fundamentals and in our view, generally favorable risk characteristics of our recently insured loans contributed to a growing insurance in force. Higher interest rates and home prices, resulted in a decrease in our NIW in 2022 when compared to 2021.

The percentage of our NIW with DTI ratios over 45% and LTV's over 95% increased in 2022 when compared with 2021. The increase was primarily driven by higher home prices and interest rates, and a higher percentage of NIW from purchase transactions.

Refer to "Mortgage Insurance Portfolio" for additional discussion of changes in our NIW mix during 2022.

Competition

PMI. The private mortgage insurance industry is highly competitive and is expected to remain so. We believe that we currently compete with other private mortgage insurers based on premium rates, underwriting requirements, financial strength (including based on credit or financial strength ratings), customer relationships, name recognition, reputation, strength of management teams and field organizations, the ancillary products and services provided to lenders, and the effective use of technology and innovation in the delivery and servicing of our mortgage insurance products.

Pricing practices

In recent years, the industry has materially reduced its use of standard rate cards, which were fairly consistent among competitors, and correspondingly increased its use of (i) "risk-based pricing systems" that use a spectrum of filed rates to allow for formulaic, risk-based pricing based on multiple attributes that may be quickly adjusted within certain parameters, and (ii) customized rate plans, both of which typically have rates lower than the standard rate card. Our increased use of reinsurance over the past several years, and the improved credit profile and reduced loss expectations associated with loans insured after 2008, have helped to mitigate the negative effect of declining premium rates on our expected returns.

For information about competition in the private mortgage insurance industry, see our risk factor titled "*Competition or changes in our relationships with our customers could reduce our revenues, reduce our premium yields and/or increase our losses.*"

GSE Risk Share Transactions

In 2018, the GSEs initiated secondary mortgage market programs with loan level mortgage default coverage provided by various (re)insurers that are not mortgage insurers governed by PMIERs, and that are not selected by the lenders. Due to differences in policy terms, these programs may offer premium rates that are below prevalent single premium LPMI rates. While we view these programs as competing with traditional private mortgage insurance, we participate in these programs from time to time.

The GSEs (and other investors) have also used other forms of credit enhancement that did not involve traditional private mortgage insurance, such as engaging in credit-linked note transactions executed in the capital markets, or using other forms of debt issuances or securitizations that transfer credit risk directly to other investors, including competitors and an affiliate of MGIC; using other risk mitigation techniques in conjunction with reduced levels of private mortgage insurance coverage; or accepting credit risk without credit enhancement.

Government programs. PMI also competes against government mortgage insurance programs such as the FHA, VA, and USDA, primarily for lower FICO score business. The combined market share of primary mortgage insurance written by government programs continues to exceed that written by PMI in 2022 and 2021.

Refer to "Mortgage Insurance Portfolio" for additional discussion on market share, the 2022 business environment and the impact it had on operating measures including NIW, IIF and RIF.

PMIERs

We operate under the requirements of the PMIERs of the GSEs in order to insure loans delivered to or purchased by them. The PMIERs include financial requirements as well as business, quality control and certain transactional approval requirements. The financial requirements of the PMIERs require a mortgage insurer's "Available Assets" (generally only the most liquid assets of an insurer) to equal or exceed its "Minimum Required Assets" (which are based on an insurer's book of risk in force, calculated from tables of factors with several risk dimensions, reduced for credit given for risk ceded under reinsurance transactions, and subject to a floor amount). Based on our application of PMIERs, MGIC's Available Assets under PMIERs totaled $5.7 billion, an excess of $2.3 billion over its Minimum Required Assets at December 31, 2022.

BUSINESS OUTLOOK FOR 2023

Our outlook for 2023 should be viewed against the backdrop of the business environment discussed above.

NIW

Our NIW is affected by total mortgage originations, the percentage of total mortgage originations using private mortgage insurance (the "PMI penetration rate"), and our market share within the PMI industry. As of January 2023, the total average mortgage origination forecasts from the Fannie Mae and MBA indicate mortgage originations of $1.8 trillion in 2023, compared to an estimated $2.3 trillion in 2022. Both purchase originations and refinance transactions are forecasted to decline in 2023 when compared to 2022. As a result of the decrease in forecasted mortgage originations, we are expecting NIW to be lower in 2023 compared to 2022.

The widespread use of risk based pricing systems by the PMI industry makes it more difficult to compare our rates to those offered by our competitors. We may not be aware of industry rate changes until we observe that our volume of NIW has changed. In addition, business under customized rate plans is awarded by certain customers for only limited periods of time. As a result, our NIW may fluctuate more than it had in the past.

IIF

Our IIF increased 7.6% in 2022 and is expected to be relatively flat in 2023. Our book of IIF is an important driver of our future revenues, and its growth is driven by our ability to generate NIW and the retention of our IIF, as measured by our persistency. Interest rates influence both our NIW and persistency. Generally speaking, in a rising rate environment, total mortgage originations may decline; however, absent material accumulated home price appreciation since the issuance of a policy, we would also expect policy cancellation rates to decline, and in turn increase persistency, although the impact generally lags the change in interest rates. In 2023, we expect interest rates to remain elevated compared to recent years and home prices to decline.

Results of operations

Premiums. Our direct premiums written and earned are impacted by our IIF during the period and our in force premium yield, both of which are expected to be relatively flat in 2023 when compared to 2022. Premiums earned are also impacted by the amount of accelerated premiums from single premium policy cancellations, which generally decrease as refinance activity decreases. Our unearned premium decreased to $195.3 million at December 31, 2022 from $241.7 million at December 31, 2021.

Our net premiums written and earned are primarily impacted by the changes in the direct premiums written and earned noted above and by the amount of premiums we cede under our quota share and excess of loss reinsurance transactions. The amount of premiums we cede in 2023 will be affected by any changes in our reinsurance coverage. Premiums we cede under our quota share transactions is also impacted by the profit commission we receive. The amount of profit commission is variable year-to-year and is dependent on the amount of losses incurred ceded. In 2022, negative losses incurred increased the profit commission we received, resulting in lower ceded premiums. Increases in ceded losses incurred will benefit our losses incurred line, but will result in lower profit commission and higher ceded premiums.

Factors that affect the amount of premiums we earn from our IIF are further discussed in our "Consolidated Results of Operations - Premium yield."

Investment income. Net investment income is a material contributor to our results of operations. We expect net investment income in 2023 to increase in comparison to 2022, primarily due to higher average investment yields. The amount of investment income will be impacted by the change in the yield we can earn on investments and the level of invested assets. The level of invested assets will primarily be impacted by the amount of cash we expect to use in financing activities relative to our cash from operations. The magnitude of any change in our invested asset level will be subject to the timing of our financing activities.

Losses. Losses incurred, net is impacted by the level of new delinquency notices. Generally, on our primary business, the highest claim frequency years have been the third and fourth year after loan origination. As of December 31, 2022, 80% of our primary RIF was written subsequent to December 31, 2019, 85% of our primary RIF was written subsequent to December 31, 2018, and 88% of our primary RIF was written subsequent to December 31, 2017. The pattern of claim frequency can be affected by many factors, including persistency and deteriorating economic conditions.

Our claims paid activity slowed at the start of the COVID-19 pandemic primarily due to forbearance and foreclosure moratoriums put in place. Claim activity has not yet returned to pre-COVID-19 levels. We expect net losses and LAE paid to increase, however, the magnitude and timing of the increases are uncertain.

Underwriting and operating expenses, net. We expect underwriting and operating expenses, net to be modestly lower in 2023 compared to 2022. In recent years, we have made additional investments in our technology, particularly in data and analytics and will continue to make similar investments in 2023. Pension expenses also increased in 2022 as a result of settlement accounting charges incurred during 2022. In 2023, we expect to incur settlement accounting charges as a result of lump sum settlements for employees who retired in the fourth quarter of 2022.

Income taxes. We expect our 2023 effective tax rate to be approximately 21%.

CAPITAL

MGIC dividend payments to our holding company

The ability of MGIC to pay dividends is restricted by insurance regulation. Amounts in excess of prescribed limits are deemed “extraordinary” and may not be paid if disapproved by the OCI. A dividend is extraordinary when the proposed dividend amount, plus dividends paid in the twelve months preceding the dividend payment date exceed the ordinary dividend level. In 2023, MGIC could pay $92 million of ordinary dividends without OCI approval, before taking into consideration dividends paid in the preceding twelve months. In 2022 and 2021, MGIC paid a cash and/or investment security dividend of $800 million and $400 million, respectively, to our holding company. Future dividend payments from MGIC to the holding company will continue to be determined in consultation with the board.

Share repurchase programs

Repurchases may be made from time to time on the open market (including through 10b5-1 plans) or through privately negotiated transactions. The repurchase programs may be suspended for periods or discontinued at any time. We repurchased approximately 27.8 million shares in 2022 using approximately $386 million of holding company resources. In 2021, we repurchased approximately 19.0 million shares of our common stock using approximately $291 million of holding company resources. As of December 31, 2022, we had $114 million of authorization remaining to repurchase our common stock through the end of 2023 under a share repurchase program approved by our Board of Directors in October 2021.

The following table shows details of our share repurchase programs.

Repurchase Program	Expiration Date	Repurchased (in millions)	Authorization Remaining (in millions)
2020 Authorization	December 31, 2021	$ 300	$ —
2021 Authorization	December 31, 2023	$ 386	$ 114

As of December 31, 2022, we had approximately 293 million shares of common stock outstanding which was a decrease of 8.4% from December 31, 2021.

Dividends to shareholders

In the first and second quarters of 2022, we paid quarterly cash dividends of $0.08 per share to shareholders which totaled $51.0 million. In the third and fourth quarters of 2022, we paid quarterly cash dividends of $0.10 per share which totaled $60.7 million. On January 24, 2023, the Board of Directors declared a quarterly cash dividend to holders of the company's common stock of $0.10 per share payable on March 2, 2023, to shareholders of record at the close of business on February 17, 2023.

For information about how the payment of dividends by our holding company will result in an adjustment to the conversion rate and price of our convertible securities, see our risk factor titled “*Your ownership in our company may be diluted by additional capital that we raise.*”

GSEs

We must comply with a GSE's PMIERs to be eligible to insure loans delivered to or purchased by that GSE. The PMIERs include financial requirements, as well as business, quality control and certain transaction approval requirements. The financial requirements of the PMIERs require a mortgage insurer's "Available Assets" (generally only the most liquid assets of an insurer) to equal or exceed its "Minimum Required Assets" (which are generally based on an insurer's book of risk in force and are calculated from tables of factors with several risk dimensions, reduced for credit given for risk ceded under reinsurance transactions).

The PMIERs generally require us to hold significantly more Minimum Required Assets for delinquent loans than for performing loans and the Minimum Required Assets required to be held increases as the number of payments missed on a delinquent loan increases.

If MGIC ceases to be eligible to insure loans purchased by one or both of the GSEs, it would significantly reduce the volume of our NIW, the substantial majority of which is for loans delivered to or purchased by the GSEs. In addition to the increase in Minimum Required Assets associated with delinquent loans, factors that may negatively impact MGIC's ability to continue to comply with the financial requirements of the PMIERs include the following:

- The GSEs may make the PMIERs more onerous in the future. The PMIERs provide that the factors that determine Minimum Required Assets will be updated periodically, or as needed if there is a significant change in macroeconomic conditions or loan performance. We do not anticipate that the regular periodic updates will occur more frequently than once every two years. The PMIERs state that the GSEs will provide notice 180 days prior to the effective date of updates to the factors; however, the GSEs may amend any portion of the PMIERs at any time.
- The PMIERS may be changed in response to the final regulatory capital framework for the GSEs which was established in February 2022.
- Our future operating results may be negatively impacted by the matters discussed in our Risk Factors. Such matters could decrease our revenues, increase our losses or require the use of assets, thereby creating a shortfall in Available Assets.
- Should capital be needed by MGIC in the future, capital contributions from our holding company may not be available due to competing demands on holding company resources, including for repayment of debt.

Our reinsurance transactions enable us to earn higher returns on our business than we would without them because they reduce the Minimum Required Assets we must hold under PMIERs. However, reinsurance may not always be available to us, or available on similar terms and our reinsurance subjects us to counterparty credit risk. Our access to reinsurance may be disrupted and the terms under which we are able to obtain reinsurance may be less attractive than in the past due to volatility stemming from circumstances such as higher interest rates, increased inflation, global events such as the Russia-Ukraine war, and other factors. In 2022, execution of transactions for XOL reinsurance through the ILN market was more challenging primarily due to increased pricing.

The calculated credit for XOL Transactions under PMIERs is generally based on the PMIERs requirement of the covered loans and the attachment and detachment point of the coverage. PMIERs credit is generally not given for the reinsured risk above the PMIERs requirement. Our existing reinsurance transactions are subject to periodic review by the GSEs and there is a risk we will not receive our current level of credit in future periods for the risk ceded under them. In addition, we may not receive the same level of credit under future transactions that we receive under existing transactions. If MGIC is not allowed certain levels of credit under the PMIERs, under certain circumstances, MGIC may terminate the reinsurance transactions without penalties.

State Regulations

The insurance laws of 16 jurisdictions, including Wisconsin, our domiciliary state, require a mortgage insurer to maintain a minimum amount of statutory capital relative to its RIF (or a similar measure) in order for the mortgage insurer to continue to write new business. We refer to these requirements as the "State Capital Requirements." While they vary among jurisdictions, the most common State Capital Requirements allow for a maximum risk-to-capital ratio of 25 to 1. A risk-to-capital ratio will increase if (i) the percentage decrease in capital exceeds the percentage decrease in insured risk, or (ii) the percentage increase in capital is less than the percentage increase in insured risk. Wisconsin does not regulate capital by using a risk-to-capital measure but instead requires a MPP. MGIC's "policyholder position" includes its net worth or surplus and its, contingency reserve.

At December 31, 2022, MGIC's risk-to-capital ratio was 10.2 to 1, below the maximum allowed by the jurisdictions with State Capital Requirements, and its policyholder position was $3.5 billion above the required MPP of $2.1 billion. Our risk-to-capital ratio and MPP reflect full credit for the risk ceded under our reinsurance transactions. It is possible that under the revised State Capital Requirements discussed below, MGIC will not be allowed full credit for the risk ceded under such transactions. If MGIC is not allowed an agreed level of credit under either the State Capital Requirements or the PMIERs, MGIC may terminate the reinsurance transactions, without penalty. At this time, we expect MGIC to continue to comply with the current State Capital Requirements; however, refer to our risk factor titled "*State capital requirements may prevent us from continuing to write new insurance on an uninterrupted basis*" for more information about matters that could negatively affect such compliance.

The NAIC previously announced plans to revise the minimum capital and surplus requirements for mortgage insurers that are provided for in its Mortgage Guaranty Insurance Model Act. In 2019, a working group of state regulators released an exposure draft of a revised Mortgage Guaranty Insurance Model Act and a risk-based capital framework to establish capital requirements for mortgage insurers, although certain items were not completely addressed by the framework, including the treatment of ceded risk and minimum capital floors. In October 2022, the NAIC working group released a revised exposure draft of the Mortgage Guaranty Insurance Model Act that does not include changes to the capital requirements of the existing Model Act.

GSE REFORM

The FHFA has been the conservator of the GSEs since 2008 and has the authority to control and direct their operations. The increased role that the federal government has assumed in the residential housing finance system through the GSE conservatorship may increase the likelihood that the business practices of the GSEs change, including through administrative action, in ways that have a material adverse effect on us and that the charters of the GSEs are changed by new federal legislation.

It is uncertain what role the GSEs, FHA and private capital, including private mortgage insurance, will play in the residential housing finance system in the future. The timing and impact on our business of any resulting changes is uncertain. Many of the proposed changes would require Congressional action to implement and it is difficult to estimate when Congressional action would be final and how long any associated phase-in period may last.

For additional information about the business practices of the GSEs, see our Risk Factor titled "Changes in the business practices of Fannie Mae and Freddie Mac's ("the GSEs"), federal legislation that changes their charters or a restructuring of the GSEs could reduce our revenues or increase our losses."

COVID-19 PANDEMIC

The COVID-19 pandemic materially impacted our 2020 financial results, as we reserved for losses associated with the increased delinquency notices received. Through December 31, 2022, the vast majority of those delinquency notices have cured, resulting in a decrease in losses incurred as we recognized favorable loss development.

Forbearance for borrowers who were affected by COVID-19 allows mortgage payments to be suspended for a period of time. Historically, forbearance plans have reduced the incidence of our losses on affected loans. However, given the uncertainty surrounding the long-term economic impact of COVID-19, it is difficult to predict the ultimate effect of COVID-19 related forbearances on our loss incidence. Whether a loan delinquency will cure, including through modification, when forbearance ends will depend on the economic circumstances of the borrower at that time. The severity of losses associated with delinquencies that do not cure will depend on economic conditions at that time, including home prices.

Foreclosures on mortgages purchased or securitized by the GSEs were suspended through July 31, 2021. Under a CFPB rule that was effective through December 31, 2021, with limited exceptions, servicers were required to ensure that at least one temporary procedural safeguard had been met before referring 120-day delinquent loans for foreclosure. Claim activity has not yet returned to pre-COVID-19 levels.

For additional information about how the COVID-19 pandemic may impact our future financial results, business, liquidity, and/or financial condition, see our Risk Factor titled "*The COVID-19 pandemic may materially impact our business and future financial condition.*"

FACTORS AFFECTING OUR RESULTS

Our current and future business, results of operations and financial condition are impacted by macroeconomic conditions such as rising interest rates, home prices, housing demand, level of employment, inflation, restrictions and costs on mortgage credit, and other factors. For additional information on how on our business may be impacted see our Risk Factor titled "*Downturns in the domestic economy or declines in home prices may result in more homeowners defaulting and our losses increasing, with a corresponding decrease in our returns.*"

As noted above, the COVID-19 pandemic may adversely affect our future business, results of operations, and financial condition.

The future effects of changing climatic conditions on our business is uncertain. For information about possible effects, please refer to our Risk Factor titled "*Pandemics, hurricanes and other natural disasters may impact our incurred losses, the amount and timing of paid claims, our inventory of notices of default and our Minimum Required Assets under PMIERs.*"

Our results of operations are affected by:

Premiums written and earned

Premiums written and earned in a year are influenced by:

- NIW, which increases IIF. Many factors affect NIW, including the volume of low down payment home mortgage originations and competition to provide credit enhancement on those mortgages from the FHA, the VA, other mortgage insurers, and other alternatives to mortgage insurance, including GSE programs that may reduce or eliminate the demand for mortgage insurance. NIW does not include loans previously insured by us that are modified, such as loans modified under HARP.

- Cancellations, which reduce IIF. Cancellations due to refinancings are affected by the level of current mortgage interest rates compared to the mortgage coupon rates throughout the in force book, current home values compared to values when the loans in the in force book were insured and the terms on which mortgage credit is available. Home price appreciation can give homeowners the right to cancel mortgage insurance on their loans if sufficient home equity is achieved. Cancellations also result from policy rescissions, which require us to return any premiums received on the rescinded policies, and claim payments, which require us to return any premium received on the related policies from the date of default on the insured loans. Cancellations of single premium policies, which are generally non-refundable, result in immediate recognition of any remaining unearned premium.

- Premium rates, which are affected by product type, competitive pressures, the risk characteristics of the insured loans, the percentage of coverage on the insured loans, and PMIERs capital requirements. The substantial majority of our monthly and annual mortgage insurance premiums are under premium plans for which, for the first ten years of the policy, the amount of premium is determined by multiplying the initial premium rate by the original loan balance; thereafter, the premium rate resets to a lower rate used for the remaining life of the policy. The remainder of our monthly and annual premiums are under premium plans for which premiums are determined by a fixed percentage of the loan's amortizing balance over the life of the policy.

- Premiums ceded, net of profit commission under our QSR Transactions, and premiums ceded under our XOL Transactions, are primarily affected by the percentage of our IIF subject to our reinsurance transactions. The profit commission under our QSR Transactions also varies inversely with the level of ceded losses incurred on a "dollar for dollar" basis and can be eliminated at ceded loss levels higher than what we have experienced on our QSR Transactions. As a result, lower levels of losses incurred result in a higher profit commission and less benefit from ceded losses incurred; higher levels of losses incurred result in more benefit from ceded losses incurred and a lower profit commission (or for certain levels of accident year loss ratios, its elimination). See Note 9 – "Reinsurance" to our consolidated financial statements for a discussion of our reinsurance transactions.

- Premiums earned are generated by the insurance that is in force during all or a portion of the period. A change in the average IIF in the current period compared to an earlier period is a factor that will increase (when the average in force is higher) or reduce (when it is lower) premiums written and earned in the current period, although this effect may be enhanced (or mitigated) by the factors discussed above.

Investment income

Our investment portfolio is composed principally of investment grade fixed income securities. The principal factors that influence investment income are the size of the portfolio and its yield. As measured by amortized cost (which excludes changes in fair value, such as from changes in interest rates), the size of the investment portfolio is mainly a function of cash generated from (or used in) operations, such as net premiums written, investment income, net claim payments and expenses, and cash provided by (or used for) non-operating activities, such as debt or stock issuances or repurchases, and dividends.

Losses incurred

Losses incurred are the current expense that reflects claim payments, costs of settling claims, and changes in our estimates of payments that will ultimately be made as a result of delinquencies on insured loans. As explained under "Critical Accounting Estimates" below, except in the case of a premium deficiency reserve, we recognize an estimate of this expense only for delinquent loans. Prior to the COVID-19 pandemic, the level of new delinquencies has historically followed a seasonal pattern, with new delinquencies in the first part of the year lower than new delinquencies in the latter part of the year. The state of the economy, local housing markets, and various other factors, including the COVID-19 pandemic, may result in delinquencies not following the typical pattern. Losses incurred are generally affected by:

- The state of the economy, including unemployment and housing values, each of which affects the likelihood that loans will become delinquent and whether loans that are delinquent cure their delinquency.

- The product mix of the in force book, with loans having higher risk characteristics generally resulting in higher delinquencies and claims.

- The size of loans insured, with higher average loan amounts tending to increase incurred losses.

- The percentage of coverage on insured loans, with deeper average coverage tending to increase incurred losses.

- The rate at which we rescind policies or curtail claims. Our estimated loss reserves incorporate our estimates of future rescissions of policies and curtailments of claims, and reversals of rescissions and curtailments. We collectively refer to such rescissions and denials as "rescissions" and variations of this term. We call reductions to claims "curtailments."

- The distribution of claims over the life of a book. Historically, the first few years after loans are originated are a period of relatively low claims, with claims increasing substantially for several years subsequent and then declining, although persistency, the condition of the economy, including unemployment and housing prices, and other factors can affect this pattern. For example, a weak economy or housing value declines can lead to claims from older books increasing, continuing at stable levels or experiencing a lower rate of decline. See further information under "Mortgage insurance earnings and cash flow cycle" below.

- Losses ceded under reinsurance transactions. See Note 9 – "Reinsurance" to our consolidated financial statements for a discussion of our reinsurance transactions.

Underwriting and other expenses

Underwriting and other expenses includes items such as employee compensation, fees for professional and consulting services, depreciation and maintenance expense, and premium taxes, and are reported net of ceding commissions associated with our QSR Transactions. Employee compensation expenses are variable due to share-based compensation, changes in benefits, and changes in headcount (which can fluctuate due to volume of NIW). See Note 9 – "Reinsurance" to our consolidated financial statements for a discussion of ceding commission on our QSR Transactions.

Interest expense

Interest expense reflects the interest associated with our consolidated outstanding debt obligations discussed in Note 7 – "Debt" to our consolidated financial statements and under "Liquidity and Capital Resources" below.

Other

Certain activities that we do not consider being part of our fundamental operating activities may also impact our results of operations and are described below.

Gains (losses) on investments and other financial instruments

- *Fixed income securities*. Investment gains and losses reflect the difference between the amount received on the sale of a fixed income security and the fixed income security's cost basis, as well as any credit allowances and any impairments on securities we intend to sell prior to recovery of its amortized cost basis. The amount received on the sale of fixed income securities is affected by the coupon rate of the security compared to the yield of comparable securities at the time of sale.

- *Equity securities*. Investment gains and losses are accounted for as a function of the periodic change in fair value.

- *Financial instruments*. Investment gains and losses on the embedded derivative on our Home Re Transactions reflect the present value impact of the variation in investment income on assets on the insurance-linked notes held by the reinsurance trusts and the contractual reference rate used to calculate the reinsurance premiums we estimate we will pay over the estimated remaining life.

Loss on debt extinguishment

Gains and losses on debt extinguishment result from discretionary activities that are undertaken to enhance our capital position, improve our debt profile and/or reduce potential dilution from our outstanding convertible debt. Extinguishing our outstanding debt obligations early through these discretionary activities may result in losses primarily driven by the payment of consideration in excess of our carrying value , and the write off of unamortized debt issuance costs on the extinguished portion of the debt.

Refer to "Explanation and reconciliation of our use of Non-GAAP financial measures" below to understand how these items impact our evaluation of our core financial performance.

MORTGAGE INSURANCE EARNINGS AND CASH FLOW CYCLE

In general, the majority of any underwriting profit that a book generates occurs in the early years of the book, with the largest portion of any underwriting profit realized in the first year following the year the book was written. Subsequent years of a book may result in either underwriting profit or underwriting losses. This pattern of results typically occurs because relatively few of the incurred losses on delinquencies that a book will ultimately experience typically occur in the first few years of the book, when premium revenue is highest, while subsequent years are affected by declining premium revenues, as the number of insured loans decreases (primarily due to loan prepayments) and increasing losses. The typical pattern is also a function of premium rates generally resetting to lower levels after ten years. The state of the economy, local housing markets and various other factors, including the COVID-19 pandemic, may result in delinquencies not following the typical pattern.

CYBERSECURITY

As part of our business, we maintain large amounts of confidential and proprietary information, including personal information of consumers and employees, on our servers and those of cloud computing services. Federal and state laws designed to promote the protection of such information require businesses that collect or maintain personal information to adopt information security programs, and to notify individuals, and in some jurisdictions, regulatory authorities, of security breaches involving personally identifiable information. All information technology systems are potentially vulnerable to damage or interruption from a variety of sources, including by cyber attacks, such as those involving ransomware. The Company discovers vulnerabilities and regularly blocks a high volume of attempts to gain unauthorized access to its systems. Globally, attacks are expected to continue accelerating in both frequency and sophistication with increasing use by actors of tools and techniques that will hinder the Company's ability to identify, investigate and recover from incidents. Such attacks may also increase as a result of retaliation by Russia in response to actions taken by the U.S. and other countries in connection with Russia's military invasion of Ukraine. The Company operates under a hybrid workforce model and such model may be more vulnerable to security breaches.

While we have information security policies and systems in place to secure our information technology systems and to prevent unauthorized access to or disclosure of sensitive information, there can be no assurance with respect to our systems and those of our third-party vendors that unauthorized access to the systems or disclosure of the sensitive information, either through the actions of third parties or employees, will not occur. Due to our reliance on information technology systems, including ours and those of our customers and third-party service providers, and to the sensitivity of the information that we maintain, unauthorized access to the systems or disclosure of the information could adversely affect our reputation, severely disrupt our operations, result in a loss of business and expose us to material claims for damages and may require that we provide free credit monitoring services to individuals affected by a security breach.

For additional information about our IT systems and cybersecurity, see our risk factor titled "*Information technology system failures or interruptions may materially impact our operations and adversely affect our financial results*" and "*We could be materially adversely affected by a cyber security breach or failure of information security controls.*"

EXPLANATION AND RECONCILIATION OF OUR USE OF NON-GAAP FINANCIAL MEASURES

NON-GAAP FINANCIAL MEASURES

We believe that use of the Non-GAAP measures of adjusted pre-tax operating income (loss), adjusted net operating income (loss) and adjusted net operating income (loss) per diluted share facilitate the evaluation of the company's core financial performance thereby providing relevant information to investors. These measures are not recognized in accordance with GAAP and should not be viewed as alternatives to GAAP measures of performance.

Adjusted pre-tax operating income (loss) is defined as GAAP income (loss) before tax, excluding the effects of net realized investment gains (losses), gain and losses on debt extinguishment, and infrequent or unusual non-operating items where applicable.

Adjusted net operating income (loss) is defined as GAAP net income (loss) excluding the after-tax effects of net realized investment gains (losses), gain and losses on debt extinguishment, and infrequent or unusual non-operating items where applicable. The amounts of adjustments to components of pre-tax operating income (loss) are tax effected using a federal statutory tax rate of 21%.

Adjusted net operating income (loss) per diluted share is calculated in a manner consistent with the accounting standard regarding earnings per share by dividing (i) adjusted net operating income (loss) after making adjustments for interest expense on convertible debt, whenever the impact is dilutive by (ii) diluted weighted average common shares outstanding, which reflects share dilution from unvested restricted stock units and from convertible debt when dilutive under the “if-converted” method.

Although adjusted pre-tax operating income (loss) and adjusted net operating income (loss) exclude certain items that have occurred in the past and are expected to occur in the future, the excluded items represent items that are: (1) not viewed as part of the operating performance of our primary activities; or (2) impacted by both discretionary and other economic or regulatory factors and are not necessarily indicative of operating trends, or both. These adjustments, along with the reasons for their treatment, are described below. Trends in the profitability of our fundamental operating activities can be more clearly identified without the fluctuations of these adjustments. Other companies may calculate these measures differently. Therefore, their measures may not be comparable to those used by us.

(1) *Net realized investment gains (losses).* The recognition of net realized investment gains or losses can vary significantly across periods as the timing of individual securities sales is highly discretionary and is influenced by such factors as market opportunities, our tax and capital profile, and overall market cycles.

(2) *Gains and losses on debt extinguishment*. Gains and losses on debt extinguishment result from discretionary activities that are undertaken to enhance our capital position, improve our debt profile, and/or reduce potential dilution from our outstanding convertible debt.

(3) *Infrequent or unusual non-operating items*. Items that are non-recurring in nature and are not part of our primary operating activities.

Non-GAAP reconciliations

Reconciliation of Income before tax / Net income to Adjusted pre-tax operating income / Adjusted net operating income:

	Years Ended December 31,					
	2022			2021		
(in thousands)	**Pre-tax**	**Tax Effect**	**Net (after-tax)**	Pre-tax	Tax Effect	Net (after-tax)
Income before tax / Net income	**$1,090,034**	**$ 224,685**	**$ 865,349**	801,777	166,794	634,983
Adjustments:						
Net realized investment (gains) losses	**9,745**	**2,046**	**7,699**	(7,009)	(1,472)	(5,537)
Loss on debt extinguishment	**40,199**	**8,442**	**31,757**	36,914	7,752	29,162
Adjusted pre-tax operating income / Adjusted net operating income	**$1,139,978**	**$ 235,173**	**$ 904,805**	$ 831,682	$ 173,074	$ 658,608

Reconciliation of Net income per diluted share to Adjusted net operating income per diluted share:

	2022	2021
Weighted average diluted shares outstanding	**311,229**	351,308
Net income per diluted share	**$ 2.79**	$ 1.85
Net realized investment (gains) losses	**0.02**	(0.02)
Loss on debt extinguishment	**0.10**	0.08
Adjusted net operating income per diluted share	**$ 2.91**	$ 1.91

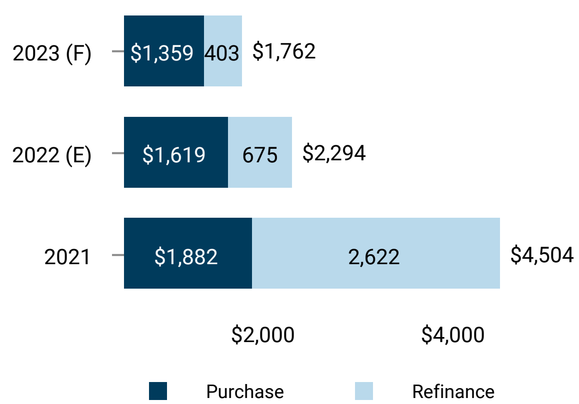
MORTGAGE INSURANCE PORTFOLIO

MORTGAGE ORIGINATIONS

The total amount of mortgage originations is generally influenced by the level of new and existing home sales, interest rates, the percentage of homes purchased for cash, and the level of refinance activity. PMI market share of total mortgage originations is influenced by the mix of purchase and refinance originations. PMI market share is also impacted by the market share of total originations of the FHA, VA, USDA, and other alternatives to mortgage insurance, including GSE programs that may reduce or eliminate the demand for mortgage insurance.

Total mortgage originations in 2022 as compared to 2021 reflects higher interest rates and home prices, contributing to a decrease in home purchase activity in 2022 after a strong 2021. Total mortgage originations are forecasted to be lower in 2023, in comparison to the last two years. Both purchase and refinance markets are forecasted to decrease in 2023 when compared to estimates for 2022.

Mortgage originations (in billions)



E - Estimated, F- Forecast

Source: Fannie Mae and MBA estimates/forecasts as of January 2023. Amounts represent the average of all sources.

As a result of the forecasted decrease in mortgage originations discussed above, our 2023 NIW is expected to be lower than 2022.

The total estimated mortgage insurance volume is shown below.

Estimated total of PMI, FHA, USDA, and VA primary mortgage insurance

(in billions)	**Twelve Months Ended December 31, 2022**	Twelve Months Ended December 31, 2021
Primary mortgage insurance	**$858**	$1,352

Source: *Inside Mortgage Finance* - February 17, 2023 or SEC filings. Includes HARP NIW.

MORTGAGE INSURANCE INDUSTRY

We compete against five other private mortgage insurers, as well as government mortgage insurance programs, including those offered by the FHA, VA, and USDA. Refer to "Overview - Business Environment - Competition" for a discussion of our competitive position.

PMI's market share is primarily impacted by competition from government mortgage insurance programs. The PMI industry's market share in 2022 increased compared to the market share in 2021.

Estimated primary MI market share

(% of total primary MI volume)	**Twelve Months Ended December 31, 2022**	Twelve Months Ended December 31, 2021
PMI	**47.2%**	43.2%
FHA	**26.7%**	24.7%
VA	**24.5%**	30.2%
USDA	**1.7%**	1.9%

Source: *Inside Mortgage Finance* - February 17, 2023 or SEC filings. Includes HARP NIW.

MGIC's estimated market share within the PMI industry is shown in the table below. Our risk-based pricing engine, MiQ, allows for frequent granular pricing changes including those to address our view of emerging and evolving market conditions and risk. We expect our market share to decline in first quarter of 2023 due to actions taken in 2022 reflective of our views of risk return. Additional discussion of the competitive landscape of the industry refer to "Overview - Business Environment - Competition" and additional discussion of pricing practices refer to "Overview - Business Environment - Pricing Practices"

Estimated MGIC market share

(% of total primary private MI volume)	**Twelve Months Ended December 31, 2022**	Twelve Months Ended December 31, 2021
MGIC	**18.9%**	20.6%

Source: *Inside Mortgage Finance* - February 17, 2023 or SEC filings. Includes HARP NIW.

NEW INSURANCE WRITTEN

The following tables provide information about loan characteristics associated with our NIW.

The percentage of our NIW with DTI ratios over 45% and LTV's over 95% increased in 2022 compared with 2021. The increases were primarily driven by higher home prices and interest rates, and a higher percentage of NIW from purchase transactions.

Primary NIW by FICO score

	Years Ended December 31,	
(% of primary NIW)	**2022**	2021
760 and greater	**43.1 %**	45.6 %
740 - 759	**18.5 %**	17.5 %
720 - 739	**14.9 %**	13.7 %
700 - 719	**10.9 %**	11.1 %
680 - 699	**7.3 %**	7.3 %
660 - 679	**3.3 %**	2.7 %
640 - 659	**1.3 %**	1.6 %
639 and less	**0.7 %**	0.5 %
Total	**100 %**	100 %

Primary NIW by loan-to-value

	Years Ended December 31,	
(% of primary NIW)	**2022**	2021
95.01% and above	**12.3 %**	10.8 %
90.01% to 95.00%	**49.3 %**	43.7 %
85.01% to 90.00%	**28.0 %**	30.0 %
80.01% to 85%	**10.4 %**	15.5 %
Total	**100 %**	100 %

Primary NIW by debt-to-income ratio

	Years Ended December 31,	
(% of primary NIW)	**2022**	2021
45.01% and above	**21.3 %**	13.6 %
38.01% to 45.00%	**32.3 %**	30.0 %
38.00% and below	**46.4 %**	56.4 %
Total	**100 %**	100 %

Primary NIW by policy payment type

	Years Ended December 31,	
(% of primary NIW)	**2022**	2021
Monthly premiums	**95.7 %**	92.5 %
Single premiums	**4.3 %**	7.4 %
Annual Premiums	**— %**	0.1 %

Primary NIW by type of mortgage

	Years Ended December 31,	
(% of primary NIW)	**2022**	2021
Purchases	**97.4 %**	79.7 %
Refinances	**2.6 %**	20.3 %

We consider a variety of loan characteristics when accessing the risk of a loan. The following tables provides information about loans with one or more of the following characteristics associated with our NIW: LTV ratios greater than 95%, mortgages with borrowers having FICO scores below 680, including those with borrowers having FICO scores of 620-679, mortgages with borrowers having DTI ratios greater than 45%, each attribute as determined at the time of loan origination.

Primary NIW by number of attributes discussed above

	Years Ended December 31,	
(% of primary NIW)	**2022**	2021
One	**31.5 %**	26.2 %
Two or More	**3.6 %**	1.5 %

IIF AND RIF

Our IIF grew 7.6% in 2022, and 11.3% in 2021, as NIW more than offset policy cancellations. Cancellation activity is impacted by refinancing activity, policies cancelled when borrowers achieve the required amount of home equity, and cancellations due to claim payment. Refinancing activity has historically been affected by the level of mortgage interest rates and the level of home price appreciation. Cancellations generally move inversely to the change in the direction of interest rates, although they generally lag a change in direction.

Persistency. Our persistency at December 31, 2022 was 79.8% compared to 62.6% at December 31, 2021. Since 2000, our year-end persistency ranged from a high of 84.7% at December 31, 2009 to a low of 47.1% at December 31, 2003. Our persistency rate is primarily affected by the level of current mortgage interest rates compared to the mortgage coupon rates on our IIF, which affects the vulnerability of the IIF to refinancing; and the current amount of equity that borrowers have in the homes underlying our IIF.

Insurance in force and risk in force

	Years Ended December 31,	
($ in billions)	**2022**	2021
NIW	**$ 76.4**	$ 120.2
Cancellations	**(55.5)**	(92.4)
Increase in primary IIF	**$ 20.9**	$ 27.8
Direct primary IIF as of December 31,	**$ 295.3**	$ 274.4
Direct primary RIF as of December 31,	**$ 76.5**	$ 69.3

CREDIT PROFILE OF OUR PRIMARY RIF

Our 2009 and later books possess significantly improved risk characteristics when compared to our 2005-2008 books. Modification and refinance programs, such as HAMP and HARP, which expired at the end of 2016 and 2018, respectively, but have been replaced by other GSE modification programs, make outstanding loans more affordable to borrowers with the goal of reducing the number of foreclosures. As of December 31, 2022, modifications accounted for approximately 4.2% of our total primary RIF, compared to 5.4% at December 31, 2021. Loans associated with 87% of all our modifications were current as of December 31, 2022. For additional information on the composition of our primary RIF see "Business - Our Products and Services"

The composition of our primary RIF by policy year as of December 31, 2022 and 2021 is shown below:

Primary risk in force

($ in millions)	**December 31, 2022**	December 31, 2021
2004 and prior	**411**	500
2005 - 2008	**3,083**	3,728
2009 - 2015	**1,753**	2,865
2016 - 2022	**71,225**	62,244
Total	**76,472**	69,337

POOL AND OTHER INSURANCE

MGIC has written no new pool insurance since 2008, however, for a variety of reasons, including responding to capital market alternatives to private mortgage insurance and customer demands, MGIC may write pool risk in the future. Our direct pool RIF was $276 million ($196 million on pool policies with aggregate loss limits and $80 million on pool policies without aggregate loss limits) at December 31, 2022 compared to $305 million ($206 million on pool policies with aggregate loss limits and $99 million on pool policies without aggregate loss limits) at December 31, 2021. If claim payments associated with a specific pool reach the aggregate loss limit, the remaining IIF within the pool would be cancelled and any remaining defaults under the pool would be removed from our default inventory.

In connection with the GSEs' CRT programs, an insurance subsidiary of MGIC provides insurance and reinsurance covering portions of the credit risk related to certain reference pools of mortgages acquired by the GSEs. Our RIF, as reported to us, related to these programs was approximately $226 million and $321 million as of December 31, 2022 and December 31, 2021, respectively.

CONSOLIDATED RESULTS OF OPERATIONS

The following section of the MD&A provides a comparative discussion of our Consolidated Results of Operations for the two-year period ended December 31, 2022. For a discussion of the Critical Accounting Estimates used by us that affect the Consolidated Results of Operations, see "Critical Accounting Estimates" below.

Revenues

Revenues

	Year Ended December 31,		
(In millions)	**2022**	2021	% Change
Net premiums written	**$ 960.7**	$ 969.0	(1)
Net premiums earned	**$ 1,007.1**	$ 1,014.4	(1)
Investment income, net of expenses	**167.5**	156.4	7
Net gains (losses) on investments and other financial instruments	**(7.5)**	5.9	N/M
Other revenue	**5.6**	9.0	(38)
Total revenues	**$ 1,172.8**	$ 1,185.7	(1)

NET PREMIUMS WRITTEN AND EARNED

Net premiums written and earned decreased 1%, respectively, in 2022 compared with the prior year. The decrease in premiums written and earned in 2022 compared to the prior year is primarily due to a decrease in the direct premium yield, offset by a decrease in ceded premiums written and earned.

Premium yields

Premium yield is net premiums earned divided by average IIF during the year and is influenced by a number of key drivers, which have a varying impact from period to period. The following table provides information related to our premium yield for 2022, and 2021.

Premium Yield

		Year Ended December 31,	
(in basis points)		**2022**	2021
In force portfolio yield	(1)	**39.4**	42.2
Premium refunds		**0.1**	(0.6)
Accelerated earnings on single premium policies		**1.0**	3.2
Total direct premium yield		**40.5**	44.8
Ceded premiums earned, net of profit commission and assumed premiums	(2)	**(5.2)**	(5.9)
Net premium yield		**35.3**	38.9

(1) Total direct premiums earned, excluding premium refunds and accelerated premiums from single premium policy cancellations divided by average primary insurance in force.

(2) Assumed premiums include those from our participation in GSE CRT programs, of which the impact on the net premium yield was 0.3 bps in 2022 and 0.4 bps in 2021

Changes in the net premium yields when compared to the respective prior year periods reflect the following:

In force Portfolio Yield

- A larger percentage of our IIF is from book years with lower premium rates due to a decline in premium rates in recent years resulting from pricing competition, insuring mortgages with lower risk characteristics, lower required capital, the availability of reinsurance and certain policies undergoing premium rate resets on their ten-year anniversaries.

Premium Refunds

- Premium refunds are primarily driven by claim activity and our estimate of refundable premiums on our delinquency inventory. The low level of claims received have resulted in a lower level of premium refunds. Our estimate of refundable premium on our delinquency inventory fluctuates with changes in our delinquency inventory and our estimate of the number of loans in our delinquency inventory that will result in a claim.

Accelerated earnings on single premium policies

- The lower level of refinance transactions has reduced the benefit from accelerated earned premium from cancellation of single premium policies prior to their estimated policy life.

Ceded premiums earned, net of profit commission and assumed premiums

- Ceded premiums earned, net of profit commission adversely impacts our net premium yield. Ceded premiums earned, net of profit commission, are associated with the QSR Transactions and the XOL Transactions. Assumed premiums consists primarily of premiums from GSE CRT programs. See "Reinsurance Transactions" below for further discussion on our reinsurance transactions.

As discussed in our Risk Factor titled "Competition or changes in our relationships with our customers could

reduce our revenues, reduce our premium yields and/or increase our losses," the private mortgage insurance industry is highly competitive and premium rates have declined over the past several years. With the smaller origination market, higher persistency rate, and continued high credit quality for NIW expected in 2023, we expect our in force portfolio premium yield to remain relatively flat during 2023.
See "Overview – Factors Affecting Our Results" above for additional factors that also influence the amount of net premiums written and earned in a year.

REINSURANCE TRANSACTIONS

Quota share reinsurance

Our quota share reinsurance affects various lines of our statements of operations and therefore we believe it should be analyzed by reviewing its total effect on our pre-tax income, as described below.

- We cede a fixed percentage of premiums earned and received on insurance covered by the agreements.
- We receive the benefit of a profit commission through a reduction in the premiums we cede. The profit commission varies inversely with the level of losses incurred on a "dollar for dollar" basis and can be eliminated at loss levels higher than we are currently experiencing. As a result, lower levels of losses incurred result in a higher profit commission and less benefit from ceded losses incurred, higher levels of ceded losses incurred result in more benefit from ceded losses incurred and a lower profit commission (or for certain levels of losses of accident year loss ratios, its elimination).
- We receive the benefit of a ceding commission through a reduction in underwriting expenses equal to 20% of premiums ceded (before the effect of the profit commission).
- We cede a fixed percentage of losses incurred on insurance covered by the agreements.

The following table provides information related to our QSR Transactions for 2022 and 2021.

Quota share reinsurance

	As of and For the Years Ended December 31,	
(Dollars in thousands)	**2022**	2021
Statements of operations:		
Ceded premiums written and earned, net of profit commission	**$ 86,435**	$ 118,537
% of direct premiums written	**8 %**	11 %
% of direct premiums earned	**7 %**	10 %
Profit commission	**176,084**	153,759
Ceding commissions	**52,071**	53,460
Ceded losses incurred	**(19,837)**	9,862
Mortgage insurance portfolio:		
Ceded RIF (in millions)		
2015 QSR	**$ —**	$ 889
2019 QSR	**—**	1,539
2020 QSR	**3,902**	4,754
2021 QSR	**6,809**	7,470
2022 QSR	**5,027**	—
Credit Union QSR	**2,261**	1,594
Total ceded RIF	**$ 17,999**	$ 16,246

Ceded premiums written, and earned net of profit commission decreased in 2022 when compared with the prior year primarily due to an increase in the profit commission, which reduces ceded premiums written and earned. The increase in profit commission was driven by negative losses incurred in 2022.

Ceded losses incurred for the year ended December 31, 2022 reflect favorable loss reserve development on previously received delinquency notices. See "Losses Incurred, net" below for discussion of our loss reserves.

We terminated our 2015 and 2019 QSR Transactions effective December 31, 2022 and incurred an early termination fee of $2 million on our 2019 QSR Transaction. We terminated our 2017 and 2018 QSR Transactions effective December 31, 2021 and incurred an early termination fee of $5 million. The termination of the QSR Transactions reduce the amount of IIF and RIF subject to QSR transactions.

Covered Risk

The percentages of our NIW, new risk written, IIF, and RIF subject to our QSR Transactions as shown in the following table will vary from period to period in part due to the mix of our risk written during the period and the number of active QSR Transactions.

Quota share reinsurance

	As of and For the Years Ended December 31,	
	2022	2021
NIW subject to QSR Transactions	**87.4 %**	81.9 %
New Risk Written subject to QSR Transactions	**93.0 %**	90.5 %
IIF subject to QSR Transactions	**67.9 %**	78.4 %
RIF subject to QSR Transactions	**73.0 %**	77.9 %

The NIW subject to quota share reinsurance increased in 2022 compared to 2021. The increase was driven by a decrease in refinance transactions which resulted in a decrease in NIW with LTVs less than or equal to 85%, which generally have lower coverage percentages, and are excluded from the QSR Transactions.

2023 QSR Transaction.
We have agreed to terms on a quota share transaction with a group of unaffiliated reinsurers covering most of our NIW in 2023 (with an additional 10.0% quota share). This is in addition to the reinsurance agreements executed in 2022 that included a 15% quota share on eligible 2023 NIW.

Excess of loss reinsurance

We have Excess-of-loss transactions (“XOL Transactions”) with a panel of unaffiliated reinsurers executed through the traditional reinsurance market (“Traditional XOL Transaction”) and with unaffiliated special purpose insurers (“Home Re Transactions”).

The 2022 Traditional XOL Transaction provides $142.6 million of reinsurance coverage on eligible NIW in 2022. The Traditional XOL Transaction has contractual termination date after approximately ten years, with an optional termination date after seven years and quarterly thereafter. For the covered policies, we retain the first layer of the aggregate losses paid, and the reinsurers will then provide second layer coverage up to the outstanding reinsurance coverage amount. We retain losses paid in excess of the outstanding reinsurance coverage amount. The reinsurance coverage is subject to adjustment based on the risk characteristics of the covered loans. The reinsurance premiums ceded to the Traditional XOL Transaction are based off the remaining reinsurance coverage levels.

The Home Re Transactions are executed with unaffiliated special purpose entities (“Home Re Entities”) through the issuance of insurance linked notes (“ILNs”). At December 31, 2022 our Home Re Transactions provided $1.6 billion of loss coverage on a portfolio of policies having an in force date from July 1, 2016 through March 31, 2019, and from January 1, 2020 through December 31, 2021; all dates inclusive. For this reinsurance coverage, we retain the first layer of the respective aggregate losses paid, and a Home Re Entity will then provide second layer coverage up to the outstanding reinsurance amount.

As of December 31, 2022, the premiums under most of our 2018-2021 reference the one-month LIBOR. As discussed in our risk factor titled "The Company may be adversely impacted by the transition from LIBOR as a reference rate," the ICE Benchmark Administration, the administrator of LIBOR, will cease publishing all USD LIBOR tenors on June 30, 2023.

The initial attachment and detachment, current attachment and detachment, and PMIERs required asset credit for each of our XOL Transactions as of December 31, 2022, are as follows:

($ In thousands)	**Initial Attachment % (1)**	**Initial Detachment % (2)**	**Current Attachment % (1)**	**Current Detachment % (2)**	**PMIERs Required Asset Credit**
Home Re 2018-1	2.25%	6.50%	11.67%	21.66%	$ —
Home Re 2019-1	2.50%	6.75%	14.79%	31.56%	—
Home Re 2020-1	3.00%	7.50%	6.20%	8.76%	—
Home Re 2021-1	2.25%	6.50%	3.28%	7.58%	178,788
Home Re 2021-2	2.10%	6.50%	2.56%	7.31%	315,126
Home Re 2022-1	2.75%	6.75%	2.96%	7.28%	454,318
2022 Traditional XOL	2.60%	7.10%	2.60%	7.10%	137,831

(1) The percentage represents the cumulative losses as a percentage of adjusted risk in force that MGIC retains prior to the XOL taking losses.

(2) The percentage represents the cumulative losses as a percentage of adjusted risk in force that must be reached before MGIC begins absorbing losses after the XOL layer

We ceded premiums on our XOL Transactions of $69.9 million and $44.5 million for the years ended December 31, 2022 and 2021, respectively.

See Note 9 - "Reinsurance," to our consolidated financial statements for additional discussion of our XOL Transactions.

INVESTMENT INCOME, NET

Net investment income increased 7% to $167.5 million in 2022 compared to $156.4 million in 2021. Net investment income benefited from higher yields.

See "Balance Sheet Review" in this MD&A for further discussion regarding our investment portfolio.

NET GAINS (LOSSES) ON INVESTMENTS AND OTHER FINANCIAL INSTRUMENTS

Net gains (losses) on investments and other financial instruments in 2022 and 2021 were $(7.5) million and $5.9 million, respectively.

OTHER REVENUE

Other revenue decreased to $5.6 million in 2022 from $9.0 million in 2021.

Losses and expenses

(In millions)		Year Ended December 31, 2022		2021	% Change
Losses incurred, net	**$**	**(254.6)**	$	64.6	N/M
Amortization of deferred policy acquisition costs		**12.4**		12.6	(2)
Other underwriting and operating expenses, net		**236.7**		198.4	19
Interest expense		**48.1**		71.4	(33)
Loss on debt extinguishment		**40.2**		36.9	9
Total losses and expenses	**$**	**82.8**	$	383.9	(78)

LOSSES INCURRED, NET

As discussed in "Critical Accounting Estimates" below and consistent with industry practices, we establish case loss reserves for future claims on delinquent loans that were reported to us as two payments past due and have not become current or resulted in a claim payment. Such loans are referred to as being in our delinquency inventory. Case loss reserves are established based on estimating the number of loans in our delinquency inventory that will result in a claim payment, which is referred to as the claim rate, and further estimating the amount of the claim payment, which is referred to as claim severity.

IBNR reserves are established for delinquencies estimated to have occurred prior to the close of an accounting period, but have not yet been reported to us. IBNR reserves are established using estimated delinquencies, claim rates and claim severities.

Estimation of losses is inherently judgmental. Even in a stable environment, changes to our estimates could result in a material impact to our consolidated results of operations and financial position. The conditions that affect the claim rate and claim severity include the current and future state of the domestic economy, including unemployment, and the current and future strength of local housing markets; exposure on insured loans; the amount of time between delinquency and claim filing; and curtailments and rescissions. The actual amount of the claim payments may be substantially different than our loss reserve estimates. Our estimates could be adversely affected by several factors, including a deterioration of regional or national economic conditions, including unemployment, leading to a reduction in borrowers' income and thus their ability to make mortgage payments, the impact of past and future government initiatives and actions taken by the GSEs (including mortgage forbearance programs and foreclosure moratoriums), and a drop in housing values that could result in, among other things, greater losses on loans, and may affect borrower willingness to continue to make mortgage payments when the net value of the home is below the mortgage balance. Loss reserves in the future will also be dependent on the number of loans reported to us as delinquent.

Prior to the COVID-19 pandemic, losses incurred have followed a seasonal trend in which the second half of the year has weaker credit performance than the first half, with higher new notice activity and a lower cure rate. The state of the economy, local housing markets and various other factors, may result in delinquencies not following the typical pattern.

As discussed in our Risk Factors titled "*The Covid-19 pandemic may materially impact our business, and future financial condition,*" the magnitude of any future impact of the COVID-19 pandemic on our incurred losses is uncertain and cannot be predicted. As discussed in our Risk Factor titled "Because we establish loss reserves only upon a loan delinquency rather than based on estimates of our ultimate losses on risk in force, losses may have a disproportionate adverse effect on our earnings in certain periods" if we have not received a notice of delinquency with respect to a loan and if we have not estimated the loan to be delinquent as of December 31, 2022 and recorded an IBNR reserve, then we have not yet recorded an incurred loss with respect to that loan.

Our estimates are also affected by any agreements we enter into regarding our claims paying practices.

Losses incurred, net decreased to $(254.6) million compared to $64.6 million in 2021, primarily due to favorable loss reserve development. While new delinquency notices added approximately $149.6 million to losses incurred in 2022, our re-estimation of loss reserves on previously received delinquency notices resulted in favorable development of approximately $404.1 million primarily related to a decrease in the estimated claim rate on delinquencies. The favorable development primarily resulted from greater than expected cure rates, as borrower reinstatements and servicer mitigation efforts resulted in more cures than originally estimated. Additionally, home price appreciation experienced in recent years has allowed borrowers to cure their delinquencies through the sale of their property. In 2021, new delinquency notices added approximately $124.6 million to losses incurred, and our re-estimation of loss reserves on previously received delinquency notices resulted in $60.0 million of favorable loss development, primarily due to the decrease in the claim rate on delinquencies received prior to the COVID-19 pandemic. This was offset by the recognition of a probable loss of $6.3 million related to litigation of our claims paying practices and adverse development on LAE reserves and reinsurance.

See "New notice claim rate" and "Claims severity" below for additional factors and trends that impact these loss reserve assumptions.

Composition of losses incurred

	Year Ended December 31,	
(In millions)	**2022**	2021
Current year / New notices	**$ 149.6**	$ 124.6
Prior year reserve development	**(404.1)**	(60.0)
Losses incurred, net	**$ (254.5)**	$ 64.6

Loss ratio

The loss ratio is the ratio, expressed as a percentage, of the sum of incurred losses and LAE, net to net premiums earned. The decrease in the loss ratio in 2022 when compared to 2021 was primarily due to a decrease in losses incurred as discussed above.

	Year Ended December 31,	
	2022	2021
Loss ratio	**(25.3)%**	6.4 %

New notice claim rate

The table below presents our new delinquency notices received, delinquency inventory, percentage of delinquent loans in forbearance, and the average number of missed payments for the loans in our delinquency inventory by policy year:

New notices and delinquency inventory during the period

		December 31, 2022		
Policy Year	New Notices	Delinquency Inventory	% of Delinquency Inventory in Forbearance	Avg. Number of Missed Payments of Delinquency Inventory
2004 and prior	3,695	2,471	13.4 %	18
2005-2008	11,702	8,317	11.9 %	19
2009-2015	3,115	2,017	12.4 %	12
2016	2,090	1,249	15.9 %	10
2017	2,797	1,719	16.9 %	10
2018	3,289	2,060	17.8 %	9
2019	3,199	1,823	21.7 %	9
2020	5,067	2,558	35.4 %	7
2021	6,656	3,307	43.9 %	5
2022	1,378	866	37.1 %	3
Total	**42,988**	**26,387**	**20.9 %**	**12**
Claim rate on new notices (1)	**8 %**			

		December 31, 2021		
Policy Year	New Notices	Delinquency Inventory	% of Delinquency Inventory in Forbearance	Avg. Number of Missed Payments of Delinquency Inventory
2004 and prior	3,893	2,829	21.4 %	19
2005-2008	13,070	10,882	24.3 %	19
2009-2015	4,040	3,400	34.9 %	13
2016	2,375	2,004	43.5 %	12
2017	3,384	2,949	46.6 %	12
2018	3,902	3,412	49.3 %	12
2019	4,163	3,340	58.1 %	11
2020	5,623	3,308	63.4 %	8
2021	1,982	1,166	40.9 %	4
Total	**42,432**	**33,290**	**39.5 %**	**14**
Claim rate on new notices (1)	**8 %**			

(1) Claim rate is the respective full year weighted average rate and is rounded to the nearest whole percent.

Historically, forbearance plans have reduced the incidence of our losses on affected loans. However, given the uncertainty surrounding the long-term economic impact of COVID-19, it is difficult to predict the ultimate effect of COVID-19 related forbearances on our loss incidence. Whether a loan delinquency will cure, including through modification, when forbearance ends will depend on the economic circumstances of the borrower at that time. The severity of losses associated with delinquencies that do not cure will depend on economic conditions at that time, including home prices.

Claims severity

Factors that impact claim severity include:

- economic conditions at that time, including home prices compared to home prices at the time of placement of coverage
- exposure on the loan, which is the unpaid principal balance of the loan times our insurance coverage percentage,
- length of time between delinquency and claim filing (which impacts the amount of interest and expenses, with a longer period between default and claim filing generally increasing severity), and
- curtailments.

As discussed in Note 8 - "Loss Reserves," our loss reserves estimates take into consideration trends over time, because the development of the delinquencies may vary from period to period without establishing a meaningful trend. An increase in loss mitigation activities, primarily third party acquisitions (sometimes referred to as "short sales"), has resulted in a decrease in the average claim paid and the average claim paid as a percentage of exposure in recent years. At the start of the COVID-19 pandemic, the level of claims received decreased. Claim activity and the average claims paid as a percentage of exposure has not yet returned to pre-COVID-19 levels. The magnitude and timing of the increases are uncertain.

The majority of loans insured prior to 2009 (which represent 41% of the loans in the delinquency inventory) are covered by master policy terms that, except under certain circumstances, do not limit the number of years that an insured can include interest when filing a claim. Under our current master policy terms, an insured can include accumulated interest when filing a claim only for the first three years the loan is delinquent. In each case, the insured must comply with its obligations under the terms of the applicable master policy.

Claims severity trend

Period	Average exposure on claim paid	Average claim paid	% Paid to exposure	Average number of missed payments at claim received date
Q4 2022	**$ 38,903**	**$ 28,492**	**73.2 %**	**41**
Q3 2022	37,625	23,461	62.4 %	46
Q2 2022	44,106	27,374	62.1 %	41
Q1 2022	38,009	27,662	72.8 %	45
Q4 2021	43,485	32,722	75.2 %	42
Q3 2021	42,468	36,138	85.1 %	34
Q2 2021	40,300	34,068	84.5 %	36
Q1 2021	46,807	36,725	78.5 %	34

Note: Table excludes material settlements. Settlements include amounts paid in settlement of disputes for claims paying practices and/or commutations of policies.

See Note 8 – "Loss Reserves" to our consolidated financial statements and "Critical Accounting Estimates" below for a discussion of our losses incurred and claims paying practices (including curtailments).

The length of time a loan is in the delinquency inventory can differ from the number of payments that the borrower has not made or is considered delinquent. These differences typically result from a borrower making monthly payments that do not result in the loan becoming fully current. The number of payments that a borrower is delinquent is shown in the following table.

Primary delinquent inventory - number of payments delinquent

	2022	2021
3 payments or less	**11,484**	9,529
4 - 11 payments	**8,026**	9,208
12 payments or more [(1)]	**6,877**	14,553
Total	**26,387**	33,290
3 payments or less	**44 %**	28 %
4 - 11 payments	**30 %**	28 %
12 payments or more	**26 %**	44 %
Total	**100 %**	100 %

(1) Approximately 28% and 13% of the loans in the primary delinquency inventory with 12 payments or more delinquent have at least 36 payments delinquent as of December 31, 2022, and 2021, respectively.

NET LOSSES AND LAE PAID

Net losses and LAE paid were flat in 2022 compared to 2021, while direct losses paid decreased slightly in 2022 compared to 2021. Our claims paid activity slowed at the start of the COVID-19 pandemic primarily due to forbearance and foreclosure moratoriums put in place. We expect net losses and LAE paid to increase, however, the magnitude and timing of the increases are uncertain.

The losses and LAE paid on reinsurance terminations decreased in 2022 when compared to 2021. The decrease is primarily due to the losses and LAE recoverable from reinsurers at time of termination of the 2015 and 2019 QSR Transactions (effective December 31, 2022), compared to the losses and LAE recoverable from reinsurers at time of termination of the 2017 and 2018 QSR transaction (effective December 31, 2021). In a reinsurance termination, amounts for any incurred but unpaid losses are due to us from the reinsurer

The table below presents our net losses and LAE paid for 2022 and 2021.

Net losses and LAE paid

(in millions)	**2022**	2021
Total primary (excluding settlements)	**$ 35**	$ 43
Claims paying practices and NPL settlements [(1)]	**8**	14
Pool	**—**	—
Direct losses paid	**43**	57
Reinsurance	**(1)**	(2)
Net losses paid	**42**	55
LAE	**8**	14
Net losses and LAE paid before terminations	**50**	69
Reinsurance terminations [(2)]	**(18)**	(36)
Net losses and LAE paid	**$ 32**	$ 33
Average claim paid	**$ 26,715**	$ 34,956

(1) See Note 8 - "Loss Reserves" for additional information on our settlements of disputes for claims paying practices and/or commutations of policies

(2) See Note 9 - "Reinsurance" for additional information on our reinsurance terminations

The primary average claim paid can vary materially from period to period based upon a variety of factors, including the local market conditions, average loan amount, average coverage percentage, the amount of time between delinquency and claim filing, and our loss mitigation efforts on loans for which claims are paid.

The primary average RIF on delinquent loans as of December 31, 2022 and 2021 and for the top 5 jurisdictions (based on December 31, 2022 delinquency inventory) appears in the following table.

Primary average RIF - delinquent loans

	2022	2021
Florida	**$ 59,515**	$ 56,227
Texas	**53,364**	51,037
Illinois	**41,640**	40,798
Pennsylvania	**40,993**	39,523
New York	**74,760**	74,836
All other jurisdictions	**51,693**	51,652
Total all jurisdictions	**$ 52,511**	$ 51,887

The primary average RIF on all loans was $64,784 and $59,518 at December 31, 2022 and December 31, 2021, respectively. The increase is primarily due to an increase in loans from recent years which generally have larger loan balances.

LOSS RESERVES

Our primary delinquency inventory was 26,387 at December 31, 2022, representing a decrease of 21% from December 31, 2021. We also experienced a decrease in the average direct reserve per default as shown in the table below. The average direct reserve per default is influenced by the number of consecutive months a borrower has been delinquent. Generally, a defaulted loan with more missed payments is more likely to result in a claim. The number of delinquencies in inventory with twelve or more missed payments at December 31, 2022 decreased when compared to the prior year. (See Note 8 -"Loss Reserves," table 8.4.) The average direct reserve per default is also impacted by the average RIF on delinquent loans as shown above.

The gross reserves as of December 31, 2022, and 2021 appear in the table below.

Gross loss reserves

	December 31,			
	2022		2021	
Primary:				
Case reserves *(In millions)*	**$ 498**		$ 795	
IBNR and LAE	**56**		82	
Total primary direct loss reserves	**554**		877	
Ending delinquency inventory		**26,387**		33,290
Percentage of loans delinquent (default rate)		**2.22 %**		2.84 %
Average direct reserve per default		**$ 20,994**		$ 26,156
Primary claims received inventory included in ending delinquency inventory		**267**		211
Other gross loss reserves [2] *(In millions)*	**4**		7	

(1) Since a number of our pool policies include aggregate loss limits and/or deductibles, we do not disclose an average direct reserve per default for our pool business.

(2) Other gross loss reserves includes direct and assumed reserves that are not included within our primary loss reserves.

The primary delinquency inventory for the top 15 jurisdictions (based on December 31, 2022 delinquency inventory) at December 31, 2022, and 2021 appears in table the below.

Primary delinquency inventory by jurisdiction

	2022	2021
Florida *	**2,414**	2,948
Texas	**1,935**	2,572
Illinois *	**1,640**	2,082
Pennsylvania *	**1,525**	1,672
New York *	**1,399**	1,674
California	**1,336**	1,852
Ohio *	**1,322**	1,458
Michigan	**965**	1,144
Georgia	**954**	1,272
New Jersey *	**841**	1,169
North Carolina	**753**	987
Maryland	**719**	929
Indiana	**622**	736
Virginia	**582**	766
Minnesota	**573**	725
All other jurisdictions	**8,807**	11,304
Total	**26,387**	33,290

Note: Asterisk denotes jurisdictions in the table above that predominately use a judicial foreclosure process, which generally increases the amount of time it takes for a foreclosure to be completed.

The primary delinquency inventory by policy year at December 31, 2022 and 2021 appears in the following table.

Primary delinquency inventory by policy year

	2022	2021
2004 and prior	**2,471**	2,829
2004 and prior %:	***9 %***	*8 %*
2005	**1,438**	1,703
2006	**2,388**	2,928
2007	**3,680**	4,973
2008	**811**	1,278
2005 - 2008 %	***32 %***	*33 %*
2009	**51**	84
2010	**31**	56
2011	**43**	79
2012	**72**	143
2013	**243**	441
2014	**633**	1,055
2015	**944**	1,542
2009 - 2015 %	***8 %***	*10 %*
2016	**1,249**	2,004
2017	**1,719**	2,949
2018	**2,060**	3,412
2019	**1,823**	3,340
2020	**2,558**	3,308
2021	**3,307**	1,166
2022	**866**	—
2016 and later %:	*51 %*	*49 %*
Total	**26,387**	**33,290**

On our primary business, the highest claim frequency years have typically been the third and fourth year after loan origination. However, the pattern of claim frequency can be affected by many factors, including persistency and deteriorating economic conditions. Deteriorating economic conditions can result in increasing claims following a period of declining claims. As of December 31, 2022, 80% of our primary RIF was written subsequent to December 31, 2019, 85% of our primary RIF was written subsequent to December 31, 2018, and 88% of our primary RIF was written subsequent to December 31, 2017.

UNDERWRITING AND OTHER EXPENSES, NET

Underwriting and other expenses includes items such as employee compensation costs, fees for professional and consulting services, depreciation and maintenance expense, and premium taxes, and are reported net of ceding commissions.

Underwriting and other expenses, net for 2022 increased to $236.7 million from $198.4 million in 2021. The increase was primarily due to higher expenses related to our technology investments, particularly in data and analytics, and an increase in pension expense. Pension expenses increased in 2022 as a result of settlement accounting charges during 2022. In 2023, we expect to incur settlement accounting charges as a result of lump sum settlements for employees who retired in the fourth quarter of 2022.

	Year Ended December 31,	
	2022	2021
Underwriting expense ratio	**25.2 %**	20.6 %

The underwriting expense ratio is the ratio, expressed as a percentage, of the underwriting and operating expenses, net and amortization of DAC of our combined insurance operations (which excludes underwriting and operating expenses of our non-insurance subsidiaries) to net premiums written. The underwriting expense ratio increased in 2022 compared with 2021 due to an increase in underwriting expenses and slight decreases in net premiums written.

LOSS ON DEBT EXTINGUISHMENT

In 2022, we recorded a loss on debt extinguishment of $40.2 million, related to the repurchases of a portion our 9% Debentures, the redemption of our 5.75% Senior Notes, and the repayment of the outstanding principal balance of the FHLB Advance. In 2021, we recorded a loss on debt extinguishment of $36.9 million associated with the repurchase of most of our 9% Debentures.

See Note 7 - "Debt" to our consolidated financial statements for a discussion on our debt.

INTEREST EXPENSE

Interest expense for 2022 was $48.1 million compared to $71.4 million for 2021. The decrease is due to the debt transactions discussed above.

INCOME TAX EXPENSE AND EFFECTIVE TAX RATE

Income tax provision and effective tax rate

(In millions, except rate)	**2022**	2021
Income before tax	**$ 1,090**	$ 802
Provision for income taxes	**225**	167
Effective tax rate	**20.6 %**	20.8 %

The increase in our provision for income taxes for 2022 compared to 2021 was primarily due to an increase in income before tax. Our effective tax rate for 2022 and 2021 approximated the federal statutory income tax rate of 21%.

See Note 12 – “Income Taxes” to our consolidated financial statements for a discussion of our tax position.

BALANCE SHEET REVIEW

The following sections focus on the assets and liabilities experiencing major developments in 2022.

Consolidated balance sheets - Assets

	As of December 31,		
(in thousands)	**2022**	2021	% Change
Investments	**$ 5,424,688**	$ 6,606,749	(18)
Cash and cash equivalents	**327,384**	284,690	15
Premiums receivable	**58,000**	56,540	3
Reinsurance recoverable on loss reserves	**28,240**	66,905	(58)
Reinsurance recoverable on paid losses	**18,081**	36,275	(50)
Deferred incomes taxes, net	**124,769**	—	N/M
Other assets	**232,631**	273,849	(15)
Total Assets	**$ 6,213,793**	$ 7,325,008	(15)

INVESTMENT PORTFOLIO

The investment portfolio decreased to $5.4 billion as of December 31, 2022 (2021: $6.6 billion), primarily due to a decrease in the fair value of our investment portfolio due to the increase in the prevailing market interest rates and the reduction of debt outstanding.

The return we generate on our investment portfolio is an important component of our consolidated financial results. Our investment portfolio primarily consists of a diverse mix of highly rated fixed income securities. The investment portfolio is designed to achieve the following objectives:

Operating Companies [(1)]	Holding Company
→ Preserve PMIERs assets	→ Provide liquidity with minimized realized loss
→ Maximize total return with emphasis on book yield, subject to our other objectives	→ Maintain highly liquid, low volatility assets
→ Limit portfolio volatility	→ Maintain high credit quality
→ Duration 3.5 to 5.5 years	→ Duration maximum of 2.5 years

(1) Primarily MGIC

To achieve our portfolio objectives, our asset allocation considers the risk and return parameters of the various asset classes in which we invest. This asset allocation is informed by, and based on, the following factors:

- economic and market outlooks;
- diversification effects;
- security duration;
- liquidity;
- capital considerations; and
- income tax rates.

The average duration and embedded investment yield of our investment portfolio as of December 31, 2022 and 2021 is shown in the following table.

Portfolio duration and embedded investment yield

	December 31,	
	2022	2021
Duration (in years)	**4.3**	4.5
Pre-tax yield [(1)]	**3.0%**	2.5%
After-tax yield [(1)]	**2.5%**	2.1%

(1) Embedded investment yield is calculated on a yield-to-worst basis.

The credit risk of a security is evaluated through analysis of the security's underlying fundamentals, including the issuer's sector, scale, profitability, debt coverage, and ratings. The investment policy guidelines limit the amount of our credit exposure to any one issue, issuer and type of instrument. The following table shows the security ratings of our fixed income investments as of December 31, 2022 and 2021.

Fixed income security ratings

% of fixed income securities at fair value

	Security Ratings [(1)]			
Period	AAA	AA	A	BBB
December 31, 2022	**18%**	**28%**	**34%**	**20%**
December 31, 2021	18%	26%	36%	20%

(1) Ratings are provided by one or more of: Moody's, Standard & Poor's and Fitch Ratings. If three ratings are available, the middle rating is used; if two FICO scores are available, the lower of the two is used; if only one FICO score is available, it is used.

Our investment portfolio was invested in comparable security types for the years ended December 31, 2022 and December 31, 2021. See Note 5 – "Investments" to our consolidated financial statements for additional disclosure on our investment portfolio.

Investments outlook

The Federal Open Market Committee ("FOMC") raised the federal funds rate seven times throughout 2022 from 0.25% to 4.5% as it weighed the ongoing economic impacts of tight labor markets, supply chain disruptions and other macroeconomic factors that elevated inflationary measures. In February, 2023 the FOMC increased the federal funds rate by an additional 0.25% and signaled continued restrictive monetary policy in response to inflationary pressures. Market yields have increased in response to the FOMC's actions, which has resulted in a decrease in our fixed income investment valuations. The actions of the FOMC and other ongoing macroeconomic factors could create significant economic uncertainty, such as increasing recessionary concerns, which may result in a widening of credit spreads. Market volatility resulting from these factors may continue to impact our investment valuations and returns.

We seek to manage our exposure to interest rate risk and volatility by maintaining a diverse mix of high-quality securities with an intermediate duration profile.

While higher interest rates may adversely impact the fair values of our fixed income investments, they present a near-term opportunity for investment into securities with yields in excess of the book yield on our portfolio. Increases in market-based portfolio yields are expected to result in higher net investment income in future periods. In addition to fixed income securities, we also hold cash and cash equivalents which yield returns that trend with changes in the federal funds rate.

As of December 31, 2022, approximately 6% of the fair value of our investment portfolio consisted of securities referencing LIBOR. As discussed in our risk factor titled "*The Company may be adversely impacted by the transition from LIBOR as a reference rate*," the ICE Benchmark Administration, the administrator of LIBOR, will cease publishing all USD LIBOR tenors on June 30, 2023.

CASH AND CASH EQUIVALENTS

Cash and cash equivalents increased to $327.4 million, as of December 31, 2022 (2021: $284.7 million), as net cash generated from operating was substantially used in financing activities.

DEFERRED INCOME TAXES

Our net deferred tax asset was $124.8 million at December 31, 2022 and is separately stated in our consolidated balance sheets as Deferred income taxes, net. Our net deferred income tax liability was $39.4 million at December 31, 2021 and is included as a component of Other liabilities in our consolidated balance sheets. The change in our deferred income tax asset and liability was primarily due to the tax effect of unrealized losses generated by the investment portfolio during 2022. We owned $661.7 million and $426.3 million of tax and loss bonds at December 31, 2022 and December 31, 2021, respectively. See Note 12 – "Income Taxes" to our consolidated financial statements for additional disclosure on the components of our deferred tax assets and liabilities.

REINSURANCE RECOVERABLE ON PAID LOSSES

Reinsurance recoverable on paid losses decreased to $18.1 million at December 31, 2022 (2021: $36.3 million). The decrease in the reinsurance recoverable on paid losses is primarily due from the losses recoverable from reinsurers at time of termination of the 2015 and 2019 QSR Transactions (effective December 31, 2022), compared to the losses recoverable from reinsurers at time of termination of the 2017 and 2018 QSR transaction (effective December 31, 2021). In a reinsurance termination, amounts for any incurred but unpaid losses are due to us from the reinsurers.

OTHER ASSETS

Other assets decreased to $111 million as of December 31, 2022 (2021: $134 million), primarily driven by a change in the net funded status of our employee benefit plans. See Note 11 - "Benefit Plans" to our consolidated financial statements for additional disclosure on our employee benefit plans.

Consolidated balance sheets - Liabilities and equity

	As of December 31,				
(In thousands)		**2022**		2021	% Change
Liabilities					
Loss reserves	**$**	**557,988**	$	883,522	(37)
Unearned premiums		**195,289**		241,690	(19)
Long-term debt		**662,810**		1,146,712	(42)
Other liabilities		**154,966**		191,702	(19)
Total Liabilities	**$**	**1,571,053**	$	2,463,626	(36)
Shareholders' equity					
Common stock	**$**	**371,353**	$	371,353	—
Paid-in capital		**1,798,842**		1,794,906	—
Treasury stock		**(1,050,238)**		(675,265)	56
AOCI, net of tax		**(481,511)**		119,697	(502)
Retained earnings		**4,004,294**		3,250,691	23
Total	**$**	**4,642,740**	$	4,861,382	(4)

LOSS RESERVES AND REINSURANCE RECOVERABLE ON LOSS RESERVES

Our loss reserves include estimates of losses and settlement expenses on (1) loans in our delinquency inventory (known as case reserves), (2) IBNR delinquencies, and (3) LAE. Our gross reserves are reduced by reinsurance recoverable on loss reserves to calculate a net reserve balance. Loss reserves decreased to $558.0 million as of December 31, 2022, from $883.5 million of December 31, 2021. Reinsurance recoverables on loss reserves were $28.2 million and $66.9 million as of December 31, 2022 and December 31, 2021, respectively. The decrease in loss reserves from 2022 to 2021 is primarily due to favorable development of $404.1 million on previously received delinquency notices, partially offset by loss reserves established on new delinquency notices. The reinsurance recoverable on loss reserves is impacted by the change in direct reserves and the percentage of our delinquency inventory covered by reinsurance transactions.

LONG-TERM DEBT

Our long-term debt decreased to $662.8 million as of December 31, 2022 from $1,146.7 million as of December 31, 2021 as we paid down our long-term debt in 2022. We repurchased $89.1 million in aggregate principal amount of our 9% Debentures, repaid the outstanding balance of the FHLB Advance of $155.0 million and we redeemed the $242.3 million of aggregate principal outstanding on our 5.75% Senior Notes due in 2023.

UNEARNED PREMIUM

Our unearned premium decreased to $195.3 million as of December 31, 2022 from $241.7 million as of December 31, 2021 primarily due to the run-off of our existing portfolio of single premium policies outpacing the level of NIW from single premium policies.

OTHER LIABILITIES

Other liabilities decreased to $155.0 million as of December 31, 2022 (2021: $191.7 million), primarily due to decreases in our deferred income tax liability, accrual for premium refunds, and interest payable. These were partially offset by an increase in our liability for pension obligation.

SHAREHOLDER'S EQUITY

The decrease in shareholders' equity represents a decrease in the fair value of our investments portfolio discussed above, repurchases of our common stock, and dividends paid to shareholders, partially offset by net income in 2022.

LIQUIDITY AND CAPITAL RESOURCES

CONSOLIDATED CASH FLOW ANALYSIS

We have three primary types of cash flows: (1) operating cash flows, which consist mainly of cash generated by our insurance operations and income earned on our investment portfolio, less amounts paid for claims, interest expense and operating expenses, (2) investing cash flows related to the purchase, sale and maturity of investments and purchases of property and equipment and (3) financing cash flows generally from activities that impact our capital structure, such as changes in debt and shares outstanding, and dividend payments. The following table summarizes these three cash flows on a consolidated basis for the last two years.

Summary of consolidated cash flows

	Years ended December 31,	
(In thousands)	**2022**	2021
Total cash provided by (used in):		
Operating activities	**$ 650,012**	$ 696,317
Investing activities	**410,485**	(160,749)
Financing activities	**(1,032,542)**	(527,290)
Increase (decrease) in cash and cash equivalents and restricted cash and cash equivalents	**$ 27,955**	$ 8,278

Operating activities

The following list highlights the major sources and uses of cash flow from operating activities:

Sources

+ Premiums received
+ Loss payments from reinsurers
+ Investment income

Uses

- Claim payments
- Premium ceded to reinsurers
- Interest expense
- Operating expenses
- Tax payments

Our largest source of cash is from premiums received from our insurance policies, which we receive on a monthly installment basis for most policies. Premiums are received at the beginning of the coverage period for single premium and annual premium policies. Our largest cash outflow is generally for claims that arise when a delinquency results in an insured loss. Based on historical experience, we expect our future claim payments associated with established case loss reserves to pay out at or within 5 years, with the majority of future claim payments made within one to three years. Our claims paid activity slowed at the start of the COVID-19 pandemic primarily due to forbearance and foreclosure moratoriums put in place. We expect net losses and LAE paid to increase, however, the magnitude and timing of the increases are uncertain.

We invest our net cash flow in various investment securities that earn interest. We also use cash to pay for our ongoing expenses such as salaries, debt interest, professional services and occupancy costs.

We also have purchase obligations totaling approximately $22 million which consist primarily of contracts related to our continued investment in our information technology infrastructure in the normal course of business. The majority of these obligations are under contracts that give us cancellation rights with notice. In the next twelve months we anticipate we will pay approximately $10 million for our purchase obligations.

In connection with our reinsurance transactions, we cede, or pay out, part of the premiums we receive to our reinsurers and collect cash when claims subject to our reinsurance coverage are paid.

Net cash provided by operating activities in 2022 decreased compared to 2021 primarily due to an increase in income taxes paid, increase in underwriting and operating expenses paid, a decrease in investment income collected, and a decrease in premiums received. This was partially offset by a decrease in losses paid, net of reinsurance settlements and a decrease in interest payments.

Investing activities

The following list highlights the major sources and uses of cash flow from investing activities:

Sources

+ Proceeds from sales of investments
+ Proceeds from maturity of fixed income securities

Uses

- Purchases of investments
- Purchases of property and equipment

We maintain an investment portfolio that is primarily invested in a diverse mix of fixed income securities. As of December 31, 2022, our portfolio had a fair value of $5.4 billion, a decrease of $1.2 billion, or 17.9% from December 31, 2021. Net cash flows provided by investing activities in 2022 primarily reflect sales and maturities of fixed income and equity securities during the year that exceeded purchases as proceeds were used in financing activities. Net cash used in investing activities in 2021 primarily reflects purchases of fixed income and equity securities during the year that exceeded sales of such securities as cash from operations was available for additional investment. In addition to investment portfolio activities, our investing activities included investment in our technology infrastructure to enhance our ability to conduct business and execute our strategies.

Financing activities

The following list highlights the major sources and uses of cash flow from financing activities:

	Sources
+	Proceeds from debt and/or common stock issuances

	Uses
-	Repayment/repurchase of debt
-	Repurchase of common stock
-	Payment of dividends to shareholders
-	Payment of withholding taxes related to share-based compensation net share settlement

Net cash flows used in financing activities in 2022 primarily reflects repurchase of our common stock, repayment of our 5.75% Notes and our FHLB Advance, the repurchase of a most of our 9% Debentures and payment of dividends to shareholders. Net cash flows used in financing activities in 2021 primarily reflect repurchases of our common stock, repurchase of a portion of our 9% Debentures, payment of dividends to shareholders and the payment of withholding taxes related to share-based compensation net share settlement.

For a further discussion of matters affecting our cash flows, see "Balance Sheet Review" above and "Debt at our Holding Company and Holding Company Liquidity" below.

CAPITALIZATION

Capital Risk

Capital risk is the risk of adverse impact on our ability to comply with capital requirements (regulatory and GSE) and to maintain the level, structure and composition of capital required for meeting financial performance objectives.

A strong capital position is essential to our business strategy and is important to maintain a competitive position in our industry. Our capital strategy focuses on long-term stability, which enables us to build and invest in our business, even in a stressed environment.

Our capital management objectives are to:

- influence and ensure compliance with capital requirements,
- maintain access to capital and reinsurance markets,
- manage our capital to support our business strategies and the competing priorities of relevant stakeholders
- assess appropriate uses for capital that cannot be deployed in support of our business strategies, including the size and form of capital return to shareholders, and
- support business opportunities by enabling capital flexibility and efficiently using company resources.

These objectives are achieved through ongoing monitoring and management of our capital position, mortgage insurance portfolio stress modeling, and a capital governance framework. Capital management is intended to be flexible in order to react to a range of potential events. The focus we place on any individual objective may change over time due to factors that include, but are not limited to, economic conditions, changes at the GSEs, competition, and alternative transactions to transfer mortgage risk.

Capital Structure

The following table summarizes our capital structure as of December 31, 2022, and 2021.

(In thousands, except ratio)	**2022**	2021
Common stock, paid-in capital, retained earnings, less treasury stock	**$5,124,251**	$4,741,685
Accumulated other comprehensive loss, net of tax	**(481,511)**	119,697
Total shareholders' equity	**4,642,740**	4,861,382
Long-term debt, par value	**671,086**	1,157,500
Total capital resources	**$5,313,826**	$6,018,882
Ratio of long-term debt to shareholders' equity	**14.5 %**	23.8 %

The decrease in shareholders' equity in 2022 represents a decrease in the fair value of our investments portfolio, repurchases of our common stock, and dividends paid, partially offset by net income in 2022. See Note 13 - "Shareholders' Equity" for further information.

DEBT AT OUR HOLDING COMPANY AND HOLDING COMPANY LIQUIDITY

Debt obligations - holding company

The 5.25% Notes and 9% Debentures are obligations of our holding company, MGIC Investment Corporation, and not of its subsidiaries. We have no debt obligations due within the next twelve months. As of December 31, 2022, our 5.25% Notes had $650 million of outstanding principal due in 2028 and our

9% Debentures had $21.1 million of outstanding principal due in April 2063.

In 2022, we repurchased $89.1 aggregate principal of our 9% debentures, redeemed the outstanding principal balance on our 5.75% Notes, and repaid the outstanding balance of our FHLB advance.

The 9% Debentures are a convertible debt issuance. Subject to certain limitations and restrictions, holders of the 9% Debentures may convert their notes into shares of our common stock at their option prior to certain dates prescribed under the terms of their issuance, in which case our corresponding obligation will be eliminated prior to the scheduled maturity.

See Note 7 - "Debt" for further information on our outstanding debt obligations and transactions impacting our consolidated financial statements in 2022 and 2021.

Liquidity analysis - holding company

As of December 31, 2022, and December 31, 2021, we had approximately $647 million and $663 million, respectively, in cash and investments at our holding company. These resources are maintained primarily to service our debt interest expense, pay debt maturities, repurchase shares, pay dividends to shareholders, and to settle intercompany obligations. While these assets are held, we generate investment income that serves to offset a portion of our cash requirements. The payment of dividends from MGIC are the principal source of holding company cash inflow and their payment is restricted by insurance regulation. See Note 14 - "Statutory Information" to our consolidated financial statement for additional information about MGIC's dividend restrictions. The payment of dividends from MGIC is also influenced by our view of the appropriate level of excess PMIERs Available Assets to maintain. Raising capital in the public markets is another potential source of holding company liquidity. The ability to raise capital in the public markets is subject to prevailing market conditions, investor demand for the securities to be issued, and our deemed creditworthiness.

Over the next twelve months the principal demand on holding company resources will be interest payments on our 5.25% Notes and 9% Debentures approximating $36.0 million, based on the debt outstanding at December 31, 2022. We believe our holding company has sufficient sources of liquidity to meet its payment obligations for the foreseeable future.

During 2022 and 2021, we used approximately $386 million and $291 million respectively, of available holding company cash to repurchase shares of our common stock. Through February 17, 2023 we used approximately $42.6 million of available holding company cash to repurchase shares of our common stock. The repurchase programs may be suspended or discontinued at any time. See "Overview - Capital" of this MD&A for a discussion of our share repurchase programs.

We may use additional holding company cash to repurchase additional shares or to repurchase our outstanding debt obligations. Such repurchases may be material, may be made for cash (funded by debt) and/or exchanges for other securities, and may be made in open market purchases (including through 10b5-1 plans), privately negotiated acquisitions or other transactions. See "Overview-Capital" of this MD&A for a discussion of our share repurchase programs.

In 2022, we used $110.9 million to pay cash dividends to shareholders. On January 24, 2023, our Board of Directors declared a quarterly cash dividend of $0.10 per common share to shareholders of record on February 17, 2023, payable on March 2, 2023.

Our holding company cash and investments decreased $16 million, to $647 million as of December 31, 2022.

Significant cash and investments *inflows* during the year:

- $800 million dividends received from MGIC,
- $94 million intercompany tax receipts, and
- $8 million of investment income.

Significant cash *outflows* during the year:

- $386 million of net share repurchase transactions,
- $248 million of 5.75% Notes redemption,
- $121 million of 9% Debenture repurchases,
- $111 million of cash dividends paid to shareholders, and
- $53 million of interest payments on our 5.75% Notes, 5.25% Notes, and 9% Debentures.

The net unrealized losses on our holding company investment portfolio were approximately $14.0 million at December 31, 2022 and the portfolio had a modified duration of approximately 1.1 years.

Scheduled debt maturities beyond the next twelve months include $650 million of our 5.25% Notes in 2028 and $21.1 million of our 9% Debentures in 2063. The principal amount of the 9% Debentures is currently convertible, at the holder's option, at a conversion rate, which is subject to adjustment, of 77.962 common shares per $1,000 principal amount of debentures. This represents a conversion price of approximately $12.83 per share. We may redeem the 9% Debentures in whole or in part from time to time, at our option, at a redemption price equal to 100% of the principal amount of the 9% Debentures being redeemed, plus any accrued and unpaid interest, if the closing sale price of our common stock exceeds $16.67 (adjusted pro rata for changes in the conversion price) for at least 20 of the 30 trading days preceding notice of the redemption. We expect to provide a redemption notice for the Debentures when this requirement is met and would expect the majority of the holders of the Debentures would elect to convert their Debentures into common stock before the redemption date. Under the terms of the Debenture, we may pay cash in lieu of issuing shares.

See Note 7 – "Debt" to our consolidated financial statements for additional information about our long term debt. The description in Note 7 - "Debt" to our consolidated financial statements is qualified in its entirety by the terms of the notes and debentures. The terms of our 9% Debentures are contained in the Indenture dated as of March 28, 2008, between us and U.S. Bank National Association filed as an exhibit to our Form 10-Q filed with the SEC on May 12, 2008. The terms of our 5.25% Notes are contained in a Supplemental Indenture, dated as of August 12, 2020, between us and U.S. Bank National Association, as trustee, which is included as an exhibit to our 8-K filed with the SEC on August 12, 2020, and in the Indenture dated as of October 15, 2000 between us and the trustee.

Although not anticipated in the near term, we may also contribute funds to our insurance operations to comply with the PMIERs or the State Capital Requirements. See "Overview – Capital" above for a discussion of these requirements.

DEBT AT SUBSIDIARIES

MGIC is a member of the FHLB, which provides MGIC access to an additional source of liquidity via a secured lending facility. In the first quarter of 2022, we prepaid the outstanding principal balance of $155.0 million on the FHLB Advance and incurred a prepayment fee of $1.3 million.

Capital Adequacy

PMIERs

We operate under each of the GSE's PMIERs. Refer to "Overview - Capital - GSEs" of this MD&A for further discussion of PMIERs.

As of December 31, 2022, MGIC's Available Assets under PMIERs totaled approximately $5.7 billion, an excess of approximately $2.3 billion over its Minimum Required Assets; and MGIC is in compliance with the requirements of the PMIERs and eligible to insure loans delivered to or purchased by the GSEs. Maintaining a sufficient level of excess Available Assets will allow MGIC to remain in compliance with the PMIERs financial requirements.

The table below presents the PMIERS capital credit for our reinsurance transactions.

PMIERs - Reinsurance Credit

	December 31,	
(In millions)	**2022**	2021
QSR Transactions	**$ 1,228**	$ 1,129
Home Re Transactions	**948**	765
Traditional XOL Transactions	**138**	—
Total capital credit for Reinsurance Transactions	**$ 2,314**	$ 1,894

Our 2023 QSR transaction terms are generally comparable to our existing QSR transactions and will also provide PMIERs capital credit. Refer to Note 9 - "Reinsurance" to our consolidated financial statements for additional information on our reinsurance transactions.

The PMIERs generally require us to hold significantly more Minimum Required Assets for delinquent loans than for performing loans and the Minimum Required Assets required to be held increases as the number of payments missed on a delinquent loan increases.

We plan to continuously comply with the PMIERs through our operational activities or through the contribution of funds from our holding company, subject to demands on the holding company's resources, as outlined above.

RISK-TO-CAPITAL

We compute our risk-to-capital ratio on a separate company statutory basis, as well as on a combined insurance operations basis. The risk-to-capital ratio is our net RIF divided by our policyholders' position. Our net RIF includes both primary and pool RIF and excludes risk on policies that are currently in default and for which case loss reserves have been established and the risk covered by reinsurance. The risk amount includes pools of loans with contractual aggregate loss limits and without these limits. MGIC's policyholders' position consists primarily of statutory policyholders' surplus (which increases as a result of statutory net income and decreases as a result of statutory net loss and dividends paid), plus the statutory contingency reserve. The statutory contingency reserve is reported as a liability on the statutory balance sheet. A mortgage insurance company is required to make annual additions to a contingency reserve of approximately 50% of earned premiums. These contributions must generally be maintained for a period of ten years. However, with regulatory approval a mortgage insurance company may make early withdrawals from the contingency reserve when incurred losses exceed 35% of earned premiums in a calendar year.

The table below presents MGIC's risk-to-capital calculation.

Risk-to-capital - MGIC

	December 31,	
(In millions, except ratio)	**2022**	2021
RIF - net [(1)]	**$ 56,292**	$ 50,298
Statutory policyholders' surplus	**$ 921**	$ 1,217
Statutory contingency reserve	**4,597**	4,056
Statutory policyholders' position	**$ 5,518**	$ 5,273
Risk-to-capital	**10.2:1**	9.5:1

(1) RIF – net, as shown in the table above, is net of reinsurance and exposure on policies currently delinquent $1.4 billion at December 31, 2022 and $1.8 billion at December 31, 2021 and for which case loss reserves have been established.

The 2022 increase in MGIC's risk-to-capital was due to an increase in RIF, net of reinsurance, partially offset by an increase in our statutory policyholder's position. The increase in statutory policyholders' position was primarily due to an increase in statutory contingency reserves and net income during 2022, offset by dividends paid to our holding company of $800 million. The increase in our RIF, net of reinsurance, was primarily due to an increase in our IIF and the termination of our 2015 and 2019 QSR Transaction, offset by a decrease in our reduction to risk on policies that are currently in default for which loss reserves have been established. Our risk-to-capital ratio will increase if the percentage increase in capital exceeds the percentage decrease in insured risk.

For additional information regarding regulatory capital see Note 14 – "Statutory Information" to our consolidated financial statements as well as our risk factor titled *"State capital requirements may prevent us from continuing to write new insurance on an uninterrupted basis."*

Financial Strength Ratings

MGIC financial strength ratings

Rating Agency	Rating	Outlook
Moody's Investors Service	A3	Stable
Standard and Poor's Rating Services	BBB+	Stable
A.M. Best	A-	Stable

MAC financial strength ratings

Rating Agency	Rating	Outlook
A.M. Best	A-	Stable

For further information about the importance of MGIC's ratings and rating methodologies, see our risk factor titled *"Competition or changes in our relationships with our customers could reduce our revenues, reduce our premium yields and / or increase our losses."*

CRITICAL ACCOUNTING ESTIMATES

The accounting estimate described below requires significant judgments and estimates in the preparation of our consolidated financial statements.

LOSS RESERVES

The estimation of case loss reserves is subject to inherent uncertainty and requires significant judgement by management. Changes to our estimates could result in a material impact to our consolidated results and financial position, even in a stable economic environment.

Case Reserves

Case reserves are established for estimated insurance losses when notices of delinquency on insured mortgage loans are received. Such loans are referred to as being in our delinquency inventory. For reporting purposes, we consider a loan delinquent when it is two or more payments past due and has not become current or resulted in a claim payment. Even though the accounting standard, ASC 944, regarding accounting and reporting by insurance entities specifically excluded mortgage insurance from its guidance relating to loss reserves, we establish loss reserves using the general principles contained in the insurance standard. However, consistent with industry standards for mortgage insurers, we do not establish case loss reserves for future claims on insured loans which are not currently delinquent.

We establish reserves using estimated claim rates and claim severities in estimating the ultimate loss.

The estimated claim rates and claim severities are used to determine the amount we estimate will actually be paid on the delinquent loans as of the reserve date. If a policy is rescinded we do not expect that it will result in a claim payment and thus the rescission generally reduces the historical claim rate used in establishing reserves. In addition, if a loan cures its delinquency, including through a successful loan modification, the cure reduces the historical claim rate used in establishing reserves. To establish reserves, we utilize a reserving model that continually incorporates historical data into the estimated claim rate. The model also incorporates an estimate for the amount of the claim we will pay, or severity. The severity is estimated using the historical percentage of our claims paid compared to our loan exposures, as well as the RIF of the loans currently in default. We do not utilize an explicit rescission rate in our reserving methodology, but rather our reserving methodology incorporates the effects rescission activity has had on our historical claim rate and claim severities. We review recent trends in the claim rate, claim severity, levels of defaults by geography and average loan exposure. As a result, the process to determine reserves does not include quantitative ranges of outcomes that are reasonably likely to occur.

The claim rates and claim severities are affected by external events, including actual economic conditions such as changes in unemployment rates, interest rates or housing values, pandemics and natural disasters. Our estimation process does not include a correlation between claim rates and claim severities to projected economic conditions such as changes in unemployment rates, interest rates or housing values. Our experience is that analysis of that nature would not produce reliable results as the change in one economic condition cannot be isolated to determine its specific effect on our ultimate paid losses because each economic condition is also influenced by other economic conditions. Additionally, the changes and interactions of these economic conditions are not likely homogeneous throughout the regions in which we conduct business. Each economic condition influences our ultimate paid losses differently, even if apparently similar in nature. Furthermore, changes in economic conditions may not necessarily be reflected in our loss development in the quarter or year in which the changes occur. Actual claim results generally lag changes in economic conditions by at least nine to twelve months.

Our estimates are also affected by any agreements we enter into regarding our claims paying practices as discussed in Note 17 – "Litigation and Contingencies" to our consolidated financial statements.

Our estimate of loss reserves is sensitive to changes in claim rate and claim severity; it is possible that even a relatively small change in our estimated claim rate or claim severity could have a material impact on reserves and, correspondingly, on our consolidated results of operations even in a stable economic environment. For example, as of December 31, 2022, assuming all other factors remain constant, a $1,000 increase/decrease in the average claim severity reserve factor would change the reserve amount by approximately +/- $10 million. A one percentage point increase/decrease in the average claim rate reserve factor would change the reserve amount by approximately +/- $15 million. Historically, it has not been uncommon for us to experience variability in the development of the loss reserves through the end of the following year at this level or higher, as shown by the historical development of our loss reserves in the table below:

Historical development of loss reserves

(In thousands)	Losses incurred related to prior years [1]	Reserve at end of prior year
2022	(404,130)	883,522
2021	(60,015)	880,537
2020	19,604	555,334
2019	(71,006)	674,019
2018	(167,366)	985,635

(1) A negative number for a prior year indicates a redundancy of loss reserves. A positive number for a prior year indicates a deficiency of loss reserves.

See Note 8 – "Loss Reserves" to our consolidated financial statements for a discussion of recent loss development.

Glossary of terms and acronyms

/ A

ARMs
Adjustable rate mortgages

ABS
Asset-backed securities

ASC
Accounting Standards Codification

Available Assets
Assets, as designated under the PMIERs, that are readily available to pay claims, and include the most liquid investments

/ B

Book or book year
A group of loans insured in a particular calendar year

BPMI
Borrower-paid mortgage insurance

/ C

CFPB
Consumer Financial Protection Bureau

CLO
Collateralized loan obligations

CMBS
Commercial mortgage-backed securities

COVID-19 Pandemic
An outbreak of the novel coronavirus disease, later named COVID-19. The outbreak of COVID-19 was declared a pandemic by the World Health Organization and a national emergency in the United States in March 2020

CRT
Credit risk transfer. The transfer of a portion of mortgage credit risk to the private sector through different forms of transactions and structures

/ D

DAC
Deferred insurance policy acquisition costs

Debt-to-income ("DTI") ratio
The ratio, expressed as a percentage, of a borrower's total debt payments to gross income

Delinquent Loan
A loan that is past due on a mortgage payment. A delinquent loan is typically reported to us by servicers when the loan has missed two or more payments. A loan will continue to be reported as delinquent until it becomes current or a claim payment has been made. A delinquent loan is also referred to as a default

Delinquency Rate
The percentage of insured loans that are delinquent

Direct
Before giving effect to reinsurance

/ E

EPS
Earnings per share

/ F

Fannie Mae
Federal National Mortgage Association

FCRA
Fair Credit Reporting Act

FHA
Federal Housing Administration

FHFA
Federal Housing Finance Agency

FHLB
Federal Home Loan Bank of Chicago, of which MGIC is a member

FICO score
A measure of consumer credit risk provided by credit bureaus, typically produced from statistical models by Fair Isaac Corporation utilizing data collected by the credit bureaus

Freddie Mac
Federal Home Loan Mortgage Corporation

/ G

GAAP

Generally Accepted Accounting Principles in the United States

GSEs

Collectively, Fannie Mae and Freddie Mac

/ H

HAMP

Home Affordable Modification Program

HARP

Home Affordable Refinance Program

Home Re Entities

Unaffiliated special purpose insurers domiciled in Bermuda that participate in our aggregate XOL transactions through the ILN market.

Home Re Transactions

Excess-of-loss reinsurance transactions with the Home Re Entities

HOPA

Homeowners Protection Act

HUD

Housing and Urban Development

/ I

IBNR Reserves

Loss reserves established on loans we estimate are delinquent, but for which the delinquency has not been reported to us

IIF

Insurance in force, which for loans insured by us, is equal to the unpaid principal balance, as reported to us

ILN

Insurance-linked notes

/ L

LAE

Loss adjustment expenses, which includes the costs of settling claims, including legal and other expenses and general expenses of administering the claims settlement process.

Loan-to-value ("LTV") ratio

The ratio, expressed as a percentage, of the dollar amount of the first mortgage loan to the value of the property at the time the loan became insured and does not reflect subsequent housing price appreciation or depreciation. Subordinate mortgages may also be present

Long-term debt:

5.75% Notes

5.75% Senior Notes

5.25% Notes

5.25% Senior Notes due on August 15, 2028, with interest payable semi-annually on February 15 and August 15 of each year

9% Debentures

9% Convertible Junior Subordinated Debentures due on April 1, 2063, with interest payable semi-annually on April 1 and October 1 of each year

FHLB Advance or the Advance

1.91% Fixed rate advance from the FHLB

Loss ratio

The ratio, expressed as a percentage, of the sum of net incurred losses and loss adjustment expenses to net premiums earned

Low down payment loans or mortgages

Loans with less than 20% down payments

LPMI

Lender-paid mortgage insurance

/ M

MBS

Mortgage-backed securities

MD&A

Management's discussion and analysis of financial condition and results of operations

MGIC

Mortgage Guaranty Insurance Corporation, a subsidiary of MGIC Investment Corporation

MAC

MGIC Assurance Corporation, a subsidiary of MGIC

Minimum Required Assets

The minimum amount of Available Assets that must be held under the PMIERs, which is based on an insurer's book of RIF and is calculated from tables of factors with several risk dimensions, reduced for credit given for risk ceded under reinsurance transactions, and subject to a floor of $400 million

MPP

Minimum Policyholder Position, as required under certain state requirements. The "policyholder position" of a mortgage insurer is its net worth or surplus, contingency reserve and a portion of the reserves for unearned premiums

/ N

N/A

Not applicable for the period presented

NAIC

The National Association of Insurance Commissioners

NIW

New Insurance Written, is the aggregate original principal amount of the mortgages that are insured during a period

N/M

Data, or calculation, deemed not meaningful for the period presented

NPL

Non-performing loan, which is a delinquent loan, at any stage in its delinquency

/ O

OCI

Office of the Commissioner of Insurance of the State of Wisconsin

/ P

Persistency

The percentage of our insurance remaining in force from one year prior

PMI

Private Mortgage Insurance (as an industry or product type)

PMIERs

Private Mortgage Insurer Eligibility Requirements issued by each of Fannie Mae and Freddie Mac to set forth requirements that an approved insurer must meet and maintain to provide mortgage guaranty insurance on loans delivered to or acquired by Fannie Mae or Freddie Mac, as applicable

Premium Rate

The contractual rate charged for coverage under our insurance policies

Premium Yield

The ratio of premium earned divided by the average IIF outstanding for the period measured

Primary Insurance

Insurance that provides mortgage default protection on individual loans. Primary insurance may be written on a "flow" basis, in which loans are insured in individual, loan-by-loan transactions, or on a "bulk" basis, in which each loan in a portfolio of loans is individually insured in a single bulk transaction

Profit Commission

Payments we receive from reinsurers under each of our quota share reinsurance transactions if the annual loss ratio is below levels specified in the quota share reinsurance transaction

/ Q

QSR Transaction

Quota share reinsurance transaction with a group of unaffiliated reinsurers

2015 QSR

Our QSR transaction that provided coverage on eligible NIW written prior to 2017

2017 QSR

Our QSR transaction that provided coverage on eligible NIW in 2017

2018 QSR

Our QSR transaction that provided coverage on eligible NIW in 2018

2019 QSR

Our QSR transaction that provided coverage on eligible NIW in 2019

2020 QSR
Our QSR transactions that provide coverage on eligible NIW in 2020

2021 QSR
Our QSR transactions that provide coverage on eligible NIW in 2021

2022 QSR
Our QSR transactions that provide coverage on eligible NIW in 2022

2023 QSR
Our QSR transactions that provide coverage on eligible NIW in 2023

Credit Union QSR
Our QSR transaction that provides coverage on eligible NIW from credit union institutions originated from April 1, 2020 through December 31, 2025

/ R

RESPA
Real Estate Settlement Procedures Act

RIF
Risk in force, which for an individual loan insured by us, is equal to the unpaid loan principal balance, as reported to us, multiplied by the insurance coverage percentage. RIF is sometimes referred to as exposure

Risk-to-capital
Under certain state regulations, the ratio of RIF, net of reinsurance and exposure on policies currently in default and for which loss reserves have been established, to the level of statutory capital

RMBS
Residential mortgage-backed securities

/ S

State Capital Requirements
Under certain state regulations, the minimum amount of statutory capital relative to risk in force (or similar measure)

/ T

TILA
Truth in Lending Act

Traditional XOL Transaction
Excess-of-loss reinsurance transaction with a group of unaffiliated reinsurers that provides coverage on eligible NIW in 2022

/ U

Underwriting expense ratio
The ratio, expressed as a percentage, of the underwriting and operating expenses, net and amortization of DAC of our combined insurance operations (which excludes underwriting and operating expenses of our non-insurance subsidiaries) to net premiums written

Underwriting profit
Net premiums earned minus incurred losses and underwriting and operating expenses

USDA
U.S. Department of Agriculture

/ V

VA
U.S. Department of Veterans Affairs

VIE
Variable interest entity

/ X

XOL Transactions
Excess-of-loss reinsurance transactions executed through the Home Re Transactions and the Traditional XOL Transaction

Quantitative and Qualitative Disclosures About Market Risk

Our investment portfolio is essentially a fixed income portfolio and is exposed to market risk. Important drivers of the market risk are credit spread risk and interest rate risk.

Credit spread risk is the risk that we will incur a loss due to adverse changes in credit spreads. Credit spread is the additional yield on fixed income securities above the risk-free rate (typically referenced as the yield on U.S. Treasury securities) that market participants require to compensate them for assuming credit, liquidity and/or prepayment risks.

We manage credit risk via our investment policy guidelines which primarily require us to place our investments in investment grade securities and limit the amount of our credit exposure to any one issue, issuer and type of instrument. Guideline and investment portfolio detail is available in "Business – Section C, Investment Portfolio" in Item 1 of our Annual Report on Form 10-K for the year ended December 31, 2022 field with teh SEC on February 22, 2023.

Interest rate risk is the risk that we will incur a loss due to adverse changes in interest rates relative to the characteristics of our interest bearing assets.

One of the measures used to quantify this exposure is modified duration. Modified duration measures the price sensitivity of the assets to the changes in spreads. At December 31, 2022, the modified duration of our fixed income investment portfolio was 4.3 years, which means that an instantaneous parallel shift in the yield curve of 100 basis points would result in a change of 4.3% in the fair value of our fixed income portfolio. For an upward shift in the yield curve, the fair value of our portfolio would decrease and for a downward shift in the yield curve, the fair value would increase. A discussion of portfolio strategy appears in "Management's Discussion and Analysis – Balance Sheet Review– Investment Portfolio" in Item 7.

Risk Factors

As used below, “we,” “our” and “us” refer to MGIC Investment Corporation’s consolidated operations or to MGIC Investment Corporation, as the context requires; and “MGIC” refers to Mortgage Guaranty Insurance Corporation.

Our actual results could be affected by the risk factors below. These risk factors are an integral part of this annual report. These risk factors may also cause actual results to differ materially from the results contemplated by forward looking statements that we may make. Forward looking statements consist of statements which relate to matters other than historical fact, including matters that inherently refer to future events. Among others, statements that include words such as “believe,” “anticipate,” “will” or “expect,” or words of similar import, are forward looking statements. We are not undertaking any obligation to update any forward looking statements or other statements we may make even though these statements may be affected by events or circumstances occurring after the forward looking statements or other statements were made. No reader of this annual report should rely on these statements being current at any time other than the time at which this annual report was filed with the Securities and Exchange Commission.

Risk Factors Relating to Global Events

The Russia-Ukraine war and/or other global events may adversely affect the U.S. economy and our business.

Russia's invasion of Ukraine has increased the already-elevated inflation rate, added more pressure to strained supply chains, and has increased volatility in the domestic and global financial markets. The war has impacted, and may impact, our business in various ways, including the following which are described in more detail in the remainder of these risk factors:

- The terms under which we are able to obtain excess-of-loss ("XOL") reinsurance through the insurance-linked notes ("ILN") market and the traditional reinsurance market have been negatively impacted and terms under which we are able to access those markets in the future may be limited or less attractive.
- The risk of a cybersecurity incident that affects our company may have increased.
- An extended or broadened war may negatively impact the domestic economy, which may increase unemployment and inflation, or decrease home prices, in each case leading to an increase in loan delinquencies.
- The volatility in the financial markets may impact the performance of our investment portfolio and our investment portfolio may include investments in companies or securities that are negatively impacted by the war.

Risk Factors Relating to the Mortgage Insurance Industry and its Regulation

Downturns in the domestic economy or declines in home prices may result in more homeowners defaulting and our losses increasing, with a corresponding decrease in our returns.

Losses result from events that reduce a borrower’s ability or willingness to make mortgage payments, such as unemployment, health issues, changes in family status, and decreases in home prices that result in the borrower's mortgage balance exceeding the net value of the home. A deterioration in economic conditions, including an increase in unemployment, generally increases the likelihood that borrowers will not have sufficient income to pay their mortgages and can also adversely affect home prices.

High levels of unemployment may result in an increasing number of loan delinquencies and an increasing number of insurance claims; however, unemployment is difficult to predict given the uncertainty in the current market environment, including as a result of global events such as the COVID-19 pandemic, the Russia-Ukraine war, and the possibility of an economic recession. Since the beginning of 2021, inflation has increased dramatically. The impact that higher inflation rates will have on loan delinquencies is unknown.

The seasonally-adjusted Purchase-Only U.S. Home Price Index of the Federal Housing Finance Agency (the “FHFA”), which is based on single-family properties whose mortgages have been purchased or securitized by Fannie Mae or Freddie Mac, indicates that home prices fell 0.1% nationwide in November, 2022 compared to October, 2022. The 12 month change in home prices remains at historically high rates, but the rate of growth is moderating: it increased by 6.7% in the first eleven months of 2022, after increasing 17.9%, 11.7%, and 5.9% in 2021, 2020 and 2019, respectively. The national average price-to-income ratio exceeds its historical average, in part as a result of recent home price appreciation outpacing increases in income. Affordability issues and the significant increase in interest rates in recent months has put downward pressure on home prices. Recent third-party forecasts predict that home prices will decline further. This decline may occur even absent a deterioration in economic conditions due to declines in demand for homes, which in turn may result from changes in buyers’ perceptions of the potential for future appreciation, restrictions on and the cost of mortgage credit due to more stringent underwriting standards, higher interest rates, changes to the tax deductibility of mortgage interest, decreases in the rate of household formations, or other factors.

Changes in the business practices of Fannie Mae and Freddie Mac's ("the GSEs"), federal legislation that changes their charters or a restructuring of the GSEs could reduce our revenues or increase our losses.

The substantial majority of our NIW is for loans purchased by the GSEs; therefore, the business practices of the GSEs greatly impact our business. In June 2022 the GSEs each published their Equitable Housing Finance Plans. The Plans seek to advance equity in housing finance over a three year period and include potential changes to the GSEs' business practices and policies. Specifically relating to mortgage insurance, (1) Fannie Mae's Plan contemplates the creation of special purchase credit program(s) ("SPCPs") targeted to historically underserved borrowers with a goal of lowering costs for such borrowers through lower than standard mortgage insurance requirements; and (2) Freddie Mac's Plan contemplates the creation of SPCPs targeted to historically underserved borrowers with the goals of (a) working with mortgage insurers to reduce costs for high LTV borrowers, and (b) updating mortgage insurance cancellation requirements. To the extent the business practices and policies of the GSEs regarding mortgage insurance coverage, costs and cancellation change, including more broadly than through SPCPs, such changes may negatively impact the mortgage insurance industry.

Other business practices of the GSEs that affect the mortgage insurance industry include:

- The GSEs' private mortgage insurer eligibility requirements ("PMIERs"), the financial requirements of which are discussed in our risk factor titled *"We may not continue to meet the GSEs' private mortgage insurer eligibility requirements and our returns may decrease if we are required to maintain more capital in order to maintain our eligibility."*

- The capital and collateral requirements for participants in the GSEs' alternative forms of credit enhancement discussed in our risk factor titled *"The amount of insurance we write could be adversely affected if lenders and investors select alternatives to private mortgage insurance."*

- The level of private mortgage insurance coverage, subject to the limitations of the GSEs' charters, when private mortgage insurance is used as the required credit enhancement on low down payment mortgages (the GSEs generally require a level of mortgage insurance coverage that is higher than the level of coverage required by their charters; any change in the required level of coverage will impact our new risk written).

- The amount of loan level price adjustments and guaranty fees (which result in higher costs to borrowers) that the GSEs assess on loans that require private mortgage insurance. The requirements of the new GSE capital framework may lead the GSEs to increase their guaranty fees. In addition, the FHFA has indicated that it is reviewing the GSEs' pricing in connection with preparing them to exit conservatorship and to ensure that pricing subsidies benefit only affordable housing activities.

- Whether the GSEs select or influence the mortgage lender's selection of the mortgage insurer providing coverage.

- The underwriting standards that determine which loans are eligible for purchase by the GSEs, which can affect the quality of the risk insured by the mortgage insurer and the availability of mortgage loans.

- The terms on which mortgage insurance coverage can be canceled before reaching the cancellation thresholds established by law and the business practices associated with such cancellations. For more information, see the above discussion of the GSEs' Equitable Housing Plans and our risk factor titled *"Changes in interest rates, house prices or mortgage insurance cancellation requirements may change the length of time that our policies remain in force."*

- The programs established by the GSEs intended to avoid or mitigate loss on insured mortgages and the circumstances in which mortgage servicers must implement such programs.

- The terms that the GSEs require to be included in mortgage insurance policies for loans that they purchase, including limitations on the rescission rights of mortgage insurers.

- The extent to which the GSEs intervene in mortgage insurers' claims paying practices, rescission practices or rescission settlement practices with lenders.

- The maximum loan limits of the GSEs compared to those of the FHA and other investors.

- The benchmarks established by the FHFA for loans to be purchased by the GSEs, which can affect the loans available to be insured. In December 2021, the FHFA established the benchmark levels for 2022-2024 purchases of low-income home mortgages, very low-income home mortgages and low-income refinance mortgages, each of which exceeded the 2021 benchmarks. The FHFA also established two new sub-goals: one targeting minority communities and the other targeting low-income neighborhoods.

The FHFA has been the conservator of the GSEs since 2008 and has the authority to control and direct their operations. The increased role that the federal government has assumed in the residential housing finance system through the GSE conservatorships may increase the likelihood that the business practices of the GSEs change, including through administrative action, in ways that have a material adverse effect on us and that the charters of the GSEs are changed by new federal legislation.

It is uncertain what role the GSEs, FHA and private capital, including private mortgage insurance, will play in the residential housing finance system in the future. The timing and impact on our business of any resulting changes are uncertain. Many of the proposed changes would require Congressional action to implement and it is difficult to estimate when Congressional action would be final and how long any associated phase-in period may last.

We may not continue to meet the GSEs' private mortgage insurer eligibility requirements and our returns may decrease if we are required to maintain more capital in order to maintain our eligibility.

We must comply with a GSE's PMIERs to be eligible to insure loans delivered to or purchased by that GSE. The PMIERs include financial requirements, as well as business, quality control and certain transaction approval requirements. The financial requirements of the PMIERs require a mortgage insurer's "Available Assets" (generally only the most liquid assets of an insurer) to equal or exceed its "Minimum Required Assets" (which are generally based on an insurer's book of risk in force and calculated from tables of factors with several risk dimensions, reduced for credit given for risk ceded under reinsurance agreements).

Based on our interpretation of the PMIERs, as of December 31, 2022, MGIC's Available Assets totaled $5.7 billion, or $2.3 billion in excess of its Minimum Required Assets. MGIC is in compliance with the PMIERs and eligible to insure loans purchased by the GSEs. Our "Minimum Required Assets" reflect a credit for risk ceded under our quota share reinsurance ("QSR") and XOL reinsurance transactions, which are discussed in our risk factor titled *"The mix of business we write affects our Minimum Required Assets under the PMIERs, our premium yields and the likelihood of losses occurring."* The calculated credit for XOL reinsurance transactions under PMIERs is generally based on the PMIERs requirement of the covered loans and the attachment and detachment points of the coverage, all of which fluctuate over time. PMIERs credit is generally not given for the reinsured risk above the PMIERs requirement. The GSEs have discretion to further limit reinsurance credit under the PMIERs. Refer to "Consolidated Results of Operations – Reinsurance Transactions" in Part 7 for information about the calculated PMIERs credit for our XOL transactions. There is a risk we will not receive our current level of credit in future periods for ceded risk. In addition, we may not receive the same level of credit under future reinsurance transactions that we receive under existing transactions. If MGIC is not allowed certain levels of credit under the PMIERs, under certain circumstances, MGIC may terminate the reinsurance transactions without penalty.

The PMIERs generally require us to hold significantly more Minimum Required Assets for delinquent loans than for performing loans and the Minimum Required Assets required to be held increases as the number of payments missed on a delinquent loan increases. If the number of loan delinquencies increases for reasons discussed in these risk factors, or otherwise, it may cause our Minimum Required Assets to exceed our Available Assets. We are unable to predict the ultimate number of loans that will become delinquent.

If our Available Assets fall below our Minimum Required Assets, we would not be in compliance with the PMIERs. The PMIERs provide a list of remediation actions for a mortgage insurer's non-compliance, with additional actions possible in the GSEs' discretion. At the extreme, the GSEs may suspend or terminate our eligibility to insure loans purchased by them. Such suspension or termination would significantly reduce the volume of our new insurance written ("NIW"), the substantial majority of which is for loans delivered to or purchased by the GSEs. In addition to the increase in Minimum Required Assets associated with delinquent loans, factors that may negatively impact MGIC's ability to continue to comply with the financial requirements of the PMIERs include the following:

- The GSEs may make the PMIERs more onerous in the future. The PMIERs provide that the factors that determine Minimum Required Assets will be updated periodically, or as needed if there is a significant change in macroeconomic conditions or loan performance. We do not anticipate that the regular periodic updates will occur more frequently than once every two years. The PMIERs state that the GSEs will provide notice 180 days prior to the effective date of updates to the factors; however, the GSEs may amend the PMIERs at any time, including by imposing restrictions specific to our company.

- The PMIERs may be changed in response to the final regulatory capital framework for the GSEs that was published in February 2022.

- Our future operating results may be negatively impacted by the matters discussed in the rest of these risk factors. Such matters could decrease our revenues, increase our losses or require the use of assets, thereby creating a shortfall in Available Assets.

Should capital be needed by MGIC in the future, capital contributions from our holding company may not be available due to competing demands on holding company resources, including for repayment of debt.

Because loss reserve estimates are subject to uncertainties, paid claims may be substantially different than our loss reserves.

When we establish case reserves, we estimate our ultimate loss on delinquent loans by estimating the number of such loans that will result in a claim payment (the "claim rate"), and further estimating the amount of the claim payment (the "claim severity"). Changes to our claim rate and claim severity estimates could have a material impact on our future results, even in a stable economic environment. Our estimates incorporate anticipated cures, loss mitigation activity, rescissions and curtailments. The establishment of loss reserves is subject to inherent uncertainty and requires significant judgment by management. Our actual claim payments may differ substantially from our loss reserve estimates. Our estimates could be affected by several factors, including a change in regional or national economic conditions as discussed in these risk factors and a change in the length of time loans are delinquent before claims are received. Generally, the longer a loan is delinquent before a claim is received, the greater the severity. As a result of foreclosure moratoriums and forbearance programs related to COVID-19, the average time it takes to receive claims has increased. Economic conditions may differ from region to region. Information about the geographic dispersion of our risk in force and delinquency inventory can be found in our Annual Reports on Form 10-K and our Quarterly Reports on Form 10-Q. Prior to the COVID-19 pandemic, losses incurred generally followed a seasonal trend in which the second half of the year has weaker credit performance than the first half, with higher new default notice activity and a lower cure rate.

We are subject to comprehensive regulation and other requirements, which we may fail to satisfy.

We are subject to comprehensive regulation, including by state insurance departments. Many regulations are designed for the protection of our insured policyholders and consumers, rather than for the benefit of investors. Mortgage insurers, including MGIC, have in the past been involved in litigation and regulatory actions related to alleged violations of the anti-referral fee provisions of the Real Estate Settlement Procedures Act ("RESPA"), and the notice provisions of the Fair Credit Reporting Act ("FCRA"). While these proceedings in the aggregate did not result in material liability for MGIC, there can be no assurance that the outcome of future proceedings, if any, under these laws or others would not have a material adverse effect on us. To the extent that we are construed to make independent credit decisions in connection with our contract underwriting activities, we also could be subject to increased regulatory requirements under the Equal Credit Opportunity Act ("ECOA"), FCRA, and other laws. Under relevant laws, examination may also be made of whether a mortgage insurer's underwriting decisions have a disparate impact on persons belonging to a protected class in violation of the law.

Although their scope varies, state insurance laws generally grant broad supervisory powers to agencies or officials to examine insurance companies and enforce rules or exercise discretion affecting almost every significant aspect of the insurance business, including payment for the referral of insurance business, premium rates and discrimination in pricing, and minimum capital requirements. The increased use, by the private mortgage insurance industry, of risk-based pricing systems that establish premium rates based on more attributes than previously considered, and of algorithms, artificial intelligence and data and analytics, has led to additional regulatory scrutiny of premium rates and of other matters such as discrimination in pricing and underwriting, data privacy and access to insurance. For more information about state capital requirements, see our risk factor titled "*State capital requirements may prevent us from continuing to write new insurance on an uninterrupted basis*." For information about regulation of data privacy, see our risk factor titled "*We could be materially adversely affected by a cyber security breach or failure of information security controls*." For more details about the various ways in which our subsidiaries are regulated, see "Business - Regulation" in Item 1.

While we have established policies and procedures to comply with applicable laws and regulations, many such laws and regulations are complex and it is not possible to predict the eventual scope, duration or outcome of any reviews or investigations nor is it possible to predict their effect on us or the mortgage insurance industry.

Pandemics, hurricanes and other natural disasters may impact our incurred losses, the amount and timing of paid claims, our inventory of notices of default and our Minimum Required Assets under PMIERs.

Pandemics and other natural disasters, such as hurricanes, tornadoes, earthquakes, wildfires and floods, or other events related to changing climatic conditions, could trigger an economic downturn in the affected areas, or in areas with similar risks, which could result in a decline in our business and an increased claim rate on policies in those areas. Natural disasters, rising sea levels and/or fresh water shortages could lead to a decrease in home prices in the affected areas, or in areas with similar risks, which could result in an increase in claim severity on policies in those areas. In addition, the inability of a borrower to obtain hazard and/or flood insurance, or the increased cost of such insurance, could lead to an increase in delinquencies or a decrease in home prices in the affected areas. If we were to attempt to limit our new insurance written in affected areas, lenders may be unwilling to procure insurance from us anywhere.

Pandemics and other natural disasters could also lead to increased reinsurance rates or reduced availability of reinsurance. This may cause us to retain more risk than we otherwise would retain and could negatively affect our compliance with the financial requirements of State Capital Requirements and the PMIERs.

The PMIERs require us to maintain significantly more "Minimum Required Assets" for delinquent loans than for performing loans; however, the increase in Minimum Required Assets is not as great for certain delinquent loans in areas that the Federal Emergency Management Agency has declared major disaster areas and for certain loans whose borrowers have been affected by COVID-19. See our risk factor titled *"We may not continue to meet the GSEs' private mortgage insurer eligibility requirements and our returns may decrease if we are required to maintain more capital in order to maintain our eligibility."*

In January 2021, the FHFA issued a Request for Input ("RFI") regarding Climate and Natural Disaster Risk Management at the Regulated Entities (i.e., the GSEs and the Federal Home Loan Banks). The FHFA has instructed the GSEs to designate climate change as a priority concern and actively consider its effects in their decision making. It is possible that efforts to manage this risk by the FHFA, GSEs (including through GSE guideline or mortgage insurance policy changes) or others could materially impact the volume and characteristics of our NIW (including its policy terms), home prices in certain areas and defaults by borrowers in certain areas.

Reinsurance may not always be available or its cost may increase.

We have in place QSR and XOL reinsurance transactions providing various amounts of coverage on 85% of our risk in force as of December 31, 2022. Refer to Part 8, Note 9 – "Reinsurance" and Part 7 "Consolidated Results of Operations – Reinsurance Transactions" for more information about coverage under our reinsurance transactions. The reinsurance transactions reduce the tail-risk associated with stress scenarios. As a result, they reduce the capital that we are required to hold to support the risk and they allow us to earn higher returns on our business than we would without them. However, reinsurance may not always be available to us or available on similar terms, the reinsurance transactions subject us to counterparty credit risk, and the GSEs may change the credit they allow under the PMIERs for risk ceded under our reinsurance transactions. Most of our XOL transactions were entered into in capital market transactions with special purpose insurers that issued notes linked to the reinsurance coverage ("Insurance Linked Notes" or "ILNs"). Our access to reinsurance may be disrupted and the terms under which we are able to obtain reinsurance may be less attractive than in the past due to volatility stemming from circumstances such as higher interest rates, increased inflation, global events such as the Russia-Ukraine war, and other factors. In 2022, execution of transactions for XOL reinsurance through the ILN market was more challenging, with increased pricing, down-sized transactions, and generally fewer transactions executed by mortgage insurers. If we are unable to obtain reinsurance for our insurance written, the capital required to support our insurance written will not be reduced as discussed above and our returns may decrease absent an increase in our premium rates. An increase in our premium rates may lead to a decrease in our NIW.

Because we establish loss reserves only upon a loan delinquency rather than based on estimates of our ultimate losses on risk in force, losses may have a disproportionate adverse effect on our earnings in certain periods.

In accordance with accounting principles generally accepted in the United States, we establish case reserves for insurance losses and loss adjustment expenses only when delinquency notices are received for insured loans that are two or more payments past due and for loans we estimate are delinquent but for which delinquency notices have not yet been received (which we include in "IBNR"). Losses that may occur from loans that are not delinquent are not reflected in our financial statements, except when a "premium deficiency" is recorded. A premium deficiency would be recorded if the present value of expected future losses and expenses exceeds the present value of expected future premiums and already established loss reserves on the applicable loans. As a result, future losses incurred on loans that are not currently delinquent may have a material impact on future results as delinquencies emerge. As of December 31, 2022, we had established case reserves and reported losses incurred for 26,387 loans in our delinquency inventory and our IBNR reserve totaled $21 million. The number of loans in our delinquency inventory may increase from that level as a result of economic conditions relating to current global events or other factors and our losses incurred may increase.

State capital requirements may prevent us from continuing to write new insurance on an uninterrupted basis.

The insurance laws of 16 jurisdictions, including Wisconsin, MGIC's domiciliary state, require a mortgage insurer to maintain a minimum amount of statutory capital relative to its risk in force (or a similar measure) in order for the mortgage insurer to continue to write new business. We refer to these requirements as the "State Capital Requirements." While they vary among jurisdictions, the most common State Capital Requirements allow for a maximum risk-to-capital ratio of 25 to 1. A risk-to-capital ratio will increase if (i) the percentage decrease in capital exceeds the percentage decrease in insured risk, or (ii) the percentage increase in capital is less than the percentage increase in insured risk. Wisconsin does not regulate capital by using a risk-to-capital measure but instead requires a minimum policyholder position ("MPP"). MGIC's "policyholder position" includes its net worth or surplus, and its contingency reserve.

At December 31, 2022 MGIC's risk-to-capital ratio was 10.2 to 1, below the maximum allowed by the jurisdictions with State Capital Requirements, and its policyholder position was $3.5 billion above the required MPP of $2.1 billion. Our risk-to-capital ratio and MPP reflect full credit for the risk ceded under our quota share reinsurance and excess of loss transactions in the ILN market and traditional reinsurance market with unaffiliated reinsurers. It is possible that under the revised State Capital Requirements discussed below, MGIC will not be allowed full credit for the risk ceded under such transactions. If MGIC is not allowed an agreed level of credit under the State Capital Requirements, MGIC may terminate the reinsurance transactions, without penalty.

The NAIC previously announced plans to revise the State Capital Requirements that are provided for in its Mortgage Guaranty Insurance Model Act. In December 2019, a working group of state regulators released an exposure draft of a revised Mortgage Guaranty Insurance Model Act and a risk-based capital framework to establish capital requirements for mortgage insurers, although certain items were not completely addressed by the framework, including the treatment of ceded risk and minimum capital floors. In October 2022, the NAIC working group released a revised exposure draft of the Mortgage Guaranty Insurance Model Act that does not include changes to the capital requirements of the existing Model Act.

While MGIC currently meets the State Capital Requirements of Wisconsin and all other jurisdictions, it could be prevented from writing new business in the future in all jurisdictions if it fails to meet the State Capital Requirements of Wisconsin, or it could be prevented from writing new business in a particular jurisdiction if it fails to meet the State Capital Requirements of that jurisdiction, and in each case if MGIC does not obtain a waiver of such requirements. It is possible that regulatory action by one or more jurisdictions, including those that do not have specific State Capital Requirements, may prevent MGIC from continuing to write new insurance in such jurisdictions. If we are unable to write business in a particular jurisdiction, lenders may be unwilling to procure insurance from us anywhere. In addition, a lender's assessment of the future ability of our insurance operations to meet the State Capital Requirements or the PMIERs may affect its willingness to procure insurance from us. In this regard, see our risk factor titled *"Competition or changes in our relationships with our customers could reduce our revenues, reduce our premium yields and/or increase our losses."* A possible future failure by MGIC to meet the State Capital Requirements or the PMIERs will not necessarily mean that MGIC lacks sufficient resources to pay claims on its insurance liabilities. You should read the rest of these risk factors for information about matters that could negatively affect MGIC's compliance with State Capital Requirements and its claims paying resources.

If the volume of low down payment home mortgage originations declines, the amount of insurance that we write could decline.

The factors that may affect the volume of low down payment mortgage originations include the health of the U.S. economy, conditions in regional and local economies and the level of consumer confidence; restrictions on mortgage credit due to more stringent underwriting standards, liquidity issues or risk-retention and/or capital requirements affecting lenders; the level of home mortgage interest rates; housing affordability; new and existing housing availability; the rate of household formation, which is influenced, in part, by population and immigration trends; homeownership rates; the rate of home price appreciation, which in times of heavy refinancing can affect whether refinanced loans have LTV ratios that require private mortgage insurance; and government housing policy encouraging loans to first-time homebuyers. A decline in the volume of low down payment home mortgage originations could decrease demand for mortgage insurance and limit our NIW. For other factors that could decrease the demand for mortgage insurance, see our risk factor titled *"The amount of insurance we write could be adversely affected if lenders and investors select alternatives to private mortgage insurance."*

The amount of insurance we write could be adversely affected if lenders and investors select alternatives to private mortgage insurance.

Alternatives to private mortgage insurance include:

- investors using risk mitigation and credit risk transfer techniques other than private mortgage insurance, or accepting credit risk without credit enhancement,
- lenders and other investors holding mortgages in portfolio and self-insuring,

- lenders using Federal Housing Administration ("FHA"), U.S. Department of Veterans Affairs ("VA") and other government mortgage insurance programs, and
- lenders originating mortgages using piggyback structures to avoid private mortgage insurance, such as a first mortgage with an 80% loan-to-value ("LTV") ratio and a second mortgage with a 10%, 15% or 20% LTV ratio rather than a first mortgage with a 90%, 95% or 100% LTV ratio that has private mortgage insurance.

The GSEs' charters generally require credit enhancement for a low down payment mortgage loan (a loan in an amount that exceeds 80% of a home's value) in order for such loan to be eligible for purchase by the GSEs. Private mortgage insurance generally has been purchased by lenders in primary mortgage market transactions to satisfy this credit enhancement requirement. In 2018, the GSEs initiated secondary mortgage market programs with loan level mortgage default coverage provided by various (re)insurers that are not mortgage insurers governed by PMIERs, and that are not selected by the lenders. These programs, which currently account for a small percentage of the low down payment market, compete with traditional private mortgage insurance and, due to differences in policy terms, they may offer premium rates that are below prevalent single premium lender-paid mortgage insurance ("LPMI") rates. We participate in these programs from time to time. See our risk factor titled *"Changes in the business practices of Fannie Mae and Freddie Mac's ("the GSEs"), federal legislation that changes their charters or a restructuring of the GSEs could reduce our revenues or increase our losses"* for a discussion of various business practices of the GSEs that may be changed, including through expansion or modification of these programs.

The GSEs (and other investors) have also used other forms of credit enhancement that did not involve traditional private mortgage insurance, such as engaging in credit-linked note transactions executed in the capital markets, or using other forms of debt issuances or securitizations that transfer credit risk directly to other investors, including competitors and an affiliate of MGIC; using other risk mitigation techniques in conjunction with reduced levels of private mortgage insurance coverage; or accepting credit risk without credit enhancement.

The FHA's share of the low down payment residential mortgages that were subject to FHA, VA, USDA or primary private mortgage insurance was 26.7% in 2022, 24.7% in 2021, and 23.4% in 2020. Beginning in 2012, the FHA's share has been as low as 23.4% (in 2020) and as high as 42.1% (in 2012). Factors that influence the FHA's market share include relative rates and fees, underwriting guidelines and loan limits of the FHA, VA, private mortgage insurers and the GSEs; lenders' perceptions of legal risks under FHA versus GSE programs; flexibility for the FHA to establish new products as a result of federal legislation and programs; returns expected to be obtained by lenders for Ginnie Mae securitization of FHA-insured loans compared to those obtained from selling loans to the GSEs for securitization; and differences in policy terms, such as the ability of a borrower to cancel insurance coverage under certain circumstances. On February 22, 2023, the FHA announced a 30 bps decrease in its mortgage insurance premium rates. This rate reduction will negatively impact our NIW; however, given the many factors that influence the FHA's market share, it is difficult to predict the extent of the impact. In addition, we cannot predict how the factors that affect the FHA's share of new insurance written will change in the future.

The VA's share of the low down payment residential mortgages that were subject to FHA, VA, USDA or primary private mortgage insurance was 24.5% in 2022, 30.2% in 2021, and 30.9% in 2020. Beginning in 2012, the VA's share has been as low as 22.8% (in 2013) and as high as 30.9% (in 2020). We believe that the VA's market share grows as the number of borrowers that are eligible for the VA's program increases, and when eligible borrowers opt to use the VA program when refinancing their mortgages. The VA program offers 100% LTV ratio loans and charges a one-time funding fee that can be included in the loan amount.

Changes in interest rates, house prices or mortgage insurance cancellation requirements may change the length of time that our policies remain in force.

The premium from a single premium policy is collected upfront and generally earned over the estimated life of the policy. In contrast, premiums from monthly and annual premium policies are received each month or year, as applicable, and earned each month over the life of the policy. In each year, most of our premiums earned are from insurance that has been written in prior years. As a result, the length of time insurance remains in force, which is generally measured by persistency (the percentage of our insurance remaining in force from one year prior), is a significant determinant of our revenues. A higher than expected persistency rate may decrease the profitability from single premium policies because they will remain in force longer and may increase the incidence of claims that was estimated when the policies were written. A low persistency rate on monthly and annual premium policies will reduce future premiums but may also reduce the incidence of claims, while a high persistency on those policies will increase future premiums but may increase the incidence of claims.

Our persistency rate was 79.8% at December 31, 2022, 62.6% at December 31, 2021, and 60.5% at December 31, 2020. Since 2000, our year-end persistency ranged from a high of 84.7% at December 31, 2009 to a low of 47.1% at December 31, 2003. Our persistency rate is primarily affected by the level of current mortgage interest rates compared to the mortgage coupon rates on our insurance in force, which affects the vulnerability of the insurance in force to refinancing; and the current amount of equity that borrowers have in the homes underlying our insurance in force. The amount of equity affects persistency in the following ways:

- Borrowers with significant equity may be able to refinance their loans without requiring mortgage insurance.
- The Homeowners Protection Act ("HOPA") requires servicers to cancel mortgage insurance when a borrower's LTV ratio meets or is scheduled to meet certain levels, generally based on the original value of the home and subject to various conditions.
- The GSEs' mortgage insurance cancellation guidelines apply more broadly than HOPA and also consider a home's current value. For more information about the GSEs guidelines and business practices, and how they may change, see our risk factor titled "*Changes in the business practices of Fannie Mae and Freddie Mac's ("the GSEs"), federal legislation that changes their charters or a restructuring of the GSEs could reduce our revenues or increase our losses.*"

We are susceptible to disruptions in the servicing of mortgage loans that we insure and we rely on third-party reporting for information regarding the mortgage loans we insure.

We depend on reliable, consistent third-party servicing of the loans that we insure. An increase in delinquent loans may result in liquidity issues for servicers. When a mortgage loan that is collateral for a mortgage backed security ("MBS") becomes delinquent, the servicer is usually required to continue to pay principal and interest to the MBS investors, generally for four months, even though the servicer is not receiving payments from borrowers. This may cause liquidity issues, especially for non-bank servicers (who service approximately 46% of the loans underlying our insurance in force as of December 31, 2022) because they do not have the same sources of liquidity that bank servicers have.

While there has been no disruption in our premium receipts through the end of 2022, servicers who experience future liquidity issues may be less likely to advance premiums to us on policies covering delinquent loans or to remit premiums on policies covering loans that are not delinquent. Our policies generally allow us to cancel coverage on loans that are not delinquent if the premiums are not paid within a grace period.

An increase in delinquent loans or a transfer of servicing resulting from liquidity issues, may increase the operational burden on servicers, cause a disruption in the servicing of delinquent loans and reduce servicers' abilities to undertake mitigation efforts that could help limit our losses.

The information presented in this report and on our website with respect to the mortgage loans we insure is based on information reported to us by third parties, including the servicers and originators of the mortgage loans, and information presented may be subject to lapses or inaccuracies in reporting from such third parties. In many cases, we may not be aware that information reported to us is incorrect until such time as a claim is made against us under the relevant insurance policy. We do not consistently receive monthly policy status information from servicers for single premium policies, and may not be aware that the mortgage loans insured by such policies have been repaid. We periodically attempt to determine if coverage is still in force on such policies by asking the last servicer of record or through the periodic reconciliation of loan information with certain servicers. It may be possible that our reports continue to reflect, as active, policies on mortgage loans that have been repaid.

Risk Factors Relating to Our Business Generally

If our risk management programs are not effective in identifying, or adequate in controlling or mitigating, the risks we face, or if the models used in our businesses are inaccurate, it could have a material adverse impact on our business, results of operations and financial condition.

Our enterprise risk management program, described in "Business - Our Products and Services - Risk Management" in Item 1, may not be effective in identifying, or adequate in controlling or mitigating, the risks we face in our business.

We employ proprietary and third-party models for a wide range of purposes, including the following: projecting losses, premiums, expenses, and returns; pricing products (through our risk-based pricing system); determining the techniques used to underwrite insurance; estimating reserves; evaluating risk; determining internal capital requirements; and performing stress testing. These models rely on estimates, projections, and assumptions that are inherently uncertain and may not always operate as intended. This can be especially true when extraordinary events occur, such as the COVID-19 pandemic, the Russia-Ukraine war, periods of extreme inflation, or environmental disasters related to changing climatic conditions. In addition, our models are being continuously updated over time. Changes in models or model assumptions could lead to material changes in our future expectations, returns, or financial results. The models we employ are complex, which could increase our risk of error in their design, implementation, or use. Also, the associated input data, assumptions, and calculations may not always be correct or accurate and the controls we have in place to mitigate these risks may not be effective in all cases. The risks related to our models may increase when we change assumptions, methodologies, or modeling platforms. Moreover, we may use information we receive through enhancements to refine or otherwise change existing assumptions and/or methodologies.

Information technology system failures or interruptions may materially impact our operations and adversely affect our financial results.

We are heavily dependent on our information technology systems to conduct our business. Our ability to efficiently operate our business depends significantly on the reliability and capacity of our systems and technology. The failure of our systems and technology to operate effectively could affect our ability to provide our products and services to customers, reduce efficiency, or cause delays in operations. Significant capital investments might be required to remediate any such problems. We are also dependent on our ongoing relationships with key technology providers, including provisioning of their products and technologies, and their ability to support those products and technologies. The inability of these providers to successfully provide and support those products could have an adverse impact on our business and results of operations.

We are in the process of upgrading certain information systems, and transforming and automating certain business processes, and we continue to enhance our risk-based pricing system and our system for evaluating risk. Certain information systems have been in place for a number of years and it has become increasingly difficult to support their operation. The implementation of technological and business process improvements, as well as their integration with customer and third-party systems when applicable, is complex, expensive and time consuming. If we fail to timely and successfully implement and integrate the new technology systems, if the third party providers upon which we are reliant do not perform as expected, if our legacy systems fail to operate as required, or if the upgraded systems and/or transformed and automated business processes do not operate as expected, it could have a material adverse impact on our business, business prospects and results of operations.

We could be materially adversely affected by a cyber security breach or failure of information security controls.

As part of our business, we maintain large amounts of confidential and proprietary information, including personal information of consumers and employees, on our servers and those of cloud computing services. Federal and state laws designed to promote the protection of such information require businesses that collect or maintain personal information to adopt information security programs, and to notify individuals, and in some jurisdictions, regulatory authorities, of security breaches involving personally identifiable information. All information technology systems are potentially vulnerable to damage or interruption from a variety of sources, including by cyber attacks, such as those involving ransomware. The Company discovers vulnerabilities and regularly blocks a high volume of attempts to gain unauthorized access to its systems. Globally, attacks are expected to continue accelerating in both frequency and sophistication with increasing use by actors of tools and techniques that will hinder the Company's ability to identify, investigate and recover from incidents. Such attacks may also increase as a result of retaliation by Russia in response to actions taken by the U.S. and other countries in connection with Russia's military invasion of Ukraine. The Company operates under a hybrid workforce model and such model may be more vulnerable to security breaches.

While we have information security policies and systems in place to secure our information technology systems and to prevent unauthorized access to or disclosure of sensitive information, there can be no assurance with respect to our systems and those of our third-party vendors that unauthorized access to the systems or disclosure of the sensitive information, either through the actions of third parties or employees, will not occur. Due to our reliance on information technology systems, including ours and those of our customers and third-party service providers, and to the sensitivity of the information that we maintain, unauthorized access to the systems or disclosure of the information could adversely affect our reputation, severely disrupt our operations, result in a loss of business and expose us to material claims for damages and may require that we provide free credit monitoring services to individuals affected by a security breach.

Should we experience an unauthorized disclosure of information or a cyber attack, including those involving ransomware, some of the costs we incur may not be recoverable through insurance, or legal or other processes, and this may have a material adverse effect on our results of operations.

The mix of business we write affects our Minimum Required Assets under the PMIERs, our premium yields and the likelihood of losses occurring.

The Minimum Required Assets under the PMIERs are, in part, a function of the direct risk-in-force and the risk profile of the loans we insure, considering LTV ratio, credit score, vintage, Home Affordable Refinance Program ("HARP") status and delinquency status; and whether the loans were insured under lender-paid mortgage insurance policies or other policies that are not subject to automatic termination consistent with the Homeowners Protection Act requirements for borrower-paid mortgage insurance. Therefore, if our direct risk-in-force increases through increases in NIW, or if our mix of business changes to include loans with higher LTV ratios or lower FICO scores, for example, all other things equal, we will be required to hold more Available Assets in order to maintain GSE eligibility.

The percentage of our NIW from all single premium policies was 4.3% in 2022 and 7.4% in 2021, and has ranged from 4.3% in 2022 to 19.0% in 2017. Depending on the actual life of a single premium policy and its premium rate relative to that of a monthly premium policy, a single premium policy may generate more or less premium than a monthly premium policy over its life.

As discussed in our risk factor titled "*Reinsurance may not always be available or its cost may increase,*" we have in place various QSR transactions. Although the transactions reduce our premiums, they have a lesser impact on our overall results, as losses ceded under the transactions reduce our losses incurred and the ceding commissions we receive reduce our underwriting expenses. The effect of the QSR transactions on the various components of pre-tax income will vary from period to period, depending on the level of ceded losses incurred. We also have in place various XOL reinsurance transactions under which we cede premiums. Under the XOL reinsurance transactions, for the respective reinsurance coverage periods, we retain the first layer of aggregate losses and the reinsurers provide second layer coverage up to the outstanding reinsurance coverage amount.

In addition to the effect of reinsurance on our premiums, we expect a decline in our premium yield because an increasing percentage of our insurance in force is from recent book years whose premium rates had been trending lower.

Our ability to rescind insurance coverage became more limited for new insurance written beginning in mid-2012, and it became further limited for new insurance written under our revised master policy that became effective March 1, 2020. These limitations may result in higher losses paid than would be the case under our previous master policies. In addition, our rescission rights temporarily have become more limited due to accommodations we made in connection with the COVID-19 pandemic. We waived our rescission rights in certain circumstances where the failure to make payments was associated with a COVID-19 pandemic-related forbearance.

From time to time, in response to market conditions, we change the types of loans that we insure. We also may change our underwriting guidelines, including by agreeing with certain approval recommendations from a GSE automated underwriting system. We also make exceptions to our underwriting requirements on a loan-by-loan basis and for certain customer programs. Our underwriting requirements are available on our website at http://www.mgic.com/underwriting/index.html.

Even when home prices are stable or rising, mortgages with certain characteristics have higher probabilities of claims. As of December 31, 2022, mortgages with these characteristics in our primary risk in force included mortgages with LTV ratios greater than 95% (15.0%), mortgages with borrowers having FICO scores below 680 (7.2%), including those with borrowers having FICO scores of 620-679 (6.2%), mortgages with limited underwriting, including limited borrower documentation (0.8%), and mortgages with borrowers having DTI ratios greater than 45% (or where no ratio is available) (15.6%), each attribute as determined at the time of loan origination. Loans with more than one of these attributes accounted for 4.4% of our primary risk in force as of December 31, 2022, and 4.1% of our primary risk in force as of December 31, 2021. When home prices increase, interest rates increase and/or the percentage of our NIW from purchase transactions increases, our NIW on mortgages with higher LTV ratios and higher DTI ratios may increase. Our NIW on mortgages with LTV ratios greater than 95% increased from 11% in 2021 to 12% in 2022 and our NIW on mortgages with DTI ratios greater than 45% increased from 14% in 2021 to 21% in 2022.

From time to time, we change the processes we use to underwrite loans. For example: we rely on information provided to us by lenders that was obtained from certain of the GSEs' automated appraisal and income verification tools, which may produce results that differ from the results that would have been determined using different methods; we accept GSE appraisal waivers for certain refinance loans, the numbers of which have increased significantly beginning in 2020; and we accept GSE appraisal flexibilities that allow property valuations in certain transactions to be based on appraisals that do not involve an onsite or interior inspection of the property. Our acceptance of automated GSE appraisal and income verification tools, GSE appraisal waivers and GSE appraisal flexibilities may affect our pricing and risk assessment. We also continue to further automate our underwriting processes and it is possible that our automated processes result in our insuring loans that we would not otherwise have insured under our prior processes.

Approximately 72% of our 2022 and 72% of our 2021 NIW was originated under delegated underwriting programs pursuant to which the loan originators had authority on our behalf to underwrite the loans for our mortgage insurance. For loans originated through a delegated underwriting program, we depend on the originators' compliance with our guidelines and rely on the originators' representations that the loans being insured satisfy the underwriting guidelines, eligibility criteria and other requirements. While we have established systems and processes to monitor whether certain aspects of our underwriting guidelines were being followed by the originators, such systems may not ensure that the guidelines were being strictly followed at the time the loans were originated.

The widespread use of risk-based pricing systems by the private mortgage insurance industry (discussed in our risk factor titled *"Competition or changes in our relationships with our customers could reduce our revenues, reduce our premium yields and / or increase our losses"*) makes it more difficult to compare our premium rates to those offered by our competitors. We may not be aware of industry rate changes until we observe that our mix of new insurance written has changed and our mix may fluctuate more as a result.

If state or federal regulations or statutes are changed in ways that ease mortgage lending standards and/or requirements, or if lenders seek ways to replace business in times of lower mortgage originations, it is possible that more mortgage loans could be originated with higher risk characteristics than are currently being originated, such as loans with lower FICO scores and higher DTI ratios. The focus of the new FHFA leadership on increasing homeownership opportunities for borrowers is likely to have this effect. Lenders could pressure mortgage insurers to insure such loans, which are expected to experience higher claim rates. Although we attempt to incorporate these higher expected claim rates into our underwriting and pricing models, there can be no assurance that the premiums earned and the associated investment income will be adequate to compensate for actual losses paid even under our current underwriting requirements.

The premiums we charge may not be adequate to compensate us for our liabilities for losses and as a result any inadequacy could materially affect our financial condition and results of operations.

When we set our premiums at policy issuance, we have expectations regarding likely performance of the insured risks over the long term. Generally, we cannot cancel mortgage insurance coverage or adjust renewal premiums during the life of a policy. As a result, higher than anticipated claims generally cannot be offset by premium increases on policies in force or mitigated by our non-renewal or cancellation of insurance coverage. Our premiums are subject to approval by state regulatory agencies, which can delay or limit our ability to increase premiums on future policies. In addition, our customized rate plans may delay our ability to increase premiums on future policies covered by such plans. The premiums we charge, the investment income we earn and the amount of reinsurance we carry may not be adequate to compensate us for the risks and costs associated with the insurance coverage provided to customers. An increase in the number or size of claims, compared to what we anticipated when we set the premiums, could adversely affect our results of operations or financial condition. Our premium rates are also based in part on the amount of capital we are required to hold against the insured risk. If the amount of capital we are required to hold increases from the amount we were required to hold when we set the premiums, our returns may be lower than we assumed. For a discussion of the amount of capital we are required to hold, see our risk factor titled "*We may not continue to meet the GSEs' private mortgage insurer eligibility requirements and our returns may decrease if we are required to maintain more capital in order to maintain our eligibility*."

We rely on our management team and our business could be harmed if we are unable to retain qualified personnel or successfully develop and/or recruit their replacements.

Our success depends, in part, on the skills, working relationships and continued services of our management team and other key personnel. The unexpected departure of key personnel could adversely affect the conduct of our business. In such event, we would be required to obtain other personnel to manage and operate our business. In addition, we will be required to replace the knowledge and expertise of our aging workforce as our workers retire. In either case, there can be no assurance that we would be able to develop or recruit suitable replacements for the departing individuals; that replacements could be hired, if necessary, on terms that are favorable to us; or that we can successfully transition such replacements in a timely manner. We currently have not entered into any employment agreements with our officers or key personnel. Volatility or lack of performance in our stock price may affect our ability to retain our key personnel or attract replacements should key personnel depart. Without a properly skilled and experienced workforce, our costs, including productivity costs and costs to replace employees may increase, and this could negatively impact our earnings.

Competition or changes in our relationships with our customers could reduce our revenues, reduce our premium yields and / or increase our losses.

The private mortgage insurance industry is highly competitive and is expected to remain so. We believe we currently compete with other private mortgage insurers based on premium rates, underwriting requirements, financial strength (including based on credit or financial strength ratings), customer relationships, name recognition, reputation, strength of management teams and field organizations, the ancillary products and services provided to lenders, and the effective use of technology and innovation in the delivery and servicing of our mortgage insurance products.

Our relationships with our customers, which may affect the amount of our NIW, could be adversely affected by a variety of factors, including if our premium rates are higher than those of our competitors, our underwriting requirements are more restrictive than those of our competitors, or our customers are dissatisfied with our claims-paying practices (including insurance policy rescissions and claim curtailments).

In recent years, the industry has materially reduced its use of standard rate cards, which were fairly consistent among competitors, and correspondingly increased its use of (i) pricing systems that use a spectrum of filed rates to allow for formulaic, risk-based pricing based on multiple attributes that may be quickly adjusted within certain parameters, and (ii) customized rate plans, both of which typically have rates lower than the standard rate card. Our increased use of reinsurance over the past several years, and the improved credit profile and reduced loss expectations associated with loans insured after 2008, have helped to mitigate the negative effect of declining premium rates on our expected returns. However, refer to our risk factor titled *"Reinsurance may not always be available or its cost may increase"* for a discussion of the risks associated with the availability of reinsurance, and our risk factors titled "*Downturns in the domestic economy or declines in home prices may result in more homeowners defaulting and our losses increasing, with a corresponding decrease in our returns*," and "*Pandemics, hurricanes and other natural disasters may impact our incurred losses, the amount and timing of paid claims, our inventory of notices of default and our Minimum Required Assets under PMIERs*" for a discussion about risks associated with our NIW.

The widespread use of risk-based pricing systems by the private mortgage insurance industry makes it more difficult to compare our rates to those offered by our competitors. We may not be aware of industry rate changes until we observe that our volume of NIW has changed. In addition, business under customized rate plans is awarded by certain customers for only limited periods of time. As a result, our NIW may fluctuate more than it had in the past. Regarding the concentration of our new business, our top ten customers accounted for approximately 33% and 36% in the twelve months ended December 31, 2022 and December 31, 2021, respectively.

We monitor various competitive and economic factors while seeking to balance both profitability and market share considerations in developing our pricing strategies. Premium rates on NIW will change our premium yield (net premiums earned divided by the average insurance in force) over time as older insurance policies run off and new insurance policies with premium rates that are generally lower are written.

Certain of our competitors have access to capital at a lower cost than we do (including, through off-shore intercompany reinsurance vehicles, which have tax advantages that may increase if U.S. corporate income taxes increase). As a result, they may be able to achieve higher after-tax rates of return on their NIW compared to us, which could allow them to leverage reduced premium rates to gain market share, and they may be better positioned to compete outside of traditional mortgage insurance, including by participating in alternative forms of credit enhancement pursued by the GSEs discussed in our risk factor titled *"The amount of insurance we write could be adversely affected if lenders and investors select alternatives to private mortgage insurance*."

Although the current PMIERs of the GSEs do not require an insurer to maintain minimum financial strength ratings, our financial strength ratings can affect us in the ways set forth below. If we are unable to compete effectively in the current or any future markets as a result of the financial strength ratings assigned to our insurance subsidiaries, our future NIW could be negatively affected.

- A downgrade in our financial strength ratings could result in increased scrutiny of our financial condition by the GSEs and/or our customers, potentially resulting in a decrease in the amount of our NIW.
- Our ability to participate in the non-GSE residential mortgage-backed securities market (the size of which has been limited since 2008, but may grow in the future), could depend on our ability to maintain and improve our investment grade ratings for our insurance subsidiaries. We could be competitively disadvantaged with some market participants because the financial strength ratings of our insurance subsidiaries are lower than those of some competitors. MGIC's financial strength rating from A.M. Best is A- (with a stable outlook), from Moody's is A3 (with a stable outlook) and from Standard & Poor's is BBB+ (with a stable outlook).

- Financial strength ratings may also play a greater role if the GSEs no longer operate in their current capacities, for example, due to legislative or regulatory action. In addition, although the PMIERs do not require minimum financial strength ratings, the GSEs consider financial strength ratings to be important when using forms of credit enhancement other than traditional mortgage insurance, as discussed in our risk factor titled "*The amount of insurance we write could be adversely affected if lenders and investors select alternatives to private mortgage insurance.*" The final GSE capital framework provides more capital credit for transactions with higher rated counterparties, as well as those who are diversified. Although we are currently unaware of a direct impact on MGIC, this could potentially become a competitive disadvantage in the future.

Standard & Poor's is considering changes to its rating methodologies for insurers, including mortgage insurers. It is uncertain what impact the changes will have, whether they will prompt similar moves at other rating agencies, or the extent to which they will impact how external parties evaluate the different rating levels.

We are subject to the risk of legal proceedings.

Before paying an insurance claim, generally we review the loan and servicing files to determine the appropriateness of the claim amount. When reviewing the files, we may determine that we have the right to rescind coverage or deny a claim on the loan (both referred to herein as "rescissions"). In addition, our insurance policies generally provide that we can reduce a claim if the servicer did not comply with its obligations under our insurance policy (such reduction referred to as a "curtailment"). In recent years, an immaterial percentage of claims received have been resolved by rescissions. In 2022 and in 2021, curtailments reduced our average claim paid by approximately 6.3% and 4.4%, respectively. The COVID-19-related foreclosure moratoriums and forbearance plans, along with increased home prices, resulted in decreased claims paid activity beginning in the second quarter of 2020. It is difficult to predict the level of curtailments once foreclosure activity returns to a more typical level. Our loss reserving methodology incorporates our estimates of future rescissions, curtailments, and reversals of rescissions and curtailments. A variance between ultimate actual rescission, curtailment and reversal rates and our estimates, as a result of the outcome of litigation, settlements or other factors, could materially affect our losses.

When the insured disputes our right to rescind coverage or curtail claims, we generally engage in discussions in an attempt to settle the dispute. If we are unable to reach a settlement, the outcome of a dispute ultimately may be determined by legal proceedings. Under ASC 450-20, until a loss associated with settlement discussions or legal proceedings becomes probable and can be reasonably estimated, we consider our claim payment or rescission resolved for financial reporting purposes and do not accrue an estimated loss. When we determine that a loss is probable and can be reasonably estimated, we record our best estimate of our probable loss. In those cases, until settlement negotiations or legal proceedings are concluded (including the receipt of any necessary GSE approvals), it is possible that we will record an additional loss.

We have been named as a third-party defendant in a lawsuit that involves refunds of mortgage insurance premiums under the Homeowners Protection Act. We are monitoring litigation addressing similar issues in which we have not been named a defendant. We are unable to assess the potential impact of any such litigation at this time. In addition, from time to time, we are involved in other disputes and legal proceedings in the ordinary course of business. In our opinion, based on the facts known at this time, the ultimate resolution of these ordinary course disputes and legal proceedings will not have a material adverse effect on our financial position or results of operations.

The COVID-19 pandemic may materially impact our business and future financial condition.

The COVID-19 pandemic materially impacted our 2020 financial results. While the initial impact of COVID-19 on our business has moderated, the extent to which COVID-19 may materially impact our business and future financial condition is uncertain and cannot be predicted. The magnitude of any future impact could be influenced by various factors, including the length and severity of the pandemic in the United States, efforts to reduce the transmission of COVID-19, the level of unemployment, government initiatives and actions taken by the GSEs (including mortgage forbearance and modification programs), and the overall effects of COVID-19 on the economy. The COVID-19 pandemic may impact our business in other ways, as described in more detail in these risk factors.

Forbearance for borrowers who were affected by COVID-19 allows mortgage payments to be suspended for a period of time. Historically, forbearance plans have reduced the incidence of our losses on affected loans. However, given the uncertainty surrounding the long-term economic impact of COVID-19, it is difficult to predict the ultimate effect of COVID-19 related forbearances on our loss incidence. Whether a loan delinquency will cure, including through modification, when forbearance ends will depend on the economic circumstances of the borrower at that time. The severity of losses associated with delinquencies that do not cure will depend on economic conditions at that time, including home prices.

Our success depends, in part, on our ability to manage risks in our investment portfolio.

Our investment portfolio is an important source of revenue and is our primary source of claims paying resources. Although our investment portfolio consists mostly of highly-rated fixed income investments, our investment portfolio is affected by general economic conditions and tax policy, which may adversely affect the markets for credit and interest-rate-sensitive securities, including the extent and timing of investor participation in these markets, the level and volatility of interest rates and credit spreads and, consequently, the value of our fixed income securities. Prevailing market rates have increased for various reasons, including inflationary pressures, which has reduced the fair value of our investment portfolio. The value of our investment portfolio may also be adversely affected by ratings downgrades, increased bankruptcies, and credit spreads widening. In addition, the collectability and valuation of our municipal bond portfolio may be adversely affected by budget deficits, and declining tax bases and revenues experienced by state and local municipalities. Our investment portfolio also includes commercial mortgage-backed securities, collateralized loan obligations, and asset-backed securities, which could be adversely affected by declines in real estate valuations, increases in unemployment, geopolitical risks and/or financial market disruption, including a heightened collection risk on the underlying loans. As a result of these matters, we may not achieve our investment objectives and a reduction in the market value of our investments could have an adverse effect on our liquidity, financial condition and results of operations.

For the significant portion of our investment portfolio that is held by MGIC, to receive full capital credit under insurance regulatory requirements and under the PMIERs, we generally are limited to investing in investment grade fixed income securities whose yields reflect their lower credit risk profile. Our investment income depends upon the size of the portfolio and its reinvestment at prevailing interest rates. A prolonged period of low investment yields would have an adverse impact on our investment income as would a decrease in the size of the portfolio.

We structure our investment portfolio to satisfy our expected liabilities, including claim payments in our mortgage insurance business. If we underestimate our liabilities or improperly structure our investments to meet these liabilities, we could have unexpected losses resulting from the forced liquidation of fixed income investments before their maturity, which could adversely affect our results of operations.

Our holding company debt obligations are material.

At December 31, 2022, we had approximately $647 million in cash and investments at our holding company and our holding company's long-term debt obligations were $671 million in aggregate principal amount. Annual debt service on the long-term debt obligations outstanding as of December 31, 2022, is approximately $36 million.

The long-term debt obligations are owed by our holding company, MGIC Investment Corporation, and not its subsidiaries. The payment of dividends from MGIC is the principal source of our holding company cash inflow. Other sources of holding company cash inflow include settlements under intercompany tax and expense sharing agreements, investment income and raising capital in the public markets. Although MGIC holds assets in excess of its minimum statutory capital requirements and its PMIERs financial requirements, the ability of MGIC to pay dividends is restricted by insurance regulation. In general, dividends in excess of prescribed limits are deemed "extraordinary" and may not be paid if disapproved by the OCI. In 2023, MGIC can pay $92 million of ordinary dividends without OCI approval, before taking into consideration dividends paid in the preceding twelve months. A dividend is extraordinary when the proposed dividend amount plus dividends paid in the last twelve months from the dividend payment date exceed the ordinary dividend level. In the twelve months ended December 31, 2022, MGIC paid $800 million in dividends to the holding company. Future dividend payments from MGIC to the holding company will be determined in consultation with the board of directors, and after considering any updated estimates about our business.

Repurchases of our common stock may be made from time to time on the open market (including through 10b5-1 plans) or through privately negotiated transactions. In 2022, we repurchased approximately 27.8 million shares, using approximately $386 million of holding company resources. As of December 31, 2022, we had $114 million of authorization remaining to repurchase our common stock through the end of 2023 under a share repurchase program approved by our Board of Directors in October 2021. If any capital contributions to our subsidiaries are required, such contributions would decrease our holding company cash and investments.

Your ownership in our company may be diluted by additional capital that we raise.

As noted above under our risk factor titled *"We may not continue to meet the GSEs' private mortgage insurer eligibility requirements and our returns may decrease if we are required to maintain more capital in* *order to maintain our eligibility,"* although we are currently in compliance with the requirements of the PMIERs, there can be no assurance that we would not seek to issue additional debt capital or to raise additional equity or equity-linked capital to manage our capital position under the PMIERs or for other purposes. Any future issuance of equity securities may dilute your ownership interest in our company. In addition, the market price of our common stock could decline as a result of sales of a large number of shares or similar securities in the market or the perception that such sales could occur.

The price of our common stock may fluctuate significantly, which may make it difficult for holders to resell common stock when they want or at a price they find attractive.

The market price for our common stock may fluctuate significantly. In addition to the risk factors described herein, the following factors may have an adverse impact on the market price for our common stock: changes in general conditions in the economy, the mortgage insurance industry or the financial markets; announcements by us or our competitors of acquisitions or strategic initiatives; our actual or anticipated quarterly and annual operating results; changes in expectations of future financial performance (including incurred losses on our insurance in force); changes in estimates of securities analysts or rating agencies; actual or anticipated changes in our share repurchase program or dividends; changes in operating performance or market valuation of companies in the mortgage insurance industry; the addition or departure of key personnel; changes in tax law; and adverse press or news announcements affecting us or the industry. In addition, ownership by certain types of investors may affect the market price and trading volume of our common stock. For example, ownership in our common stock by investors such as index funds and exchange-traded funds can affect the stock's price when those investors must purchase or sell our common stock because the investors have experienced significant cash inflows or outflows, the index to which our common stock belongs has been rebalanced, or our common stock is added to and/or removed from an index (due to changes in our market capitalization, for example).

The Company may be adversely impacted by the transition from LIBOR as a reference rate.

The United Kingdom's Financial Conduct Authority, which regulates LIBOR, announced that after 2021 it would no longer publish one-week and two-month tenor USD LIBOR and that after June 30, 2023, it would no longer publish all other USD LIBOR tenors. Efforts are underway to identify and transition to a set of alternative reference rates. The set of alternative rates includes the Secured Overnight Financing Rate ("SOFR"), which the Federal Reserve Bank of New York began publishing in 2018. Because SOFR is calculated based on different criteria than LIBOR, SOFR and LIBOR may diverge.

While it is not currently possible to determine precisely whether, or to what extent, the replacement of LIBOR would affect us, the implementation of alternative benchmark rates to LIBOR may have an adverse effect on our business, results of operations or financial condition. We have three primary types of transactions that involve financial instruments referencing LIBOR. First, as of December 31, 2022, approximately 6% of the fair value of our investment portfolio consisted of securities referencing LIBOR. Second, as of December 31, 2022, approximately $0.4 billion of our risk in force was on adjustable rate mortgages whose interest is referenced to one-month USD LIBOR. A change in reference rate associated with these loans may affect their principal balance, which may affect our risk-in-force and the amount of Minimum Required Assets we are required to maintain under PMIERs. A change in reference rate may also affect the amount of principal and/or accrued interest we are required to pay in the event of a claim payment. Third, the premiums under most of our 2018-2021 XOL reinsurance agreements executed through insurance linked noted transactions are determined, in part, by the difference between interest payable on the reinsurers' notes which reference one-month USD LIBOR and earnings from a pool of securities receiving interest that may reference LIBOR (in 2022, our total premiums on such transactions were approximately $36.4 million).

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Exchange Act Rule 13a-15(f) and 15d-15(f)). Our internal control over financial reporting is 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. Because of its inherent limitations, however, 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.

Our management, with the participation of our principal executive officer and principal financial officer, has evaluated the effectiveness of our internal control over financial reporting using the framework in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on such evaluation, our management concluded that our internal control over financial reporting was effective as of December 31, 2022.

PricewaterhouseCoopers LLP, an independent registered public accounting firm, has audited the consolidated financial statements and effectiveness of internal control over financial reporting as of December 31, 2022, as stated in their report which appears herein.

CHANGES IN INTERNAL CONTROL DURING THE FOURTH QUARTER

There are no changes in our internal control over financial reporting (as defined in Rule 13a-15(f) and Rule 15d-15(f) under the Exchange Act) that occurred during the quarter ended December 31, 2022 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of MGIC Investment Corporation

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of MGIC Investment Corporation and its subsidiaries (the "Company") as of December 31, 2022 and 2021, and the related consolidated statements of operations, of comprehensive income (loss), of shareholders' equity and of cash flows for each of the three years in the period ended December 31, 2022, including the related notes and financial statement schedules listed in the index appearing under Item 15(a)(2) (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control - Integrated Framework (2013) issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated 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 consolidated 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 consolidated financial statements. Our audit of internal control over financial reporting 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 audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (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.

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.

Critical Audit Matters

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

Valuation of Loss Reserves – Primary Case Reserves

As described in Notes 3 and 8 to the consolidated financial statements, the Company establishes case reserves for estimated insurance losses when notices of delinquency on insured mortgage loans are received. As of December 31, 2022, the Company's recorded loss reserves were $558 million. A significant portion of total loss reserves relate to primary case reserves established for the Company's primary insurance business. Case reserves are established by estimating the number of loans in the delinquency inventory that will result in a claim payment, which is referred to as the claim rate, and further estimating the amount of the claim payment, which is referred to as claim severity. The Company's case reserve estimates are primarily established based upon historical experience, including rescissions of policies, curtailments of claims, and loan modification activity. The conditions that affect the claim rate and claim severity include the current and future state of the domestic economy, including unemployment and the current and future strength of local housing markets; exposure on insured loans; the amount of time between delinquency and claim filing; and curtailments and rescissions.

The principal considerations for our determination that performing procedures relating to the valuation of loss reserves – primary case reserves is a critical audit matter are (i) the significant judgment by management when developing the estimate of the primary case reserves; (ii) a high degree of auditor judgment, subjectivity, and effort in performing procedures and evaluating the audit evidence relating to the claim rate and claim severity significant assumptions; and (iii) the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the valuation of loss reserves, including controls over the development of significant assumptions related to the claim rate and claim severity. These procedures also included, among others, the involvement of professionals with specialized skill and knowledge to assist in developing an independent estimate of the primary case reserves and comparing this independent estimate to management's recorded primary case reserves to evaluate the reasonableness of the recorded primary case reserves. Developing the independent estimate involved testing the completeness and accuracy of data provided by management and independently developing assumptions related to the claim rate and claim severity.

/s/ PricewaterhouseCoopers LLP
Milwaukee, Wisconsin
February 22, 2023

We have served as the Company's auditor since 1985, which includes periods before the Company became subject to SEC reporting requirements.

MGIC INVESTMENT CORPORATION AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS

		December 31,	
(In thousands)	Note	**2022**	2021
Assets			
Investment portfolio:	5 / 6		
Fixed income, available-for-sale, at fair value (amortized cost, 2022 - $5,926,785; 2021 - $6,397,658)		**$ 5,409,698**	$ 6,587,581
Equity securities, at fair value (cost, 2022 - $15,924; 2021 - $15,838)		**14,140**	16,068
Other invested assets, at cost		**850**	3,100
Total investment portfolio		**5,424,688**	6,606,749
Cash and cash equivalents		**327,384**	284,690
Restricted cash and cash equivalents		**5,529**	20,268
Accrued investment income		**55,178**	51,902
Reinsurance recoverable on loss reserves	9	**28,240**	66,905
Reinsurance recoverable on paid losses	9	**18,081**	36,275
Premiums receivable		**58,000**	56,540
Home office and equipment, net		**41,419**	45,614
Deferred insurance policy acquisition costs		**19,062**	21,671
Deferred income taxes, net	12	**124,769**	—
Other assets		**111,443**	134,394
Total assets		**$ 6,213,793**	$ 7,325,008
Liabilities and shareholders' equity			
Liabilities:			
Loss reserves	8	**$ 557,988**	$ 883,522
Unearned premiums		**195,289**	241,690
Federal Home Loan Bank Advance	7	**—**	155,000
Senior notes	7	**641,724**	881,508
Convertible junior subordinated debentures	7	**21,086**	110,204
Other liabilities		**154,966**	191,702
Total liabilities		**1,571,053**	2,463,626
Contingencies	17		
Shareholders' equity:	13		
Common stock (one dollar par value, shares authorized 1,000,000; shares issued 2022 - 371,353; 2021 - 371,353; shares outstanding 2022 - 293,433; 2021 - 320,336)		**371,353**	371,353
Paid-in capital		**1,798,842**	1,794,906
Treasury stock at cost (shares 2022 - 77,920; 2021 - 51,017)		**(1,050,238)**	(675,265)
Accumulated other comprehensive (loss) income, net of tax	10	**(481,511)**	119,697
Retained earnings		**4,004,294**	3,250,691
Total shareholders' equity		**4,642,740**	4,861,382
Total liabilities and shareholders' equity		**$ 6,213,793**	$ 7,325,008

See accompanying notes to consolidated financial statements.

MGIC INVESTMENT CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS

		Years Ended December 31,		
(In thousands, except per share data)	Note	**2022**	2021	2020
Revenues:				
Premiums written:				
Direct		**$ 1,108,570**	$ 1,123,117	$ 1,106,632
Assumed		**8,535**	8,924	10,837
Ceded	9	**(156,373)**	(163,031)	(188,727)
Net premiums written		**960,732**	969,010	928,742
Decrease (increase) in unearned premiums		**46,401**	45,409	93,201
Net premiums earned	9	**1,007,133**	1,014,419	1,021,943
Investment income, net of expenses	5	**167,476**	156,438	154,396
Net gains (losses) on investments and other financial instruments	5	**(7,463)**	5,861 (1)	12,576 (1)
Other revenue		**5,639**	8,957 (1)	10,231 (1)
Total revenues		**1,172,785**	1,185,675	1,199,146
Losses and expenses:				
Losses incurred, net	8 / 9	**(254,565)**	64,577	364,774
Amortization of deferred policy acquisition costs		**12,366**	12,602	12,380
Other underwriting and operating expenses, net		**236,697**	198,445	176,398
Loss on debt extinguishment	7	**40,199**	36,914	26,736
Interest expense	7	**48,054**	71,360	59,595
Total losses and expenses		**82,751**	383,898	639,883
Income before tax		**1,090,034**	801,777	559,263
Provision for income taxes	12	**224,685**	166,794	113,170
Net income		**$ 865,349**	$ 634,983	$ 446,093
Earnings per share:	4			
Basic		**$ 2.83**	$ 1.90	$ 1.31
Diluted		**$ 2.79**	$ 1.85	$ 1.29
Weighted average common shares outstanding - basic	4	**305,847**	334,330	339,953
Weighted average common shares outstanding - diluted	4	**311,229**	351,308	359,293

(1) Certain amounts have been reclassified to conform with current year presentation

See accompanying notes to consolidated financial statements.

MGIC INVESTMENT CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

		Years Ended December 31,		
(In thousands)	Note	**2022**	2021	2020
Net income		**$ 865,349**	$ 634,983	$ 446,093
Other comprehensive income (loss), net of tax:	10			
Change in unrealized investment gains and losses	5/10	**(558,534)**	(122,099)	133,616
Benefit plans adjustment	11	**(42,674)**	24,975	10,497
Other comprehensive income (loss), net of tax		**(601,208)**	(97,124)	144,113
Comprehensive income		**$ 264,141**	$ 537,859	$ 590,206

See accompanying notes to consolidated financial statements.

MGIC INVESTMENT CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

		Years Ended December 31,		
(In thousands)	Note	**2022**	2021	2020
Common stock				
Balance, beginning and end of year		**371,353**	371,353	371,353
Paid-in capital				
Balance, beginning of year		**1,794,906**	1,862,042	1,869,719
Cumulative effect of debt with conversion options accounting standards update		**—**	(68,289)	—
Balance, beginning of period, as adjusted		**1,794,906**	1,793,753	1,869,719
Reacquisition of convertible junior subordinated debentures-equity component		**—**	—	(2,673)
Reissuance of treasury stock, net under share-based compensation plans		**(20,835)**	(15,956)	(18,807)
Equity compensation		**24,771**	17,109	13,803
Balance, end of year		**1,798,842**	1,794,906	1,862,042
Treasury stock				
Balance, beginning of year		**(675,265)**	(393,326)	(283,196)
Purchases of common stock	13	**(385,714)**	(290,818)	(119,997)
Reissuance of treasury stock, net under share-based compensation plans		**10,741**	8,879	9,867
Balance, end of year		**(1,050,238)**	(675,265)	(393,326)
Accumulated other comprehensive income (loss)				
Balance, beginning of year		**119,697**	216,821	72,708
Other comprehensive (loss) income	10	**(601,208)**	(97,124)	144,113
Balance, end of year		**(481,511)**	119,697	216,821
Retained earnings				
Balance, beginning of year		**3,250,691**	2,642,096	2,278,650
Cumulative effect of debt with conversion options accounting standards update		**—**	68,289	—
Balance, beginning of period, as adjusted		**3,250,691**	2,710,385	2,278,650
Net income		**865,349**	634,983	446,093
Cash dividends	13	**(111,746)**	(94,677)	(82,647)
Balance, end of year		**4,004,294**	3,250,691	2,642,096
Total shareholders' equity		**$ 4,642,740**	$ 4,861,382	$ 4,698,986

See accompanying notes to consolidated financial statements.

MGIC INVESTMENT CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
(In thousands)	**2022**	2021	2020
Cash flows from operating activities:			
Net income	**$ 865,349**	$ 634,983	$ 446,093
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and other amortization	**54,252**	66,014	57,812
Deferred tax expense (benefit)	**(4,367)**	5,188	27,475
Equity compensation	**24,771**	17,109	13,803
Loss on debt extinguishment	**40,199**	36,914	26,736
Net (gains) losses on investments and other financial instruments	**7,463**	(5,861)	(12,576)
Change in certain assets and liabilities:			
Accrued investment income	**(3,276)**	(1,905)	(292)
Reinsurance recoverable on loss reserves	**38,665**	28,137	(73,401)
Reinsurance recoverable on paid losses	**18,194**	(35,606)	852
Premiums receivable	**(1,460)**	(496)	(457)
Deferred insurance policy acquisition costs	**2,609**	(110)	(3,030)
Profit commission receivable	**4,724**	(19,245)	4,586
Loss reserves	**(325,534)**	2,985	325,203
Unearned premiums	**(46,401)**	(45,409)	(93,203)
Return premium accrual	**(11,800)**	7,200	(500)
Current income taxes	**(8,549)**	5,429	6,271
Other, net	**(4,827)**	990	6,937
Net cash provided by operating activities	**650,012**	696,317	732,309
Cash flows from investing activities:			
Purchases of investments	**(674,406)**	(1,531,129)	(2,636,972)
Proceeds from sales of investments	**399,661**	473,904	836,851
Proceeds from maturity of fixed income securities	**688,484**	900,591	1,030,926
Additions to property and equipment	**(3,254)**	(4,115)	(3,311)
Net cash provided by (used in) investing activities	**410,485**	(160,749)	(772,506)
Cash flows from financing activities:			
Proceeds from issuance of senior notes	**—**	—	640,250
Purchase of senior notes	**—**	—	(179,735)
Payment of original issue discount - senior notes	**—**	—	(2,969)
Purchase of convertible junior subordinated debentures	**(89,118)**	(98,610)	(36,392)
Payment of original issue discount- convertible junior subordinated debentures	**—**	—	(15,049)
Redemption of 5.75% senior notes	**(242,296)**	—	—
Repayment of FHLB advance	**(155,000)**	—	—
Cash portion of loss on debt extinguishment	**(39,514)**	(36,914)	(25,266)
Repurchase of common stock	**(385,573)**	(290,818)	(119,997)
Dividends paid	**(110,947)**	(94,219)	(82,061)
Payment of debt issuance costs	**—**	—	(2,020)
Payment of withholding taxes related to share-based compensation net share settlement	**(10,094)**	(6,729)	(8,940)
Net cash (used in) provided by financing activities	**(1,032,542)**	(527,290)	167,821
Net increase in cash and cash equivalents and restricted cash and cash equivalents	**27,955**	8,278	127,624

Cash and cash equivalents and restricted cash and cash equivalents at beginning of year		**304,958**		296,680		169,056
Cash and cash equivalents and restricted cash and cash equivalents at end of year	**$**	**332,913**	$	304,958	$	296,680

See accompanying notes to consolidated financial statements.

Notes to Consolidated Financial Statements

NOTE 1 Nature of Business

MGIC Investment Corporation is a holding company which, through Mortgage Guaranty Insurance Corporation ("MGIC"), is principally engaged in the mortgage insurance business. We provide mortgage insurance to lenders throughout the United States and to government sponsored entities to protect against loss from defaults on low down payment residential mortgage loans. Primary mortgage insurance provides mortgage default protection on individual loans and covers a percentage of the unpaid loan principal, delinquent interest and certain expenses associated with the default and subsequent foreclosure or sale approved by us, of the underlying property. MGIC Assurance Corporation ("MAC") and MGIC Indemnity Corporation ("MIC"), insurance subsidiaries of MGIC, provide insurance for certain mortgages under Fannie Mae and Freddie Mac (the "GSEs") credit risk transfer programs.

Through certain non-insurance subsidiaries, we also provide certain services for the mortgage finance industry, such as contract underwriting.

At December 31, 2022, our direct primary insurance in force ("IIF") was $295.3 billion, which represents the principal balance in our records of all mortgage loans that we insure, and our direct primary risk in force ("RIF") was $76.5 billion, which represents the IIF multiplied by the insurance coverage percentage.

The substantial majority of our NIW is for loans purchased by the GSEs. The current private mortgage insurer eligibility requirements ("PMIERs") of the GSEs include financial requirements, as well as business, quality control and certain transactional approval requirements. The financial requirements of the PMIERs require a mortgage insurer’s "Available Assets" (generally only the most liquid assets of an insurer) to equal or exceed its "Minimum Required Assets" (which are based on an insurer's book of risk in force, calculated from tables of factors with several risk dimensions). Based on our application of the PMIERs, as of December 31, 2022, MGIC’s Available Assets are in excess of its Minimum Required Assets; and MGIC is in compliance with the PMIERs and eligible to insure loans purchased by the GSEs.

The COVID-19 pandemic materially impacted our 2020 financial results as we reserved for losses associated with the increased delinquency inventory. Through December 31, 2022 the vast majority of those delinquency notices have cured resulting in favorable loss reserve development. We have addressed the impacts of COVID-19 throughout this document.

NOTE 2 Basis of Presentation

BASIS OF PRESENTATION

The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP"), as codified in the Accounting Standards Codification ("ASC"). Our consolidated financial statements include the accounts of MGIC Investment Corporation and its majority-owned subsidiaries. Intercompany transactions and balances have been eliminated. In accordance with GAAP, we are required to make estimates and assumptions that affect the reported amounts of assets and liabilities and 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 periods. Actual results could differ from those estimates.

SUBSEQUENT EVENTS

We have considered subsequent events through the date of this filing.

NOTE 3 Significant Accounting Policies

CASH AND CASH EQUIVALENTS

We consider money market funds and investments with original maturities of three months or less to be cash equivalents.

RESTRICTED CASH AND CASH EQUIVALENTS

Restricted cash and cash equivalents consists of cash and money market funds held in trusts for the benefit of contractual counterparties under reinsurance agreements or for other contractual restrictions.

FAIR VALUE MEASUREMENTS

We carry certain financial instruments at fair value and disclose the fair value of all financial instruments. Our financial instruments carried at fair value are predominantly measured on a recurring basis. Financial instruments measured on a nonrecurring basis are subject to fair value adjustments only in certain circumstances (for example, when there is evidence of impairment).

The fair value of an asset or liability is defined as the price that would be received upon a sale of an asset, or paid to transfer a liability, in an orderly transaction between market participants at the measurement date. Fair value is based on quoted market prices or inputs, where available. If prices or quotes are not available, fair value is based on valuation models or other valuation techniques that consider relevant transaction characteristics (such as maturity) and use as inputs observable or unobservable market parameters including yield curves, interest rates, volatilities, equity or debt prices, and credit curves. Valuation adjustments may be made to ensure that financial instruments are recorded at fair value, as described below.

For the years ended December 31, 2022, 2021, and 2020, we did not elect to measure any financial instruments acquired, or issued, such as our outstanding debt obligations, at fair value for which the primary basis of accounting is not fair value.

Valuation process

We use independent pricing sources to determine the fair value of a substantial majority of our financial instruments, which primarily consist of assets in our investment portfolio, but also includes cash and cash equivalents and restricted cash and cash equivalents. A variety of inputs are used; in approximate order of priority, they are: benchmark yields, reported trades, broker/dealer quotes, issuer spreads, two-sided markets, benchmark securities, bids, offers, and reference data including market research publications. Market indicators, industry, and economic events are also considered. The inputs listed above are evaluated using a multidimensional pricing model. This model combines all inputs to arrive at a value assigned to each security. Quality controls are performed by the independent pricing sources throughout this process, which include reviewing tolerance reports, trading information, data changes, and directional moves compared to market moves.

On a quarterly basis, we perform quality controls over values received from the pricing sources which also include reviewing tolerance reports, data changes, and directional moves compared to market moves. We have not made any adjustments to the prices obtained from the independent pricing sources.

Valuation hierarchy

A three-level valuation hierarchy has been established under GAAP for disclosure of fair value measurements. The valuation hierarchy is based on the transparency of inputs to the valuation of a financial instrument as of the measurement date. To determine the fair value of securities available-for-sale in Level 1 and Level 2 of the fair value hierarchy, independent pricing sources, as described below, have been utilized. One price is provided per security based on observable market data. To ensure securities are appropriately classified in the fair value hierarchy, we review the pricing techniques and methodologies of the independent pricing sources and believe that their policies adequately consider market activity, either based on specific transactions for the issue valued or based on modeling of securities with similar credit quality, duration, yield and structure that were recently traded.

The three levels are defined as follows:

Level 1	Quoted prices for identical instruments in active markets that we can access. Financial assets using Level 1 inputs primarily include U.S. Treasury securities, money market funds, treasury bills, and certain equity securities.
Level 2	Quoted prices for similar instruments in active markets that we can access; quoted prices for identical or similar instruments in markets that are not active; and inputs, other than quoted prices, that are observable in the marketplace for the instrument. The observable inputs are used in valuation models to calculate the fair value of the instruments. Financial assets using Level 2 inputs primarily include obligations of U.S. government corporations and agencies, corporate bonds, mortgage-backed securities, asset-backed securities, most municipal bonds, and commercial paper. The independent pricing sources used for our Level 2 investments vary by type of investment. See Note 6 - "Fair Value Measurements" for further information.
Level 3	Valuations derived from valuation techniques in which one or more significant inputs or value drivers are unobservable or, from par values due to restrictions on certain securities that require them to be redeemed or sold only to the security issuer at par value. The inputs used to derive the fair value of Level 3 securities reflect our own assumptions about the assumptions a market participant would use in pricing an asset or liability. Our non-financial assets that are classified as Level 3 securities consist of real estate acquired through claim settlement and embedded derivatives related to our Home Re Transactions. The fair value of real estate acquired is the lower of our acquisition cost or a percentage of the appraised value. The percentage applied to the appraised value is based upon our historical sales experience adjusted for current trends. The fair value of our embedded derivatives reflects the present value impact of the variation in investment income on the assets held by the reinsurance trusts and the contractual reference rate on Home Re Transactions used to calculate the reinsurance premiums we estimate we will pay over the estimated remaining life.

INVESTMENTS

Fixed income securities. Our fixed income securities are classified as available-for-sale and are reported at fair value. The related unrealized investment gains or losses are, after considering the related tax expense or benefit, recognized as a component of accumulated other comprehensive income (loss) in shareholders' equity. Realized investment gains and losses on fixed income securities are reported in income based upon specific identification of securities. Any changes in the credit allowance are also be reported in income within "Net gains (losses) on investments and other financial instruments" on the consolidated statement of operations.

Equity securities. Equity securities are reported at fair value, except for certain securities that are carried at cost. Equity securities carried at cost are reported as Other invested assets. Realized investment gains and losses on equity securities are reported in income based upon specific identification of securities sold. Any change in fair value of equity securities are also be reported in income within "Net gains (losses) on investments and other financial instruments" on the consolidated statement of operations. .

Other invested assets. Other invested assets are carried at cost. These assets represent our investment in Federal Home Loan Bank of Chicago ("FHLB") stock, which due to restrictions, is required to be redeemed or sold only to the security issuer at par value.

Accrued Investment Income. We report accrued investment income separately from securities. Accrued investment income is written off through net realized investment gains (losses) if, and at the time, the issuer of the security defaults or is expected to default on payments.

Unrealized losses and allowance for credit losses

Each quarter we determine whether securities in an unrealized loss position are impaired by considering several factors including, but not limited to:

- our intent to sell the security or whether it is more likely than not that we will be required to sell the security before recovery of its amortized cost basis;
- the present value of the discounted cash flows we expect to collect compared to the amortized cost basis of the security;
- failure of the issuer to make scheduled interest or principal payments;
- a change in rating to below investment grade; and
- adverse conditions specifically related to the security, an industry, or a geographic area.

Based on our evaluation, we will record a realized loss on an impaired security if we intend to sell, if it is more likely than not that we will be required to sell it prior to recovery of its amortized cost basis, or if the present value of the discounted cash flows we expect to collect is less than the amortized cost basis of the security.

When a security is considered to be impaired, but when a sale is not intended or is not likely, the loss is separated into the portion that represents the credit loss and the portion that is due to other factors. A credit loss is recorded, subject to reversal, in the consolidated statement of operations within "Net gains (losses) on investments and other financial instruments." The loss due to other factors is recognized in accumulated other comprehensive loss, net of taxes. A credit loss is determined to exist if the present value of the discounted cash flows, using the security's original yield, expected to be collected from the security is less than the cost basis of the security.

HOME OFFICE AND EQUIPMENT

Home office and equipment is carried at cost net of depreciation. For financial reporting purposes, depreciation is determined on a straight-line basis for the home office and equipment over estimated lives ranging from 3 to 45 years. For income tax purposes, we use accelerated depreciation methods.

Home office and equipment is shown net of accumulated depreciation of $57.1 million, $55.4 million and $51.2 million as of December 31, 2022, 2021 and 2020, respectively. Depreciation expense for the years ended December 31, 2022, 2021 and 2020 was $4.9 million, $5.6 million and $6.3 million, respectively.

DEFERRED INSURANCE POLICY ACQUISITION COSTS

Costs directly associated with the successful acquisition of mortgage insurance business, consisting of employee compensation and other policy issuance and underwriting expenses, are initially deferred and reported as deferred insurance policy acquisition costs ("DAC"). The deferred costs are net of any ceding commissions received associated with our reinsurance agreements. For each underwriting year of business, these costs are amortized to income in proportion to estimated gross profits over the estimated life of the policies. We utilize anticipated investment income in our calculation. This includes accruing interest on the unamortized balance of DAC. The estimates for each underwriting year are reviewed quarterly and updated when necessary to reflect actual experience and any changes to key variables such as persistency or loss development.

LOSS RESERVES

Loss reserves include case reserves, incurred but not reported ("IBNR") reserves, and loss adjustment expense ("LAE") reserves.

Case reserves and LAE reserves are established when notices of delinquency on insured mortgage loans are received. Such loans are referred to as being in our delinquency inventory. For reporting purposes, we consider a loan delinquent when it is two or more payments past due and has not become current or resulted in a claim payment. Even though the accounting standard, ASC 944, regarding accounting and reporting by insurance entities specifically excludes mortgage insurance from its guidance relating to loss reserves, we establish loss reserves using the general principles contained in the insurance standard. However, consistent with industry standards for mortgage insurers, we do not establish case reserves for future claims on insured loans that are not currently delinquent.

Case reserves are established by estimating the number of loans in our delinquency inventory that will result in a claim payment, which is referred to as the claim rate, and further estimating the amount of the claim payment, which is referred to as claim severity. Our case reserve estimates are primarily established based upon historical experience, including rescissions of policies, curtailments of claims, and loan modification activity. Adjustments to reserve estimates are reflected in the financial statements in the years in which the adjustments are made. The liability for reinsurance assumed is based on information provided by the ceding companies.

IBNR reserves are established for delinquencies estimated to have occurred prior to the close of an accounting period, but have not yet been reported to us. Consistent with case reserves for reported delinquencies, IBNR reserves are also established using estimated claim rates and claim severities.

LAE reserves are established for the estimated costs of settling claims, including legal and other expenses, and general expenses of administering the claims settlement process.

Our loss reserve estimates are also affected by any agreements we enter into regarding our claims paying practices, as discussed in Note 17 – "Litigation and Contingencies" to our consolidated financial statements.

Loss reserves are ceded to reinsurers under our reinsurance agreements. (See "Reinsurance" discussion below. Also see Note 8 – "Loss Reserves" and Note 9 – "Reinsurance.")

PREMIUM DEFICIENCY RESERVE

After our loss reserves are established, we perform premium deficiency tests using our best estimate of future premium, losses and LAE paid. Premium deficiency reserves are established, if necessary, when the present value of expected future losses and LAE paid exceeds the present value of expected future premium and already established loss reserves.

REVENUE RECOGNITION

We write policies which are guaranteed renewable at the insured's option on a monthly, single, or annual premium basis. We have no ability to re-underwrite or reprice these policies. Premiums written on monthly premium policies are earned as coverage is provided. Premiums written on single premium policies and annual premium policies are initially deferred as unearned premium reserve. Premiums written on annual premium policies are earned on a monthly pro rata basis. Premiums written on policies covering more than one year are amortized over the estimated policy life based on historical experience, which includes the anticipated incurred loss pattern. When a policy is cancelled for a reason other than rescission or claim payment, all premium that is non-refundable is immediately earned. Any refundable premium is returned to the servicer or borrower. When a policy is cancelled due to rescission, all previously collected premium is returned, When a policy is cancelled because a claim is paid, premium collected since the date of delinquency is returned.

The liability associated with our estimate of premium to be returned is accrued for separately and included in "Other liabilities" on our consolidated balance sheets. Changes in this liability, and the actual return of premiums for all periods, affects premiums written and earned.

We assess whether a credit loss allowance is required for our premium receivable. We consider collectability trends and industry development, among other things. Any estimated credit loss would be immediately recognized.

Fee income of our non-insurance subsidiaries is earned and recognized as the services are provided and the customer is obligated to pay. Fee income consists primarily of contract underwriting and related fee-based services provided to lenders and is included in “Other revenue” on the consolidated statements of operations.

INCOME TAXES

Deferred income taxes are provided under the liability method, which recognizes the future tax effects of temporary differences between amounts reported in the consolidated financial statements and the tax bases of these items. The estimated tax effects are computed at the enacted federal statutory income tax rate. Changes in tax laws, rates, regulations, and policies or the final determination of tax audits or examinations, could materially affect our estimates and can be significant to our operating results. We evaluate the realizability of the deferred tax assets based on the weight of all available positive and negative evidence. Deferred tax assets are reduced by a valuation allowance if it is more likely than not that all or some portion of the deferred tax assets will not be realized.

The recognition of a tax position is determined using a two-step approach. The first step applies a more-likely-than-not threshold for recognition and derecognition. The second step measures the tax position as the greatest amount of benefit that is cumulatively greater than 50% likely to be realized. When evaluating a tax position for recognition and measurement, we presume that the tax position will be examined by the relevant taxing authority that has full knowledge of all relevant information. We recognize interest accrued and penalties related to unrecognized tax benefits in our provision for income taxes.

Federal tax law permits mortgage guaranty insurance companies to deduct from taxable income, subject to certain limitations, the amounts added to contingency loss reserves that are recorded for regulatory purposes. The amounts we deduct must generally be included in taxable income in the tenth subsequent year. The deduction is allowed only to the extent that we purchase and hold U.S. government non-interest-bearing tax and loss bonds in an amount equal to the tax benefit attributable to the deduction. We account for these purchases as a payment of current federal income tax. (See "Note 12 - Income Taxes.")

BENEFIT PLANS

We have a non-contributory defined benefit pension plan covering substantially all employees, as well as a supplemental executive retirement plan. Effective January 1, 2023, these plans are frozen (no future benefits will be accrued for participants due to employment and no new participants will be added). Retirement benefits were based on compensation and years of service, utilizing a cash balance formula. Under the cash balance formula, participants’ accounts were credited each year with an employer contribution. Participants will continue to earn interest credits on their retirement benefits. We recognize these retirement benefit costs over the period during which employees render the service that qualifies them for benefits. Our policy is to fund pension cost as required under the Employee Retirement Income Security Act of 1974.

We offer both medical and dental benefits for retired domestic employees, their eligible spouses and dependents. Eligibility for coverage is based on meeting certain years of service and retirement age qualifications. We accrue the estimated costs of retiree medical and dental benefits over the period during which employees render the service that qualifies them for benefits. (See Note 11 – “Benefit Plans.”)

REINSURANCE

We cede insurance risk through the use of quota share reinsurance transactions and excess of loss reinsurance transactions. We have excess of loss transactions executed through the traditional reinsurance market and with Home Re, special purpose insurers. Premiums and losses incurred are ceded pursuant to the terms of our quota share reinsurance transactions. Reinsurance premiums ceded under our traditional reinsurance transaction are based off the remaining reinsured coverage levels. Reinsurance premiums ceded under our Home Re transactions are composed of coverage, initial expense and supplemental premiums. The coverage premiums are generally calculated as the difference between the amount of interest payable by the Home Re Entity on the remaining reinsurance coverage levels, and the investment income collected on the collateral assets held in the reinsurance trust account and used to collateralize the Home Re Entity's reinsurance obligation to MGIC.

Loss reserves are reported before taking credit for amounts ceded under reinsurance transactions. Ceded loss reserves are reflected as "Reinsurance recoverable on loss reserves." Amounts due from reinsurers on paid claims are reflected as “Reinsurance recoverable on paid losses.” Ceded premiums payable, net of ceding commission and profit commission are included in “Other liabilities.” Profit commissions are included with “Premiums written – Ceded” and ceding commissions are included with “Other underwriting and operating expenses, net.” We remain liable for all insurance ceded. (See Note 9 – “Reinsurance.”)

We assess whether a credit loss allowance is required for our reinsurance recoverables. In assessing whether a credit allowance should be established, we consider several factors including, but not limited to, the credit ratings of individual reinsurers, investor reports for our excess of loss transactions, collateral held in trust accounts in which MGIC is the sole beneficiary, and aging of outstanding reinsurance recoverable balances.

Assumed reinsurance is based on information received from the ceding company.

See Note 9 – “Reinsurance" for discussion of our variable interest entity ("VIE") policy on the Home Re Transactions.

SHARE-BASED COMPENSATION

We have certain share-based compensation plans. Under the fair value method, compensation cost is measured at the grant date based on the fair value of the award and is recognized over the service period which generally corresponds to the vesting period. Awards under our plans generally vest over periods ranging from one to three years, although awards to our non-employee directors vest immediately. (See Note 15 – “Share-based Compensation Plans.”)

EARNINGS PER SHARE

Basic earnings per share ("EPS") is calculated by dividing net income by the weighted average number of shares of common stock outstanding. The computation of basic EPS includes as "participating securities" an immaterial number of unvested share-based compensation awards that contain non-forfeitable rights to dividends or dividend equivalents, whether paid or unpaid, under the "two-class" method. Our participating securities are composed of vested restricted stock and restricted stock units ("RSUs") with non-forfeitable rights to dividends. Diluted EPS includes the components of basic EPS and also gives effect to dilutive common stock equivalents. We calculate diluted EPS using the treasury stock method and if-converted method. Under the treasury stock method, diluted EPS reflects the potential dilution that could occur if our unvested restricted stock units result in the issuance of common stock. Under the if-converted method, diluted EPS reflects the potential dilution that could occur if our 9% Debentures are converted to common stock. The determination of potentially issuable shares does not consider the satisfaction of the conversion requirements and the shares are included in the determination of diluted EPS as of the beginning of the period, if dilutive. For purposes of calculating basic and diluted EPS, vested RSUs are considered outstanding.

RELATED PARTY TRANSACTIONS

In 2022, there were no material related party transactions. In 2021 MGIC distributed to the holding company, as a dividend, its investment in MGIC Credit Assurance Corporation. In 2020 MGIC Reinsurance Corporation of Wisconsin, a subsidiary of MGIC, merged with MGIC.

Prospective Accounting Standards

Table 3.1 shows the relevant new amendments to accounting standards, which are not yet effective or adopted.

Standard / Interpretation

Table 3.1

Amended Standards		**Effective date**
ASC 944	Long-Duration Contracts	
	• *ASU 2018-12 - Financial Services - Insurance (Topic 944): Targeted Improvements to the Accounting for Long-Duration Contracts*	January 1, 2023
ASC 848	Reference Rate Reform	
	• *ASU 2020-06 - Reference Rate Report (Topic 848): Deferral of the Sunset Date of Topic 848.*	January 1, 2023
Inflation Reduction Act		
	• *Inflation Reduction Act of 2022*	January 1, 2023

Targeted Improvements for Long Duration Contracts: ASU 2018-12

In August 2018, the FASB issued guidance which simplifies the amortization of deferred insurance policy acquisition costs. It also provides updates to the recognition, measurement, presentation and disclosure requirements for long duration contracts, which generally do not apply to mortgage insurance. The updated guidance requires deferred acquisition costs to be amortized on a constant level basis over the expected term of the related contracts, versus in proportion to premium, gross profits, or gross margins. In November 2020, FASB issued ASU 2020-11 deferring the effective date, so that it applies for annual periods beginning after December 15, 2022, including interim periods within those annual periods. We have evaluated the impact of the adoption of this guidance will have on our consolidated financial statements, and determined it will not have a material impact.

Reference Rate Reform: ASU 2022-06

In March 2020, the FASB issued ASU 2020-04 to provide temporary optional guidance to ease the potential burden in accounting for (or recognizing the effects of) reference rate reform. It provided optional expedients and exceptions for applying generally accepted accounting principles to contracts, hedging relationships and other transactions affected by reference rate reform if certain criteria are met. In December 2022, the FASB issued ASU 2022-06, extending the election and application from March 12, 2020 through December 31, 2024 (originally December 31, 2022). The adoption of, and future elections under, this standard are not expected to have a material impact on our consolidated financial statements as the standard will ease, if warranted, the requirements for accounting for the future effects of reference rate reform. We continue to monitor the impact the discontinuance of LIBOR or other reference rates will have on our contracts and other transactions.

Inflation Reduction Act

The Inflation Reduction Act of 2022 includes provisions for a 1% excise tax on net stock repurchases and a 15% corporate minimum tax. Both of these taxes are effective in 2023. We do not expect these tax provisions to have a material impact on our consolidated financial statements.

NOTE 4 Earnings Per Share

Table 4.1 reconciles basic and diluted EPS amounts:

Earnings per share

Table 4.1

(In thousands, except per share data)	Years Ended December 31, 2022	2021	2020
Basic earnings per share:			
Net income	**$ 865,349**	$ 634,983	$ 446,093
Weighted average common shares outstanding - basic	**305,847**	334,330	339,953
Basic earnings per share	**$ 2.83**	$ 1.90	$ 1.31
Diluted earnings per share:			
Net income	**$ 865,349**	$ 634,983	$ 446,093
Interest expense, net of tax [1]:			
9% Debentures	**3,228**	14,343	17,004
Diluted income available to common shareholders	**$ 868,577**	$ 649,326	$ 463,097
Weighted-average shares - basic	**305,847**	334,330	339,953
Effect of dilutive securities:			
Unvested restricted stock units	**1,917**	1,782	1,589
9% Debentures	**3,465**	15,196	17,751
Weighted average common shares outstanding - diluted	**311,229**	351,308	359,293
Diluted income per share	**$ 2.79**	$ 1.85	$ 1.29

[1] Interest expense has been tax effected at a rate of 21%.

For the years ended December 31, 2022, 2021, and 2020, all of our outstanding 9% Debentures are reflected in diluted earnings per share using the “if-converted” method. Under this method, if dilutive, the common stock related to the outstanding 9% Debentures is assumed issued as of the beginning of the reporting period and the related interest expense, net of tax, is added back to earnings in calculating diluted EPS.

NOTE 5 Investments

FIXED INCOME SECURITIES

Our fixed income securities consisted of the following as of December 31, 2022 and 2021:

Details of fixed income investment securities by category as of December 31, 2022

Table 5.1a

(In thousands)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
U.S. Treasury securities and obligations of U.S. government corporations and agencies	**$ 145,581**	**$ 2**	**$ (9,683)**	**$ 135,900**
Obligations of U.S. states and political subdivisions	**2,400,261**	**4,866**	**(256,073)**	**2,149,054**
Corporate debt securities	**2,416,475**	**1,043**	**(196,377)**	**2,221,141**
ABS	**126,723**	**5**	**(6,041)**	**120,687**
RMBS	**223,743**	**10**	**(25,744)**	**198,009**
CMBS	**257,785**	**22**	**(20,591)**	**237,216**
CLOs	**337,656**	**5**	**(7,829)**	**329,832**
Foreign government debt	**4,486**	**—**	**(699)**	**3,787**
Commercial paper	**14,075**	**—**	**(3)**	**14,072**
Total fixed income securities	**$ 5,926,785**	**$ 5,953**	**$ (523,040)**	**$ 5,409,698**

Details of fixed income investment securities by category as of December 31, 2021

Table 5.1b

(In thousands)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
U.S. Treasury securities and obligations of U.S. government corporations and agencies	$ 133,990	$ 285	$ (868)	$ 133,407
Obligations of U.S. states and political subdivisions	2,408,688	133,361	(7,396)	2,534,653
Corporate debt securities	2,704,586	75,172	(13,776)	2,765,982
ABS	150,888	830	(1,008)	150,710
RMBS	309,991	2,397	(3,278)	309,110
CMBS	315,330	5,736	(1,936)	319,130
CLOs	360,436	609	(106)	360,939
Foreign government debt	13,749	—	(99)	13,650
Total fixed income securities	$ 6,397,658	$ 218,390	$ (28,467)	$ 6,587,581

We had $11.8 million and $13.4 million of investments at fair value on deposit with various states as of December 31, 2022 and 2021, respectively, due to regulatory requirements of those state insurance departments.

In connection with our insurance and reinsurance activities within MAC and MIC, insurance subsidiaries of MGIC, we are required to maintain assets in trusts for the benefit of contractual counterparties, which had investments at fair value of $128.4 million and $189.8 million at December 31, 2022 and 2021, respectively. The decrease is primarily due to a decline in collateral required as the risk in force covered by these insurance and reinsurance activities has decreased.

The amortized cost and fair values of fixed income securities at December 31, 2022, by contractual maturity, are shown in table 5.2 below. Actual maturities will differ from contractual maturities because borrowers may have the right to call or prepay obligations with or without call or prepayment penalties. Because most mortgage and asset-backed securities provide for periodic payments throughout their lives, they are listed in separate categories.

Fixed income securities maturity schedule

Table 5.2

	December 31, 2022	
(In thousands)	**Amortized Cost**	**Fair Value**
Due in one year or less	**$ 452,188**	**$ 445,210**
Due after one year through five years	**1,358,606**	**1,288,152**
Due after five years through ten years	**1,890,875**	**1,713,608**
Due after ten years	**1,279,209**	**1,076,984**
	4,980,878	**4,523,954**
ABS	**126,723**	**120,687**
RMBS	**223,743**	**198,009**
CMBS	**257,785**	**237,216**
CLOs	**337,656**	**329,832**
Total as of December 31, 2022	**$ 5,926,785**	**$ 5,409,698**

EQUITY SECURITIES

The cost and fair value of investments in equity securities as of December 31, 2022 and December 31, 2021 are shown in tables 5.3a and 5.3b below.

Details of equity investment securities as of December 31, 2022

Table 5.3a

(In thousands)	**Cost**	**Gross gains**	**Gross losses**	**Fair Value**
Equity securities	**15,924**	**—**	**(1,784)**	**14,140**

Details of equity investment securities as of December 31, 2021

Table 5.3b

(In thousands)	**Cost**	**Gross gains**	**Gross losses**	**Fair Value**
Equity securities	15,838	264	(34)	16,068

NET GAINS (LOSSES) ON INVESTMENTS AND OTHER FINANCIAL INSTRUMENTS

The net gains (losses) on investments and other financial instruments and the proceeds from the sale of fixed income securities classified as available-for-sale are shown in table 5.4 below.

Details of net gains (losses) on investments and other financial instruments

Table 5.4

(in thousands)	**December 31, 2022**	December 31, 2021	December 31, 2020
Fixed income securities			
Gains on sales	**7,152**	8,980	21,272
Losses on sales	**(15,477)**	(1,942)	(8,809)
Change in credit allowance	**—**	49	(49)
Impairments	**(1,415)**	—	(331)
Equity securities gains (losses)			
Gains (losses) on sales	**(7)**	4	1,344
Market adjustment	**(2,013)**	(463)	552
Change in embedded derivative on Home Re Transactions [1]	**4,269**	(721)	(1,176)
Other			
Gains (losses) on sales	**2**	(33)	(231)
Market adjustment	**26**	(13)	4
Net gains (losses) on investments and other financial instruments	**(7,463)**	5,861	12,576
Proceeds from sales of fixed income securities	**397,553**	471,783	803,401
Proceeds from sales of equity securities	**97**	2,621	25,693

[1] See Note 6 "Fair Value Measurements" for discussion of the embedded derivative on the Home Re Transactions.

OTHER INVESTED ASSETS

Our other invested assets balances includes an investment in Federal Home Loan Bank ("FHLB") stock that is carried at cost, which due to its nature approximates fair value. Ownership of FHLB stock provides access to a secured lending facility. In the first quarter of 2022, we repaid the outstanding principal balance of our Federal Home Loan Bank Advance ("FHLB Advance") and accordingly reduced our investment in FHLB stock. At December 31, 2021, the FHLB Advance amount was secured by $167.2 million of eligible collateral. As a result of the prepayment of the FHLB Advance in 2022, we are no longer required to maintain collateral.

UNREALIZED INVESTMENT LOSSES

Tables 5.5a and 5.5b below summarize, for all available-for-sale investments in an unrealized loss position as of December 31, 2022 and 2021, the aggregate fair value and gross unrealized loss by the length of time those securities have been continuously in an unrealized loss position. The fair value amounts reported in tables 5.5a and 5.5b below are estimated using the process described in Note 6 - "Fair Value Measurements" to these consolidated financial statements.

Unrealized loss aging for securities by type and length of time as of December 31, 2022

Table 5.5a

	Less Than 12 Months		12 Months or Greater		**Total**	
(In thousands)	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	**Fair Value**	**Unrealized Losses**
U.S. Treasury securities and obligations of U.S. government corporations and agencies	$ 67,531	$ (3,583)	$ 76,246	$ (6,100)	**$ 143,777**	**$ (9,683)**
Obligations of U.S. states and political subdivisions	1,344,272	(157,903)	360,956	(98,170)	**1,705,228**	**(256,073)**
Corporate debt securities	1,488,255	(109,976)	758,732	(86,401)	**2,246,987**	**(196,377)**
ABS	53,201	(1,008)	67,073	(5,033)	**120,274**	**(6,041)**
RMBS	77,563	(8,572)	136,179	(17,172)	**213,742**	**(25,744)**
CMBS	166,973	(12,951)	70,792	(7,640)	**237,765**	**(20,591)**
CLOs	213,461	(4,644)	114,459	(3,185)	**327,920**	**(7,829)**
Foreign government debt	—	—	3,787	(699)	**3,787**	**(699)**
Commercial paper	—	—	3,816	(3)	**3,816**	**(3)**
Total	$ 3,411,256	$ (298,637)	$ 1,592,040	$ (224,403)	**$5,003,296**	**$ (523,040)**

Unrealized loss aging for securities by type and length of time as of December 31, 2021

Table 5.5b

	Less Than 12 Months		12 Months or Greater		Total	
(In thousands)	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
U.S. Treasury securities and obligations of U.S. government corporations and agencies	$ 91,154	$ (790)	$ 2,616	$ (78)	$ 93,770	$ (868)
Obligations of U.S. states and political subdivisions	452,021	(7,189)	15,540	(207)	467,561	(7,396)
Corporate debt securities	865,085	(13,260)	10,997	(516)	876,082	(13,776)
ABS	100,064	(998)	1,552	(10)	101,616	(1,008)
RMBS	180,586	(2,548)	31,641	(730)	212,227	(3,278)
CMBS	89,889	(1,887)	1,511	(49)	91,400	(1,936)
CLOs	177,663	(71)	21,973	(35)	199,636	(106)
Foreign government debt	13,649	(99)	—	—	13,649	(99)
Total	$ 1,970,111	$ (26,842)	$ 85,830	$ (1,625)	$ 2,055,941	$ (28,467)

The change in net unrealized gains (losses) of investments is shown in table 5.6 below.

Change in net unrealized gains (losses)

Table 5.6

(In thousands)	**2022**	2021	2020
Fixed income securities	**$ (707,005)**	$ (154,555)	$ 169,135

There were 1,226 and 610 securities in an unrealized loss position as of December 31, 2022 and 2021, respectively. Based on current facts and circumstances, we believe the unrealized losses as of December 31, 2022 presented in table 5.5a above are not indicative of the ultimate collectability of the current amortized cost of the securities. The unrealized losses in all categories of our investments were primarily caused by an increase in prevailing interest rates. We also rely upon estimates of several credit and non-credit factors in our review and evaluation of individual investments to determine whether a credit impairment exists. All of the securities in an unrealized loss position are current with respect to their interest obligations.

The source of net investment income is shown in table 5.7 below.

Net investment income

Table 5.7

(In thousands)	**2022**	2021	2020
Fixed income securities	**$ 166,306**	$ 160,030	$ 157,065
Equity securities	**437**	471	620
Cash equivalents	**5,049**	75	1,648
Other	**51**	22	275
Investment income	**171,843**	160,598	159,608
Investment expenses	**(4,367)**	(4,160)	(5,212)
Net investment income	**$ 167,476**	$ 156,438	$ 154,396

NOTE 6 Fair Value Measurements

Recurring fair value measurements

The following describes the valuation methodologies generally used by the independent pricing sources, or by us, to measure financial instruments at fair value, including the general classification of such financial instruments pursuant to the valuation hierarchy.

- Fixed income securities:

  U.S. Treasury Securities and Obligations of U.S. Government Corporations and Agencies: Securities with valuations derived from quoted prices for identical instruments in active markets that we can access are categorized in Level 1 of the fair value hierarchy. Securities valued by surveying the dealer community, obtaining relevant trade data, benchmark quotes and spreads and incorporating this information in the valuation process are categorized as Level 2 of the fair value hierarchy.

  Corporate Debt are valued by surveying the dealer community, obtaining relevant trade data, benchmark quotes and spreads and incorporating this information into the valuation process. These securities are generally categorized in Level 2 of the fair value hierarchy.

  Obligations of U.S. States & Political Subdivisions are valued by tracking, capturing, and analyzing quotes for active issues and trades reported via the Municipal Securities Rulemaking Board records. Daily briefings and reviews of current economic conditions, trading levels, spread relationships, and the slope of the yield curve provide further data for evaluation. These securities are generally categorized in Level 2 of the fair value hierarchy.

  Residential Mortgage-Backed Securities ("RMBS") are valued by monitoring interest rate movements, and other pertinent data daily. Incoming market data is enriched to derive spread, yield and/or price data as appropriate, enabling known data points to be extrapolated for valuation application across a range of related securities. These securities are generally categorized in Level 2 of the fair value hierarchy.

  Commercial Mortgage-Backed Securities ("CMBS") are valued using techniques that reflect market participants' assumptions and maximize the use of relevant observable inputs including quoted prices for similar assets, benchmark yield curves and market corroborated inputs. Evaluation uses regular reviews of the inputs for securities covered, including executed trades, broker quotes, credit information, collateral attributes and/or cash flow waterfall as applicable. These securities are generally categorized in Level 2 of the fair value hierarchy.

  Asset-Backed Securities ("ABS") are valued using spreads and other information solicited from market buy-and-sell-side sources, including primary and secondary dealers, portfolio managers, and research analysts. Cash flows are generated for each tranche, benchmark yields are determined, and deal collateral performance and tranche level attributes including trade activity, bids, and offers are applied, resulting in tranche specific prices. These securities are generally categorized in Level 2 of the fair value hierarchy.

  Collateralized loan obligations ("CLOs") are valued by evaluating manager rating, seniority in the capital structure, assumptions about prepayment, default and recovery and their impact on cash flow generation. Loan level net asset values are determined and aggregated for tranches and as a final step prices are checked against available recent trade activity. These securities are generally categorized in Level 2 of the fair value hierarchy.

  Foreign government debt is valued by surveying the dealer community, obtaining relevant trade data, benchmark quotes and spreads and incorporating this information into the valuation process. These securities are generally categorized in Level 2 of the fair value hierarchy.

  Commercial Paper, with an original maturity greater than 90 days, is valued using market data for comparable instruments of similar maturity and average yields. These securities are categorized in Level 2 of the fair value hierarchy.

- Equity securities: Consist of actively traded, exchange-listed equity securities, including exchange traded funds ("ETFs") and Bond Mutual Funds, with valuations derived from quoted prices for identical assets in active markets that we can access. These securities are valued in Level 1 of the fair value hierarchy.

- Cash Equivalents: Consists of money market funds and treasury bills with valuations derived from quoted prices for identical assets in active markets that we can access. These securities are valued in level 1 of the fair value hierarchy. Instruments in this category valued using market data for comparable instruments are classified as level 2 in the fair value hierarchy.

Assets measured at fair value, by hierarchy level, as of December 31, 2022 and 2021 are shown in tables 6.1a and 6.1b below. The fair value of the assets is estimated using the process described above, and more fully in Note 3 - "Significant Accounting Policies" to the consolidated financial statements in this Form 10-K.

Assets carried at fair value by hierarchy level as of December 31, 2022

Table 6.1a

(In thousands)	**Fair Value**	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)
U.S. Treasury securities and obligations of U.S. government corporations and agencies	**$ 135,900**	$ 116,897	$ 19,003
Obligations of U.S. states and political subdivisions	**2,149,054**	—	2,149,054
Corporate debt securities	**2,221,141**	—	2,221,141
ABS	**120,687**	—	120,687
RMBS	**198,009**	—	198,009
CMBS	**237,216**	—	237,216
CLOs	**329,832**	—	329,832
Foreign government debt	**3,787**	—	3,787
Commercial paper	**14,072**	—	14,072
Total fixed income securities	**5,409,698**	116,897	5,292,801
Equity securities	**14,140**	14,140	—
Cash equivalents	**328,756** (1)	324,129	4,627
Total	**$ 5,752,594**	$ 455,166	$ 5,297,428

Assets carried at fair value by hierarchy level as of December 31, 2021

Table 6.1b

(In thousands)	Fair Value	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)
U.S. Treasury securities and obligations of U.S. government corporations and agencies	$ 133,407	$ 102,153	$ 31,254
Obligations of U.S. states and political subdivisions	2,534,653	—	2,534,653
Corporate debt securities	2,765,982	—	2,765,982
ABS	150,710	—	150,710
RMBS	309,110	—	309,110
CMBS	319,130	—	319,130
CLOs	360,939	—	360,939
Foreign government debt	13,650	—	13,650
Total fixed income securities	6,587,581	102,153	6,485,428
Equity securities	16,068	16,068	—
Cash equivalents	254,230 (1)	254,230	—
Total	$ 6,857,879	$ 372,451	$ 6,485,428

(1) Includes restricted cash equivalents

Certain financial instruments, including insurance contracts, are excluded from these fair value disclosure requirements. The carrying values of cash and cash equivalents (Level 1) and accrued investment income (Level 2) approximated their fair values. Additional fair value disclosures related to our investment portfolio are included in Note 5 - "Investments."

In addition to the assets carried at fair value discussed above, we have embedded derivatives carried at fair value related to our Home Re Transactions that are classified as Other liabilities or Other assets in our consolidated balance sheets. The estimated fair value related to our embedded derivatives reflects the present value impact of the variation in investment income on the assets held by the reinsurance trusts and the contractual reference rate on the Home Re Transactions used to calculate the reinsurance premiums we estimate we will pay over the estimated remaining life. These liabilities or assets are categorized in Level 3 of the fair value hierarchy. At December 31, 2022 and 2021, the fair value of the embedded derivatives was an asset of $2.5 million and a liability of $1.8 million, respectively. (See Note 4 - "Reinsurance" for more information about our reinsurance programs.)

Real estate acquired through claim settlement is carried at fair values and is reported in “Other assets” on the consolidated balance sheet. These assets are categorized as Level 3 of the fair value hierarchy. Purchases of real estate acquired was $3.5 million and $4.8 million for the years ended December 31, 2022, and 2021, respectively. Sales of real estate acquired was $4.0 million and $4.8 million for the years ended December 31, 2022, and 2021, respectively.

FINANCIAL LIABILITIES NOT MEASURED AT FAIR VALUE

Other invested assets include an investment in FHLB stock that is carried at cost, which due to restrictions that require it to be redeemed or sold only to the security issuer at par value, approximates fair value. The fair value of other invested assets is categorized as Level 2.

Financial liabilities include our outstanding debt obligations. The fair values of our 5.25% Notes and 9% Debentures were based on observable market prices. In all cases the fair values of the financial liabilities below are categorized as level 2.

Table 6.3 presents the carrying value and fair value of our financial assets and liabilities disclosed, but not carried, at fair value as of December 31, 2022 and 2021.

Financial liabilities not carried at fair value

Table 6.3

	December 31, 2022		December 31, 2021	
(In thousands)	**Carrying Value**	**Fair Value**	Carrying Value	Fair Value
Financial assets				
Other invested assets	**$ 850**	**$ 850**	$ 3,100	$ 3,100
Financial liabilities				
FHLB Advance	**$ —**	**$ —**	$ 155,000	$ 157,585
5.75% Notes	**—**	**—**	241,255	256,213
5.25% Notes	**641,724**	**600,938**	640,253	686,875
9% Debentures	**21,086**	**28,085**	110,204	151,000
Total financial liabilities	**$ 662,810**	**$ 629,023**	**$ 1,146,712**	**$ 1,251,673**

NOTE 7 Debt

DEBT OBLIGATIONS

Table 7.1 shows the carrying value of our long-term debt obligations as of December 31, 2022 and 2021.

Long-term debt obligations

Table 7.1

	December 31,	
(In millions)	**2022**	2021
FHLB Advance - 1.91%, due February 2023	**$ —**	$ 155.0
5.75% Notes, due August 2023	**—**	241.3
5.25% Notes, due August 2028 (par value: $650 million)	**641.7**	640.2
9% Debentures, due April 2063	**21.1**	110.2
Long-term debt, carrying value	**$ 662.8**	$ 1,146.7

The 5.25% Senior Notes ("5.25% Notes") and 9% Convertible Junior Subordinated Debentures (“9% Debentures”) are obligations of our holding company, MGIC Investment Corporation.

2022 Transactions

During 2022, we repurchased $89.1 million in aggregate principal of our 9% Debentures at a purchase price of $121.2 million plus accrued interest. The repurchase of our 9% Debentures resulted in a $32.1 million loss on debt extinguishment on our consolidated statement of operations and a reduction of 6.8 million potentially dilutive shares.

The Federal Home Loan Bank Advance (the “FHLB Advance”) was an obligation of MGIC. In the first quarter of 2022, we repaid the outstanding principal balance of the FHLB Advance at a prepayment price of $156.3 million, incurring a prepayment fee of $1.3 million.

In July 2022, we redeemed the outstanding principal balance of the 5.75% Senior Notes (“5.75% Notes”) through a make-whole price of $248.4 million plus accrued interest. The excess of the make-whole price over the carrying value, plus the write-off of unamortized issuance costs on the par value, resulted in a $6.8 million loss on debt extinguishment. The make-whole amount was calculated as the sum of the present values of the remaining scheduled payments of principal and interest discounted at the treasury rate defined in the notes plus 50 basis points and accrued interest. The 5.75% Notes were an obligation of our holding company.

2021 Transactions

In December 2021, we repurchased $98.6 million in aggregate principal amount of our 9% Debentures at a purchase price of $135.5 million, plus accrued interest. The repurchase of 9% Debentures resulted in a $36.9 million loss on debt extinguishment on our consolidated statement of operations and a reduction in our potentially dilutive shares by approximately 7.5 million shares.

2020 Transactions

In August 2020, we issued $650 million aggregate principal amount of 5.25% Notes, which are due in 2028 and received net proceeds, after the deduction of underwriting fees, of $640.3 million. In addition to underwriting fees, we incurred approximately $2.0 million of other expenses associated with the issuance of these notes.

We repurchased $182.7 million in aggregate principal amount of our 5.75% notes at a purchase price of $197.8 million, plus accrued interest, using proceeds from the 5.25% Notes issuance. The excess of the purchase price over the carrying value, plus the write-off of unamortized issuance costs on the par value, is reflected as a loss on debt extinguishment of $16.5 million on our consolidated statement of operations.

We repurchased $48.1 million in aggregate principal amount of our 9% Debentures at a purchase price of $61.6 million, plus accrued interest, using proceeds from the 5.25% Notes issuance. The repurchase of 9% Debentures resulted in a $10.2 million loss on debt extinguishment on our consolidated statement of operations; a reduction in our shareholders' equity of $2.7 million related to the reacquisition of the equity component of the 9% Debentures; and a reduction in our potentially dilutive shares by approximately 3.6 million shares.

5.25% Notes

Interest on the 5.25% Notes is payable semi-annually on February 15 and August 15. Prior to August 15, 2023, we may redeem the 5.25% Notes at an amount equal to the sum of (a) the greater of: (i) the sum of the principal amount and the make-whole amount; and (ii) 102.625% of principal; and (b) accrued and unpaid interest. The make-whole amount is the excess of: (1) the present value of the remaining principal, premium and interest payments that would be payable with respect to the note if such note were redeemed on August 15, 2023 (at 102.625% of principal), computed using a discount rate equal to the treasury rate specified in the notes, plus 50 basis points, over (2) the outstanding principal amount of such note.

On and after August 15, 2023, we may redeem the notes at 102.625% of principal; on or after August 15, 2024, we may redeem the notes at 101.313% of principal; and on or after August 15, 2025, we may redeem the notes at 100% of principal; in each case, plus accrued and unpaid interest.

The 5.25% Notes have covenants and events of default customary for securities of this nature, and further provide that the trustee or holders of at least 25% in aggregate principal amount of the outstanding 5.25% Notes may declare them immediately due and payable upon the occurrence of certain events of default after the expiration of the applicable grace period. In addition, in the case of an event of default arising from certain events of bankruptcy, insolvency or reorganization relating to the Company or any of its significant subsidiaries, the 5.25% Notes will become due and payable immediately. This description is not intended to be complete in all respects and is qualified in its entirety by the terms of the 5.25% Notes, including their covenants and events of default. We were in compliance with all covenants as of December 31, 2022.

9% Debentures

Interest on the 9% Debentures is payable semi-annually on April 1 and October 1 each year. The 9% Debentures are currently convertible, at the holder's option, at a conversion rate, which is subject to adjustment, of 77.9620 common shares per $1,000 principal amount of the 9% Debentures at any time prior to the maturity date. This represents a conversion price of approximately $12.83 per share. If a holder elects to convert their 9% Debentures, deferred interest, if any, owed on the 9% Debentures being converted is also converted into shares of our common stock. The conversion rate for any deferred interest is based on the average price that our shares traded at during a 5-day period immediately prior to the election to convert.

The 9% Debentures include a feature that allows us, at our option, to make a cash payment to converting holders in lieu of issuing shares of common stock upon conversion of the 9% Debentures. We may redeem the 9% Debentures in whole or in part from time to time, at our option, at a redemption price equal to 100% of the principal amount of the 9% Debentures being redeemed, plus any accrued and unpaid interest, if the closing sale price of our common stock exceeds $16.67 (adjusted pro rata for changes in the conversion price) for at least 20 of the 30 trading days preceding notice of the redemption.

This description is not intended to be complete in all respects and is qualified in its entirety by the terms of the 9% Debentures, including their covenants and events of default. We were in compliance with all covenants at December 31, 2022. The 9% Debentures rank junior to all of our existing and future senior indebtedness.

INTEREST PAYMENTS

Interest payments were $53.7 million during 2022, $71.7 million during 2021 and $54.3 million during 2020.

NOTE 8 Loss Reserves

As described in Note 3 – "Summary of Significant Accounting Policies – Loss Reserves," we establish case reserves and loss adjustment expenses ("LAE") reserves on delinquent loans that were reported to us as two or more payments past due and have not become current or resulted in a claim payment. Such loans are referred to as being in our delinquency inventory. Case reserves are established by estimating the number of loans in our delinquency inventory that will result in a claim payment, which is referred to as the claim rate, and further estimating the amount of the claim payment, which is referred to as claim severity.

IBNR reserves are established for estimated losses from delinquencies we estimate have occurred prior to the close of an accounting period, but have not yet been reported to us. IBNR reserves are also established using estimated claim rates and claim severities.

Estimation of losses is inherently judgmental. The conditions that affect the claim rate and claim severity include the current and future state of the domestic economy, including unemployment and the current and future strength of local housing markets; exposure on insured loans; the amount of time between delinquency and claim filing (all else being equal, the longer the period between delinquency and claim filing, the greater the severity); and curtailments and rescissions. The actual amount of the claim payments may be substantially different than our loss reserve estimates. Our estimates could be adversely affected by several factors, including a deterioration of regional or national economic conditions, including unemployment, leading to a reduction in borrowers' income and thus their ability to make mortgage payments, the impact of past and future government initiatives and actions taken by the GSEs (including mortgage forbearance programs and foreclosure moratoriums), and a drop in housing values which may affect borrower willingness to continue to make mortgage payments when the value of the home is below the mortgage balance. Loss reserves in future periods will also be dependent on the number of loans reported to us as delinquent.

Changes to our estimates could result in a material impact to our consolidated results of operations and financial position, even in a stable economic environment. Given the uncertainty of the macroeconomic environment, including the effectiveness of loss mitigation efforts, change in home prices, and changes in unemployment, our loss reserve estimates may continue to be impacted.

In considering the potential sensitivity of the factors underlying our estimate of loss reserves, it is possible that even a relatively small change in our estimated claim rate or claim severity could have a material impact on loss reserves and, correspondingly, on our consolidated results of operations even in a stable economic environment. For example, as of December 31, 2022, assuming all other factors remain constant, a $1,000 increase/decrease in the average severity reserve factor would change the loss reserve amount by approximately +/- $10 million. A one percentage point increase/decrease in the average claim rate reserve factor would change the loss reserve amount by approximately +/- $15 million.

The "Losses incurred" section of table 8.1 below shows losses incurred on delinquencies that occurred in the current year and in prior years. The amount of losses incurred relating to delinquencies that occurred in the current year represents the estimated amount to be ultimately paid on such delinquencies. The amount of losses incurred relating to delinquencies that occurred in prior years represents the difference between the actual claim rate and claim severity associated with those delinquencies resolved in the current year compared to the estimated claim rate and claim severity at the prior year-end, as well as a re-estimation of amounts to be ultimately paid on delinquencies continuing from the end of the prior year. This re-estimation of the claim rate and claim severity is the result of our review of current trends in the delinquency inventory, such as percentages of delinquencies that have resulted in a claim, the amount of the claims relative to the average loan exposure, changes in the relative level of delinquencies by geography and changes in average loan exposure.

Losses incurred on delinquencies that occurred in the current year increased in 2022, compared to 2021. The increase is primarily due to an increase in estimated severity on current year delinquencies. In addition, there was a decrease in IBNR reserve estimates by $5.9 million in 2021, while IBNR estimates increased by $2.3 million in 2022.

In 2022, we experienced favorable loss development of $404.1 million on previously received delinquencies primarily related to a decrease in the estimated claim rate. The favorable development primarily resulted from greater than expected cure rates, as borrower reinstatements and servicer mitigation efforts resulted in more cures than originally estimated. Additionally, home price appreciation experienced in recent years has allowed borrowers to cure their delinquencies through the sale of their property. For the year ended December 31, 2021 we experienced favorable loss development of $60.0 million on previously received notices primarily due to the decrease in the claim rate on delinquencies received prior to the COVID-19 pandemic. This was offset by the recognition of a probable loss of $6.3 million related to litigation of our claims paying practices and adverse development on LAE reserves and reinsurance.

The "Losses paid" section of table 8.1 below shows the amount of losses paid on delinquencies that occurred in the current year and losses paid on delinquencies that occurred in prior years. At the start of the COVID-19 pandemic, the level of claims received decreased and the average time it took to receive a claim increased. Claim activity has not yet returned to pre-COVID-19 levels.

Table 8.1 provides a reconciliation of beginning and ending loss reserves as of and for the past three years:

Development of loss reserves

Table 8.1

(In thousands)	**2022**	2021	2020
Reserve at beginning of year	**$ 883,522**	$ 880,537	$ 555,334
Less reinsurance recoverable	**66,905**	95,042	21,641
Net reserve at beginning of year	**816,617**	785,495	533,693
Losses incurred:			
Losses and LAE incurred in respect of delinquent notices received in:			
Current year	**149,565**	124,592	345,170
Prior years [1]	**(404,130)**	(60,015)	19,604
Total losses incurred	**(254,565)**	64,577	364,774
Losses paid:			
Losses and LAE paid in respect of delinquent notices received in:			
Current year	**362**	664	3,069
Prior years	**49,626**	68,769	109,923
Reinsurance terminations [2]	**(17,684)**	(35,978)	(20)
Total losses paid	**32,304**	33,455	112,972
Net reserve at end of year	**529,748**	816,617	785,495
Plus reinsurance recoverables	**28,240**	66,905	95,042
Reserve at end of year	**$ 557,988**	$ 883,522	$ 880,537

(1) A positive number for prior year loss development indicates a deficiency of prior year reserves. A negative number for prior year loss development indicates a redundancy of prior year loss reserves. See the following table for more information about prior year loss development.

(2) In a reinsurance termination, amounts for any incurred but unpaid losses are due to us from the reinsurers. As a result, the amount due from the reinsurers is reclassified from reinsurance recoverable on loss reserves to reinsurance recoverable on paid losses, resulting in no impact to losses incurred. (See Note 9 - "Reinsurance")

The prior year development of the reserves in 2022, 2021 and 2020 is reflected in the table 8.2 below.

Reserve development on previously received delinquencies

Table 8.2

(In thousands)	**2022**	2021	2020
(Decrease) in estimated claim rate on primary delinquencies	**$ (400,577)**	$ (82,904)	$ (2,536)
Increase (decrease) in estimated claim severity on primary delinquencies	**(21,995)**	310	13,535
Change in estimates related to pool reserves, LAE reserves, reinsurance and other	**18,442**	22,579	8,605
Total prior year loss development [1]	**$ (404,130)**	$ (60,015)	$ 19,604

(1) A positive number for prior year loss development indicates a deficiency of prior year loss reserves. A negative number for prior year loss development indicates a redundancy of prior year loss reserves.

DELINQUENCY INVENTORY

A roll-forward of our primary delinquency inventory for the years ended December 31, 2022, 2021, and 2020 appears in table 8.3 below. The information concerning new notices and cures is compiled from monthly reports received from loan servicers. The level of new notice and cure activity reported in a particular month can be influenced by, among other things, the date on which a servicer generates its report, the number of business days in a month and transfers of servicing between loan servicers.

Primary delinquency inventory roll-forward

Table 8.3

	2022	2021	2020
Beginning delinquent inventory	**33,290**	57,710	30,028
New Notices	**42,988**	42,432	106,099
Cures	**(48,262)**	(64,896)	(76,107)
Paid claims	**(1,305)**	(1,223)	(2,245)
Rescissions and denials	**(35)**	(38)	(65)
Other items removed from inventory	**(289)**	(695)	—
Ending delinquent inventory	**26,387**	33,290	57,710

During 2022 and 2021, our losses paid included amounts paid upon commutation of coverage on pools of non-performing loans. As a result of these payments 289 items were removed from the delinquency inventory with an amount paid of $4.6 million in 2022. During 2021, 695 items were removed from delinquency inventory with an amount paid of $13.8 million.

Historically as a delinquency ages it is more likely to result in a claim. The number of consecutive months that a borrower has been delinquent is shown in table 8.4 below.

Primary delinquency inventory - consecutive months delinquent

Table 8.4

	December 31,		
	2022	2021	2020
3 months or less	**8,820**	7,586	11,542
4 - 11 months	**8,217**	7,990	34,620
12 months or more [1]	**9,350**	17,714	11,548
Total	**26,387**	33,290	57,710
3 months or less	**33 %**	23 %	20 %
4 - 11 months	**31 %**	24 %	60 %
12 months or more	**36 %**	53 %	20 %
Total	**100 %**	100 %	100 %
Primary claims received inventory included in ending delinquent inventory	**267**	211	159

(1) Approximately 36%, 20%, and 31% of the delinquent inventory that has been delinquent for 12 consecutive months or more has been delinquent for at least 36 consecutive months as of December 31, 2022, 2021 and 2020, respectively.

COVID-19 Pandemic Delinquencies

We experienced an increase in new delinquency notices in the second and third quarters of 2020 because of the impacts of the COVID-19 pandemic, including the high level of unemployment and economic uncertainty resulting from measures to reduce the transmission of COVID-19. Forbearance programs enacted by the GSEs provided for payment forbearance on mortgages to borrowers experiencing a hardship during the COVID-19 pandemic. Historically, forbearance plans have reduced the incidence of our losses on affected loans. Through December 31, 2022 the vast majority of the delinquencies received in the second and third quarter of 2020 have cured.

POOL INSURANCE DEFAULT INVENTORY

Pool insurance default inventory was 391 at December 31, 2022, 498 at December 31, 2021, and 680 at December 31, 2020.

PREMIUM REFUNDS

Our estimate of premiums to be refunded on expected claim payments is accrued for separately in "Other liabilities" on our consolidated balance sheets and approximated $25.5 million and $37.3 million at December 31, 2022 and 2021, respectively. The decrease is driven by a decrease in delinquency inventory as well as a decrease inventory that is twelve or more months delinquent.

NOTE 9 Reinsurance

Our consolidated financial statements reflect the effects of assumed and ceded reinsurance transactions. Assumed reinsurance refers to the acceptance of certain insurance risks that other insurance companies have underwritten. Ceded reinsurance involves transferring certain insurance risks (along with, in the case of quota share reinsurance, the related earned premiums) we have underwritten to other insurance companies who agree to share these risks. The purpose of ceded reinsurance is to protect us, at a cost, against losses arising from our mortgage guaranty policies covered by the agreement and to manage our capital requirements under PMIERs. Reinsurance is currently placed on a quota share and excess of loss basis but we also had immaterial captive reinsurance agreements that were in effect through December 31, 2020.

Table 9.1 below shows the effect of all reinsurance agreements on premiums earned and losses incurred as reflected in the consolidated statements of operations.

Reinsurance

Table 9.1

	Years ended December 31,		
(In thousands)	**2022**	2021	2020
Premiums earned:			
Direct	**$ 1,154,728**	$ 1,167,592	$ 1,199,824
Assumed	**8,778**	9,858	10,848
Ceded - quota share reinsurance (1)	**(86,435)**	(118,537)	(167,930)
Ceded - excess-of-loss reinsurance	**(69,938)**	(44,494)	(20,799)
Total ceded	**(156,373)**	(163,031)	(188,729)
Net premiums earned	**$ 1,007,133**	$ 1,014,419	$ 1,021,943
Losses incurred:			
Direct	**$ (274,072)**	$ 74,496	$ 442,194
Assumed	**(330)**	(57)	555
Ceded - quota share reinsurance	**19,837**	(9,862)	(77,975)
Losses incurred, net	**$ (254,565)**	$ 64,577	$ 364,774
Other Reinsurance Impacts:			
Profit commission on quota share reinsurance (1)	**$ 176,084**	$ 153,759	$ 72,425
Ceding commission on quota share reinsurance	**52,071**	53,460	48,077

(1) Ceded premiums earned are shown net of profit commission.

QUOTA SHARE REINSURANCE

We have entered into quota share reinsurance ("QSR") transactions with panels of third-party reinsurers to cede a fixed quota share percentage of premiums earned and received and losses incurred on insurance covered by the transactions. We receive the benefit of a ceding commission equal to 20% of premiums ceded before profit commission. We also receive the benefit of a profit commission through a reduction of premiums we cede. The profit commission varies inversely with the level of losses on a “dollar for dollar” basis and can be eliminated at annual loss ratios higher than we have experienced on our QSR transactions.

Each of our QSR transactions typically have annual loss ratio caps of 300% and lifetime loss ratios of 200%.

Table 9.2 below provides additional detail regarding our QSR transactions in effect during 2022.

Reinsurance

Table 9.2

Quota Share Contract	Covered Policy Years	Quota Share %	Annual Loss Ratio to Exhaust Profit Commission (1)	Contractual Termination Date
2015 QSR (2)	Prior to 2017	15.0 %	68.0 %	December 31, 2031
2019 QSR (2)	2019	30.0 %	62.0 %	December 31, 2030
2020 QSR	2020	12.5 %	62.0 %	December 31, 2031
2020 QSR and 2021 QSR	2020	17.5 %	62.0 %	December 31, 2032
2020 QSR and 2021 QSR	2021	17.5 %	61.9 %	December 31, 2032
2021 QSR and 2022 QSR	2021	12.5 %	57.5 %	December 31, 2032
2021 QSR and 2022 QSR	2022	15.0 %	57.5 %	December 31, 2033
2022 QSR and 2023 QSR	2022	15.0 %	62.0 %	December 31, 2033
2022 QSR and 2023 QSR	2023	15.0 %	62.0 %	December 31, 2034
Credit Union QSR (3)	2020-2025	65.0 %	50.0 %	December 31, 2039

(1) We will receive a profit commission provided the annual loss ratio on policies covered under the transaction remains below this ratio.

(2) 2015 and 2019 QSR Transactions were terminated effective December 31, 2022.

(3) Eligible credit union business written before April 1, 2020 was covered by our 2019 and prior QSR Transactions.

We have agreed to terms with a group of unaffiliated reinsurers for a reinsurance transaction with an effective date of January 1, 2023 with a similar structure to our existing QSR transactions that will cover most of our NIW in 2023 (with an additional 10.0% quota share). Generally, we will receive an annual profit commission provided the annual loss ratio on the loans covered under the transaction remain below 58.5%.

We can elect to terminate the QSR Transactions under specified scenarios without penalty upon prior written notice, including if we will receive less than 90% (80% for the Credit Union QSR Transaction) of the full credit amount under the PMIERs, full financial statement credit or full credit under applicable regulatory capital requirements for the risk ceded in any required calculation period. Early termination of the QSR agreements can also be elected by us for a fee, or under specified scenarios for no fee upon prior written notice.

Table 9.3 provides additional detail regarding optional termination dates and optional reductions to our quota share percentage which can, in each case be elected by us for a fee. The optional reduction to the quota share percentage would give us an option to reduce our quota share percentage from the original percentage as shown in table 9.2 to the percentage showed in 9.3.

Reinsurance

Table 9.3

Quota Share Contract	Covered Policy Years	Optional Termination Date (1)	Optional Quota Share % Reduction Date (2)	Optional Reduced Quota Share %
2020 QSR	2020	June 30, 2023	January 1, 2023	10.5% or 8%
2020 QSR and 2021 QSR	2020	June 30, 2023	January 1, 2023	14.5% or 12%
2020 QSR and 2021 QSR	2021	December 31, 2023	January 1, 2023	14.5% or 12%
2021 QSR and 2022 QSR	2021	December 31, 2023	January 1, 2023	10.5% or 8%
2021 QSR and 2022 QSR	2022	December 31, 2024	July 1, 2023	12.5% or 10%
2022 QSR and 2023 QSR	2022	December 31, 2024	July 1, 2023	12.5% or 10%
2022 QSR and 2023 QSR	2023	December 31, 2025	July 1, 2024	12.5% or 10%

(1) We can elect early termination of the QSR transaction beginning on this date, and bi-annually thereafter.

(2) We can elect to reduce the quota share percentage beginning on this date, and bi-annually thereafter.

We incurred an early termination fee of $2.2 million for the termination of our 2019 QSR Transaction effective December 31, 2022 and $5.0 million for the termination of our 2017 and 2018 QSR Transactions effective December 31, 2021. We also terminated our 2015 QSR Transaction effective December 31, 2022. The reinsurance recoverable on paid losses due from reinsurers for loss and LAE reserves incurred at the time of termination includes $17.7 million as of December 31, 2022 from reinsurers participating in the 2015 and 2019 QSR Transactions and included $36.0 million as of December 31, 2021 due from reinsurers participating in the 2017 and 2018 QSR Transactions.

Ceded premiums written and earned, net of profit commission, decreased in 2022 due to the increase in profit commission. The increase in profit commission was a result of ceded losses incurred. Ceded losses incurred for the year ended December 31, 2022 primarily reflect favorable loss reserve development. See Note 8 - “Loss Reserves” for discussion of our loss reserves.
Under the terms of our QSR Transactions currently in effect, ceded premiums, ceding commissions, profit commission, and ceded loss paid and LAE paid are settled net on a quarterly basis. The ceded premiums due after deducting the related ceding commission and profit commission is reported within "Other liabilities" on the consolidated balance sheets. The reinsurance recoverable on loss reserves related to our QSR Transactions was $28.2 million as of December 31, 2022 and $66.9 million as of December 31, 2021. The reinsurance recoverable balance is secured by funds on deposit from the reinsurers, the minimum amount of which is based on the greater of 1) a reinsurer's funding requirements under PMIERs or 2) ceded reserves and unpaid losses. Each of the reinsurers under our quota share reinsurance agreements described above has an insurer financial strength rating of A- or better (or a comparable rating) by Standard and Poor's Rating Services, A.M. Best, Moody's, or a combination of the three. An allowance for credit losses was not required for 2022 or 2021.

EXCESS OF LOSS REINSURANCE

We have Excess-of-loss transactions (“XOL Transactions”) with a panel of unaffiliated reinsurers executed through the traditional reinsurance market (“Traditional XOL Transaction”) and with unaffiliated special purpose insurers (“Home Re Transactions”).

The 2022 Traditional XOL Transaction provides reinsurance coverage on eligible NIW in 2022. For the covered policies, we retain the first layer of the aggregate losses paid, and the reinsurers will then provide second layer coverage up to the outstanding reinsurance coverage amount. We retain losses paid in excess of the outstanding reinsurance coverage amount. The reinsurance coverage is subject to adjustment based on the risk characteristics of the covered loans.

We can elect to terminate our Traditional XOL Transaction under specified scenarios without penalty upon prior written notice, including if we will receive less than the full credit amount under the PMIERs, full financial statement credit or full credit under applicable regulatory capital requirements for the risk ceded in any required calculation period. The reinsurance premiums ceded to the Traditional XOL Transaction are based off the remaining reinsurance coverage levels. The reinsured coverage levels are secured by funds on deposit from reinsurers, the minimum amount of which is based on the greater of 1) a reinsurer's funding requirements under PMIERs or 2) ceded reserves and unpaid losses.

The Home Re Transactions are executed with unaffiliated special purpose insurers (“Home Re Entities”). For the reinsurance coverage periods, we retain the first layer of the respective aggregate losses paid, and a Home Re Entity will then provide second layer coverage up to the outstanding reinsurance coverage amount. We retain losses paid in excess of the outstanding reinsurance coverage amount. Subject to certain conditions, the reinsurance coverage decreases over a period of either 10 or 12.5 years, depending on the transaction, as the underlying covered mortgages amortize or are repaid, or mortgage insurance losses are paid.

The Home Re Entities financed the coverages by issuing mortgage insurance-linked notes (“ILNs”) to unaffiliated investors in an aggregate amount equal to the initial reinsurance coverage amounts. Each ILN is non-recourse to any assets of MGIC or affiliates. The proceeds of the ILNs, which were deposited into reinsurance trusts for the benefit of MGIC, will be the source of reinsurance claim payments to MGIC and principal repayments on the ILNs.

When a “Trigger Event” is in effect, as defined in the related insurance-linked notes transaction agreements, payment of principal on the related notes will be suspended and the reinsurance coverage available to MGIC under the transactions will not be reduced by such principal payments. As of December 31, 2022, a "Trigger Event" has occurred on our Home Re 2019-1 transaction because the reinsured principal balance of loans that were reported 60 or more days delinquent exceeded a percentage of the total reinsured principal balance of loans specified under each transaction. A "Trigger Event" has also occurred on the Home Re 2022-1 transaction because the credit enhancement of the most senior tranche is less than the target credit enhancement.

Table 9.4a and 9.4b provides a summary of our XOL Transactions as of December 31, 2022, December 31, 2021 and December 31, 2020.

Excess of Loss Reinsurance

9.4a

($ in thousands)	**Issue Date**	**Policy In force Dates**	**Optional Call/ Termination Date (1)**	**Legal Maturity**	**Initial First Layer Retention**	**Initial Excess of Loss Reinsurance Coverage**
Home Re 2022-1, Ltd.	April 26, 2022	May 29, 2021 - December 31, 2021	April 25, 2028	12.5 years	$325,589	$473,575
Home Re 2021-2, Ltd.	August 3, 2021	January 1, 2021 - May 28, 2021	July 25, 2028	12.5 years	190,159	398,429
Home Re 2021-1, Ltd.	February 2, 2021	August 1, 2020 - December 31, 2020	January 25, 2028	12.5 years	211,159	398,848
Home Re 2020-1, Ltd.	October 29, 2020	January 1, 2020 - July 31, 2020	October 25, 2027	10 years	275,283	412,917
Home Re 2019-1, Ltd.	May 25, 2019	January 1, 2018 - March 31, 2019	May 25, 2026	10 years	185,730	315,739
Home Re 2018-1, Ltd.	October 30, 2018	July 1, 2016 - December 31, 2017	October 25, 2025	10 years	168,691	318,636
2022 Traditional XOL	April 1, 2022	January 1, 2022 - December 30, 2022	January 1, 2030	10 years	82,523	142,642

(1) We have the right to terminate the Home Re Transactions under certain circumstances and on any payment date on or after the respective Optional Call date. We can elect early termination of the Traditional XOL Transaction beginning on this date, and quarterly thereafter.

9.4b	**Remaining First Layer Retention**			**Remaining Excess of Loss Reinsurance Coverage**		
($ in thousands)	**December 31, 2022**	December 31, 2021	December 31, 2020	**December 31, 2022**	December 31, 2021	December 31, 2020
Home Re 2022-1, Ltd.	**$ 325,576**	$ —	$ —	**$ 473,575**	$ —	$ —
Home Re 2021-2, Ltd.	**190,097**	190,159	—	**352,084**	398,429	—
Home Re 2021-1, Ltd.	**211,102**	211,142	—	**277,053**	387,830	—
Home Re 2020-1, Ltd.	**274,871**	275,204	275,283	**113,247**	234,312	412,917
Home Re 2019-1, Ltd.	**183,540**	183,917	184,514	**208,146**	208,146	208,146
Home Re 2018-1, Ltd.	**164,849**	165,365	166,005	**140,993**	218,343	218,343
2022 Traditional XOL	**82,517**	—	—	**142,642**	—	—

The reinsurance premiums ceded to each Home Re Entity are composed of coverage, initial expense and supplemental premiums. The coverage premiums are generally calculated as the difference between the amount of interest payable by the Home Re Entity on the remaining reinsurance coverage levels, and the investment income collected on the collateral assets held in reinsurance trust account and used to collateralize the Home Re Entity's reinsurance obligation to MGIC. The amount of monthly reinsurance coverage premium ceded will fluctuate due to changes in the reference rate and changes in money market rates that affect investment income collected on the assets in the reinsurance trust. The Home Re 2021-2 and Home Re 2022-1 Transactions references SOFR, while the remaining Home Re Transactions reference the one-month LIBOR. As a result, we concluded that each Home Re Transaction contains an embedded derivative that is accounted for separately as a freestanding derivative. The fair values of the derivatives at December 31, 2022 and December 31, 2021, were not material to our consolidated balance sheet, and the change in fair values during the years ended December 31, 2022, December 31, 2021 and December 31, 2020 were not material to our consolidated statements of operations. (see Note 5 - "Investments" and Note 6 - "Fair Value Measurements").

At the time the Home Re Transactions were entered into, we concluded that each Home Re Entity is a variable interest entity ("VIE"). A VIE is a legal entity that does not have sufficient equity at risk to finance its activities without additional subordinated financial support or is structured such that equity investors lack the ability to make sufficient decisions relating to the entity's operations through voting rights or do not substantively participate in gains and losses of the entity. Given that MGIC (1) does not have the unilateral power to direct the activities that most significantly affect each Home Re Entity's economic performance and (2) does not have the obligation, outside the terms of the reinsurance agreement, to absorb losses or the right to receive benefits of each Home Re Entity that could be significant to the Home Re Entity, consolidation of the Home Re Entities is not required.

We are required to disclose our maximum exposure to loss, which we consider to be an amount that we could be required to record in our statements of operations, as a result of our involvement with the VIEs under our Home Re Transactions. As of December 31, 2022, December 31, 2021 and December 31, 2020, we did not have material exposure to the VIEs as we have no investment in the VIEs and had no reinsurance claim payments due from the VIEs under our reinsurance transactions. We are unable to determine the timing or extent of claims from losses that are ceded under the reinsurance transactions. The VIE assets are deposited in reinsurance trusts for the benefit of MGIC that will be the source of reinsurance claim payments to MGIC. The purpose of the reinsurance trusts is to provide security to MGIC for the obligations of the VIEs under the reinsurance transactions. The trustee of the reinsurance trusts, a recognized provider of corporate trust services, has established segregated accounts within the reinsurance trusts for the benefit of MGIC, pursuant to the trust agreements. The trust agreements are governed by, and construed in accordance with, the laws of the State of New York. If the trustee of the reinsurance trusts failed to distribute claim payments to us as provided in the reinsurance trusts, we would incur a loss related to our losses ceded under the reinsurance transactions and deemed unrecoverable. We are also unable to determine the impact such possible failure by the trustee to perform pursuant to the reinsurance trust agreements may have on our consolidated financial statements. As a result, we are unable to quantify our maximum exposure to loss related to our involvement with the VIEs. MGIC has certain termination rights under the reinsurance transactions should its claims not be paid. We consider our exposure to loss from our reinsurance transactions with the VIEs to be remote.

Table 9.5 presents the total assets of the Home Re Entities as of December 31, 2022 , December 31, 2021 and December 31, 2020.

Home Re Entities total assets

Table 9.5

(In thousands)

Home Re Entity		Total VIE Assets
December 31, 2022		
Home Re 2018-1 Ltd.	**$**	**146,822**
Home Re 2019-1 Ltd.		**208,146**
Home Re 2020-1 Ltd.		**119,159**
Home Re 2021-1 Ltd.		**285,039**
Home Re 2021-2 Ltd.		**357,340**
Home Re 2022-1 Ltd.		**473,575**
December 31, 2021		
Home Re 2018-1 Ltd.	$	218,343
Home Re 2019-1 Ltd.		208,146
Home Re 2020-1 Ltd.		251,387
Home Re 2021-1 Ltd.		398,848
Home Re 2021-2 Ltd.		398,429
December 31, 2020		
Home Re 2018-1 Ltd.	$	218,343
Home Re 2019-1 Ltd.		208,146
Home Re 2020-1 Ltd.		412,917

The reinsurance trust agreements provide that the trust assets may generally only be invested in certain money market funds that (1) invest at least 99.5% of their total assets in cash or direct U.S. federal government obligations, such as U.S. Treasury bills, as well as other short-term securities backed by the full faith and credit of the U.S. federal government or issued by an agency of the U.S. federal government, (2) have a principal stability fund rating of “AAAm” by S&P or a money market fund rating of “Aaa-mf” by Moody’s as of the Closing Date and thereafter maintain any rating with either S&P or Moody’s, and (3) are permitted investments under the applicable credit for reinsurance laws and applicable PMIERs credit for reinsurance requirements.

The total calculated PMIERs credit for risk ceded under our XOL Transactions is generally based on the PMIERs requirement of the covered policies and the attachment and detachment points of the coverage, all of which fluctuate over time. (see Note 1 - "Nature of Business" and Note 2 - "Basis of Presentation").

NOTE 10 Other Comprehensive Income (Loss)

The pretax components of our other comprehensive income (loss) and related income tax benefit (expense) for the years ended December 31, 2022, 2021 and 2020 are included in table 10.1 below.

Components of other comprehensive income (loss)

Table 10.1

(In thousands)	**2022**	2021	2020
Net unrealized investment (losses) gains arising during the period	**$ (707,005)**	$ (154,555)	$ 169,135
Income tax benefit (expense)	**148,471**	32,456	(35,519)
Net of taxes	**(558,534)**	(122,099)	133,616
Net changes in benefit plan assets and obligations	**(54,017)**	31,613	13,288
Income tax benefit (expense)	**11,343**	(6,638)	(2,791)
Net of taxes	**(42,674)**	24,975	10,497
Total other comprehensive income (loss)	**(761,022)**	(122,942)	182,423
Total income tax benefit (expense)	**159,814**	25,818	(38,310)
Total other comprehensive income (loss), net of tax	**$ (601,208)**	$ (97,124)	$ 144,113

The pretax and related income tax benefit (expense) components of the amounts reclassified from our accumulated other comprehensive income (loss) ("AOCI") to our consolidated statements of operations for the years ended December 31, 2022, 2021 and 2020 are included in table 10.2 below.

Reclassifications from Accumulated Other Comprehensive Income (Loss)

Table 10.2

(In thousands)	**2022**	2021	2020
Reclassification adjustment for net realized (losses) gains [1]	**$ (9,860)**	$ 10,455	$ 13,862
Income tax benefit (expense)	**2,070**	(2,195)	(2,912)
Net of taxes	**(7,790)**	8,260	10,950
Reclassification adjustment related to benefit plan assets and obligations [2]	**(16,750)**	(9,779)	(15,968)
Income tax benefit (expense)	**3,518**	2,053	3,353
Net of taxes	**(13,232)**	(7,726)	(12,615)
Total reclassifications	**(26,610)**	676	(2,106)
Income tax benefit (expense)	**5,588**	(142)	441
Total reclassifications, net of tax	**$ (21,022)**	$ 534	$ (1,665)

(1) (Decreases) increases Net gains (losses) on investments and other financial instruments on the consolidated statements of operations.

(2) Decreases (increases) Other underwriting and operating expenses, net on the consolidated statements of operations.

A roll-forward of AOCI for the years ended December 31, 2022, 2021, and 2020, including amounts reclassified from AOCI, is included in table 10.3 below.

Roll-forward of Accumulated Other Comprehensive Income (Loss)

Table 10.3

(In thousands)	Net unrealized gains and losses on available-for-sale securities	Net benefit plan assets and obligations recognized in shareholders' equity	Total AOCI
Balance, December 31, 2019, net of tax	**$ 138,521**	$ (65,813)	$ 72,708
Other comprehensive income (loss) before reclassifications	**144,566**	(2,118)	142,448
Less: Amounts reclassified from AOCI	**10,950**	(12,615)	(1,665)
Balance, December 31, 2020, net of tax	**272,137**	(55,316)	216,821
Other comprehensive income (loss) before reclassifications	**(113,839)**	17,249	(96,590)
Less: Amounts reclassified from AOCI	**8,260**	(7,726)	534
Balance, December 31, 2021, net of tax	**150,038**	(30,341)	119,697
Other comprehensive income (loss) before reclassifications	**(566,324)**	(55,906)	(622,230)
Less: Amounts reclassified from AOCI	**(7,790)**	(13,232)	(21,022)
Balance, December 31, 2022, net of tax	**$ (408,496)**	$ (73,015)	$ (481,511)

NOTE 11 Benefit Plans

We have a non-contributory defined benefit pension plan covering substantially all employees, as well as a supplemental executive retirement plan. Effective January 1, 2023, these plans are frozen (no future benefits will be accrued for participants due to employment and no new participants will be added). Participants in these plans are fully vested in their benefits as of December 31, 2022. We also offer both medical and dental benefits for retired domestic employees, and their eligible spouses and dependents under a postretirement benefit plan. The following tables 11.1, 11.2, and 11.3 provide the components of aggregate annual net periodic benefit cost for each of the years ended December 31, 2022, 2021, and 2020 and changes in the benefit obligation and the funded status of the pension, supplemental executive retirement and other postretirement benefit plans as recognized in the consolidated balance sheets as of December 31, 2022 and 2021.

Components of net periodic benefit cost

Table 11.1

	Pension and Supplemental Executive Retirement Plans			Other Postretirement Benefits		
(In thousands)	**12/31/2022**	12/31/2021	12/31/2020	**12/31/2022**	12/31/2021	12/31/2020
Company Service Cost	**$ 7,153**	$ 7,569	$ 7,342	**$ 1,307**	$ 1,508	$ 1,263
Interest Cost	**12,461**	11,276	13,036	**694**	648	832
Expected Return on Assets	**(18,064)**	(20,657)	(22,139)	**(10,502)**	(8,863)	(7,407)
Amortization of:						
Net Transition Obligation/(Asset)	**—**	—	—	**—**	—	—
Net Prior Service Cost/(Credit)	**(163)**	(239)	(247)	**489**	213	51
Net Losses/(Gains)	**5,726**	5,490	6,578	**(3,103)**	(1,697)	(783)
Cost of Settlements and Curtailments	**13,801**	6,012	10,369	**—**	—	—
Net Periodic Benefit Cost	**$ 20,914**	$ 9,451	$ 14,939	**$ (11,115)**	$ (8,191)	$ (6,044)

Development of funded status

Table 11.2

	Pension and Supplemental Executive Retirement Plans		Other Postretirement Benefits	
(In thousands)	**12/31/2022**	12/31/2021	**12/31/2022**	12/31/2021
Actuarial Value of Benefit Obligations				
Measurement Date	**12/31/2022**	12/31/2021	**12/31/2022**	12/31/2021
Accumulated Benefit Obligation	**$ 274,975**	$ 390,747	**$ 29,580**	$ 25,635
Funded Status/Asset (Liability) on the Consolidated Balance Sheet				
Benefit Obligation	**$ (274,975)**	$ (391,698)	**$ (29,580)**	$ (25,635)
Plan Assets at Fair Value	**250,674**	391,555	**111,154**	140,839
Funded Status - Overfunded/Asset	**N/A**	N/A	**$ 81,574**	$ 115,204
Funded Status - Underfunded/Liability	**(24,301)**	(143)	**N/A**	N/A

Accumulated other comprehensive (income) loss

Table 11.3

	Pension and Supplemental Executive Retirement Plans		Other Postretirement Benefits	
(In thousands)	**12/31/2022**	12/31/2021	**12/31/2022**	12/31/2021
Net Actuarial (Gain)/Loss	**$ 89,711**	$ 84,045	**$ (13,781)**	$ (47,352)
Net Prior Service Cost/(Credit)	**3,245**	(747)	**13,249**	2,461
Net Transition Obligation/(Asset)	**—**	—	**—**	—
Total at Year End	**$ 92,956**	$ 83,298	**$ (532)**	$ (44,891)

The amortization of gains and losses resulting from differences in actual experience from assumed experience or changes in assumptions including discount rates is included as a component of Net Periodic Benefit Cost/

(Income) for the year. The gain or loss in excess of a 10% corridor is amortized by the average remaining life expectancy for the pension and supplemental executive retirement plans and by the average remaining service period of participating employees expected to receive benefits under the other postretirement benefits plan.
Table 11.4 shows the changes in the projected benefit obligation for the years ended December 31, 2022 and 2021.

Change in projected benefit / accumulated benefit

Table 11.4

	Pension and Supplemental Executive Retirement Plans		Other Postretirement Benefits	
(In thousands)	**12/31/2022**	12/31/2021	**12/31/2022**	12/31/2021
Benefit Obligation at Beginning of Year	**$ 391,698**	$ 423,713	**$ 25,635**	$ 28,714
Company Service Cost	**7,153**	7,569	**1,307**	1,508
Interest Cost	**12,461**	11,276	**694**	648
Plan Participants' Contributions	**—**	—	**463**	456
Net Actuarial (Gain)/Loss	**(83,240)**	(10,018)	**(8,123)**	(3,574)
Benefit Payments from Fund	**(13,165)**	(12,866)	**(1,504)**	(1,963)
Benefit Payments Paid Directly by Company	**(114)**	(362)	**—**	—
Plan Amendments	**3,247**	2	**11,278**	—
Curtailments	**(352)**	—	**—**	—
Settlement Payments from Fund [(1)]	**(42,713)**	(27,616)	**—**	—
Other Adjustment	**—**	—	**(170)**	(154)
Benefit Obligation at End of Year	**$ 274,975**	$ 391,698	**$ 29,580**	$ 25,635

(1) Represents lump sum payments from our pension plan to eligible participants, who were former employees with vested benefits.

The actuarial gains for 2022 and 2021, reported above, for the pension and supplemental executive retirement plans and the other postretirement benefits plan were primarily due to an increase in the discount rate used to calculate the obligations. The discount rate increased to 5.60% at December 31, 2022 from 3.05% at December 31, 2021. See Table 11.7 for the actuarial assumptions used to calculate the benefit obligations of our plans for 2022 and 2021.

Tables 11.5 and 11.6 shows the changes in the fair value of the net assets available for plan benefits and changes in other comprehensive income (loss) for the years ended December 31, 2022 and 2021.

Change in plan assets

Table 11.5

	Pension and Supplemental Executive Retirement Plans		Other Postretirement Benefits	
(In thousands)	**12/31/2022**	12/31/2021	**12/31/2022**	12/31/2021
Fair Value of Plan Assets at Beginning of Year	**$ 391,555**	$ 411,245	**$ 140,839**	$ 119,024
Actual Return on Assets	**(91,303)**	13,992	**(28,088)**	23,773
Company Contributions	**6,414**	7,162	**—**	—
Plan Participants' Contributions	**—**	—	**463**	456
Benefit Payments from Fund	**(13,165)**	(12,866)	**(1,504)**	(1,963)
Benefit Payments Paid Directly by Company	**(114)**	(362)	**—**	—
Settlement Payments from Fund	**(42,713)**	(27,616)	**—**	—
Other Adjustment	**—**	—	**(556)**	(451)
Fair Value of Plan Assets at End of Year	**$ 250,674**	$ 391,555	**$ 111,154**	$ 140,839

Change in accumulated other comprehensive income (loss) ("AOCI")

Table 11.6

	Pension and Supplemental Executive Retirement Plans		Other Postretirement Benefits	
(In thousands)	**12/31/2022**	12/31/2021	**12/31/2022**	12/31/2021
AOCI in Prior Year	**$ 83,298**	$ 97,911	**$ (44,891)**	$ (27,892)
Increase/(Decrease) in AOCI				
Recognized during year - Prior Service (Cost)/ Credit	**745**	239	**(489)**	(213)
Recognized during year - Net Actuarial (Losses)/Gains	**(20,109)**	(11,502)	**3,103**	1,697
Occurring during year - Prior Service Cost	**3,247**	2	**11,277**	—
Occurring during year - Net Actuarial Losses/ (Gains)	**25,775**	(3,352)	**30,468**	(18,483)
AOCI in Current Year	**$ 92,956**	$ 83,298	**$ (532)**	$ (44,891)

The projected benefit obligations, net periodic benefit costs and accumulated postretirement benefit obligation for the plans were determined using the following weighted average assumptions.

Actuarial assumptions

Table 11.7

	Pension and Supplemental Executive Retirement Plans		Other Postretirement Benefits	
	12/31/2022	12/31/2021	**12/31/2022**	12/31/2021
Weighted-Average Assumptions Used to Determine				
Benefit Obligations at year end				
1. Discount Rate	**5.60 %**	3.05 %	**5.60 %**	2.85 %
2. Rate of Compensation Increase	**3.00 %**	3.00 %	**N/A**	N/A
3. Cash balance interest crediting rate	**3.97 %**	2.80 %	**N/A**	N/A
Weighted-Average Assumptions Used to Determine				
Net Periodic Benefit Cost for Year				
1. Discount Rate	**3.70 %**	2.80 %	**2.85 %**	2.35 %
2. Expected Long-term Return on Plan Assets	**5.25 %**	5.25 %	**7.50 %**	7.50 %
3. Rate of Compensation Increase	**3.00 %**	3.00 %	**N/A**	N/A
Assumed Health Care Cost Trend Rates at year end				
1. Health Care Cost Trend Rate Assumed for Next Year	**N/A**	N/A	**7.00 %**	6.50 %
2. Rate to Which the Cost Trend Rate is Assumed to Decline (Ultimate Trend Rate)	**N/A**	N/A	**5.00 %**	5.00 %
3. Year That the Rate Reaches the Ultimate Trend Rate	**N/A**	N/A	**2031**	2028

In selecting a discount rate, we performed a hypothetical cash flow bond matching exercise, matching our expected pension plan and postretirement medical plan cash flows, respectively, against a selected portfolio of high quality corporate bonds. The modeling was performed using a bond portfolio of noncallable bonds with at least $50 million outstanding. The average yield of these hypothetical bond portfolios was used as the benchmark for determining the discount rate. In selecting the expected long-term rate of return on assets, we considered the average rate of earnings expected on the classes of funds invested or to be invested to provide for the benefits of these plans. This included considering the trusts' targeted asset allocation for the year and the expected returns likely to be earned over the next 20 years.

The year-end asset allocations of the plans are shown in table 11.8 below.

Plan assets

Table 11.8

	Pension Plan		Other Postretirement Benefits	
	12/31/2022	12/31/2021	**12/31/2022**	12/31/2021
Equity Securities	**20 %**	21 %	**100 %**	100 %
Debt Securities	**80 %**	79 %	**— %**	— %
Total	**100 %**	100 %	**100 %**	100 %

Fair value is disclosed using a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value as described in Note 6 - "Fair Value Measurements".

The following describes the valuation methodologies used for pension plan and other postretirement benefits plan assets at fair value.

- Domestic Mutual Funds: Securities are priced at the net asset value ("NAV"), which is the closing price published by the mutual fund on the reporting date. These financial assets are categorized as Level 1 in the fair value hierarchy.
- U.S. Government Securities: See Note 6 - "Fair Value Measurements" for a discussion of the valuation methodologies for U.S. Treasury Securities and Obligations of U.S. Government Corporations and Agencies.
- Corporate Debt: See Note 6 - "Fair Value Measurements" for a discussion of the valuation methodologies for Corporate Debt.

- Foreign Debt: These financial assets are represented by corporate debt securities issued by entities domiciled outside of the United States. See Note 6 - "Fair Value Measurements" for a discussion of the valuation methodologies for Corporate Debt.
- Municipal Bonds: See Note 6 - "Fair Value Measurements" for a discussion of the valuation methodologies for Obligations of U.S. States & Political Subdivisions.
- Pooled Equity Accounts: Pooled Equity Account assets are represented by the units held by the plan. The redemption value is determined based on the NAV of the underlying units. The NAV is derived from the aggregate fair value of the underlying investments less any liabilities as of the reporting date. These financial assets are categorized as Level 2 in the fair value hierarchy.

Tables 11.9a and 11.9b set forth by level, within the fair value hierarchy, the pension plan assets and related accrued investment income at fair value as of December 31, 2022 and 2021. There were no securities that used Level 3 inputs.

Pension plan assets at fair value as of December 31, 2022

Table 11.9a

(In thousands)	**Level 1**	**Level 2**	**Total**
Domestic mutual funds	**$ 67**	**$ —**	**$ 67**
U.S. government securities	**13,328**	**—**	**13,328**
Corporate debt securities			
Corporate debt securities and other	**—**	**146,854**	**146,854**
Non-government foreign debt securities	**—**	**20,793**	**20,793**
Municipal bonds	**—**	**18,336**	**18,336**
Pooled equity accounts	**—**	**51,296**	**51,296**
Total Assets at fair value	**$ 13,395**	**$ 237,279**	**$ 250,674**

Pension plan assets at fair value as of December 31, 2021

Table 11.9b

(In thousands)	Level 1	Level 2	Total
Domestic mutual funds	$ 4,071	$ —	$ 4,071
U.S. government securities	32,947	—	32,947
Corporate debt Securities			
Corporate debt securities and other	—	221,033	221,033
Non-government foreign debt securities	—	34,103	34,103
Municipal bonds	—	20,093	20,093
Pooled equity accounts	—	79,308	79,308
Total Assets at fair value	$ 37,018	$ 354,537	$ 391,555

The pension plan has implemented a strategy to reduce risk through the use of a targeted funded ratio. The liability driven component is key to the asset allocation. The liability driven component seeks to align the duration of the fixed income asset allocation with the expected duration of the plan liabilities or benefit payments. Overall asset allocation is dynamic and specifies target allocation weights and ranges based on the funded status.

An improvement in funded status results in the de-risking of the portfolio, allocating more funds to fixed income and less to equity. A decline in funded status would result in a higher allocation to equity. The maximum equity allocation is 40%.

The equity investments use combinations of mutual funds, ETFs, and pooled equity account structures focused on the following strategies:

Strategy	Objective	Investment types
Return seeking growth	Funded ratio improvement over the long term	• Global quality growth • Global low volatility
Return seeking bridge	Downside protection in the event of a declining equity market	• Enduring asset • Durable company

The fixed income objective is to preserve capital and to provide monthly cash flows for the payment of plan liabilities. Fixed income investments can include government, government agency, corporate, mortgage-backed, asset-backed, and municipal securities, and other classes of bonds. The duration of the fixed income portfolio has an objective of being within one year of the duration of the accumulated benefit obligation. The fixed income investments have an objective of a weighted average credit of A3/A-/A- by Moody's, S&P, and Fitch, respectively.

Tables 11.10a and 11.10b set forth the other postretirement benefits plan assets at fair value as of December 31, 2022 and 2021. All are Level 1 assets.

Other postretirement benefits plan assets at fair value as of December 31, 2022

Table 11.10a

(In thousands)		**Level 1**
Domestic Mutual Funds	**$**	**89,584**
International Mutual Funds		**21,570**
Total Assets at fair value	**$**	**111,154**

Other postretirement benefits plan assets at fair value as of December 31, 2021

Table 11.10b

(In thousands)		Level 1
Domestic Mutual Funds	$	112,770
International Mutual Funds		28,069
Total Assets at fair value	$	140,839

Our postretirement plan portfolio is designed to achieve the following objectives over each market cycle and for at least 5 years:

- ➔ Total return should exceed growth in the Consumer Price Index by 5.75% annually
- ➔ Achieve competitive investment results

The primary focus in developing asset allocation ranges for the portfolio is the assessment of the portfolio's investment objectives and the level of risk that is acceptable to obtain those objectives. To achieve these objectives the minimum and maximum allocation ranges for fixed income securities and equity securities are:

	Minimum	Maximum
Equities (long only)	70 %	100 %
Real estate	0 %	15 %
Commodities	0 %	10 %
Fixed income/Cash	0 %	10 %

Given the long term nature of this portfolio and the lack of any immediate need for significant cash flow, it is anticipated that the equity investments will consist of growth stocks and will typically be at the higher end of the allocation ranges above.

Investment in international mutual funds is limited to a maximum of 30% of the equity range. The allocation as of December 31, 2022 included 2% that was primarily invested in equity securities of emerging market countries and another 17% was invested in securities of companies primarily based in Europe and the Pacific Basin.

For the year ended December 31, 2022, we contributed $6.4 million to the pension and supplemental executive retirement plans. We do not expect to make a contribution to the pension plan in 2023 and distributions from the supplemental executive retirement plan will be funded as incurred. We did not make a contribution to the other postretirement benefits plan in 2022 and we do not expect to make a contribution in 2023.

Expected future benefit payments from the plans are shown in Table 11.12 below.

Expected future benefit payments

Table 11.12

	Pension and Supplemental Executive Retirement Plans	Other Postretirement Benefits
(In thousands)	**12/31/2022**	**12/31/2022**
Current + 1	**23,966**	**2,211**
Current + 2	**23,309**	**2,476**
Current + 3	**23,104**	**2,780**
Current + 4	**23,363**	**2,886**
Current + 5	**23,194**	**2,929**
Current + 6 - 10	**102,588**	**16,102**

PROFIT SHARING AND 401(K)

We have a profit sharing and 401(k) savings plan for employees. At the discretion of the Board of Directors, we may make a contribution to the plan of up to 5% of each participant's eligible compensation. We provide a matching 401(k) savings contribution for employees of 100% up to the first 4% contributed. We recognized expenses related to these plans of $7.6 million in 2022 and $8.0 million in both 2021 and 2020. Effective January 1, 2023, we will provide a matching

401(k) savings contribution for employees of 200% up to the first 2% contributed and 100% of the next 2% contributed.

NOTE 12 Income Taxes

Net deferred tax assets (liabilities) as reported on the consolidated balance sheet as of December 31, 2022 and 2021 are shown in table 12.1 below. At December 31, 2021 the deferred tax liability is included as a component of Other liabilities on the consolidated balance sheet.

Deferred tax assets and liabilities

Table 12.1

(In thousands)	**2022**	2021
Total deferred tax assets	**$ 144,819**	$ 32,331
Total deferred tax liabilities	**(20,050)**	(71,743)
Net deferred tax asset (liability)	**$ 124,769**	$ (39,412)

Table 12.2 includes the components of the net deferred tax asset (liability) as of December 31, 2022 and 2021.

Deferred tax components

Table 12.2

(In thousands)	**2022**	2021
Unearned premium reserves	**$ 16,209**	$ 19,116
Benefit plans	**(9,444)**	(21,360)
Loss reserves	**1,785**	4,034
Unrealized depreciation (appreciation) in investments	**108,588**	(39,883)
Deferred policy acquisition cost	**(4,003)**	(4,551)
Deferred compensation	**6,806**	6,118
Research and experimental costs	**9,719**	—
Other, net	**(4,891)**	(2,886)
Net deferred tax asset (liability)	**$124,769**	$(39,412)

We believe that all gross deferred tax assets at December 31, 2022 and 2021 are fully realizable and no valuation allowance has been established.

Table 12.3 summarizes the components of the provision for income taxes:

Provision for (benefit from) income taxes

Table 12.3

(In thousands)	**2022**	2021	2020
Current federal	**$ 228,259**	$ 161,055	$ 85,574
Deferred federal	**(5,235)**	4,392	28,244
Other	**1,661**	1,347	(648)
Provision for income taxes	**$ 224,685**	$ 166,794	$ 113,170

Current federal income tax payments were $236.5 million, $155.3 million, and $79.6 million in 2022, 2021 and 2020, respectively. At December 31, 2022 we owned $661.7 million of tax and loss bonds.

Table 12.4 reconciles the federal statutory income tax rate to our effective tax provision rate.

Effective tax rate reconciliation

Table 12.4

	2022	2021	2020
Federal statutory income tax rate	**21.0 %**	21.0 %	21.0 %
Tax exempt municipal bond interest	**(0.5)%**	(0.6)%	(0.9)%
Other, net	**0.1 %**	0.4 %	0.1 %
Effective tax rate	**20.6 %**	20.8 %	20.2 %

We have not recorded any uncertain tax positions during 2022 and 2021 and have no unrecognized tax benefits at December 31, 2022 and December 31, 2021. We recognize interest accrued and penalties related to unrecognized tax benefits in income taxes. The statute of limitations related to the consolidated federal income tax return is closed for all years prior to 2019.

NOTE 13 Shareholders' Equity

CHANGE IN ACCOUNTING POLICY

As of January 1, 2021, we adopted the updated guidance for "*Accounting for Convertible Instruments and Contracts in an Entity's Own Equity*". The application of this guidance resulted in a $68.3 million cumulative effect adjustment to our 2021 beginning retained earnings and paid-in capital to reflect the 9% Debenture as if we had always accounted for the debt as a liability in its entirety.

SHARE REPURCHASE PROGRAMS

Repurchases may be made from time to time on the open market (including through 10b5-1 plans) or through privately negotiated transactions. In 2022, we repurchased approximately 27.8 million shares of our common stock at a weighted average cost per share of $13.89, which included commissions. We may repurchase up to an additional $114 million of our common stock through the end of 2023 under a share repurchase program approved by our Board of Directors in October 2021. In 2023, through February 17, we repurchased approximately 3.1 million shares of our common stock at a weighted average cost per share of $13.65, which included commissions.

In 2021, we repurchased approximately 19.0 million shares of our common stock at a weighted average cost per share of $15.30, which included commissions.

During 2020, we repurchased approximately 9.6 million shares of our common stock at a weighted average cost per share of $12.47, which included commissions.

CASH DIVIDENDS

In the first and second quarters of 2022, we paid quarterly cash dividends of $0.08 per share to shareholders which totaled $51.0 million. In the third and fourth quarters of 2022, we paid quarterly cash dividends of $0.10 per share which totaled $60.7 million. On January 24, 2023, the Board of Directors declared a quarterly cash dividend to holders of the company's common stock of $0.10 per share payable on March 2, 2023, to shareholders of record at the close of business on February 17, 2023.

NOTE 14 Statutory Information

STATUTORY ACCOUNTING PRINCIPLES

The statutory financial statements of our insurance companies are presented on the basis of accounting principles prescribed, or practices permitted, by the Office of the Commissioner of Insurance of the State of Wisconsin (the "OCI"), which has adopted the National Association of Insurance Commissioners ("NAIC") Statements of Statutory Accounting Principles ("SSAP") as the basis of its statutory accounting principles. In converting from statutory to GAAP, typical adjustments include deferral of policy acquisition costs, the inclusion of net unrealized holding gains or losses in shareholders' equity relating to fixed income securities, and the inclusion of statutory non-admitted assets.

In addition to the typical adjustments from statutory to GAAP, mortgage insurance companies are required to maintain contingency loss reserves equal to 50% of premiums earned under SSAP and principles prescribed by the OCI. Such amounts cannot be withdrawn for a period of ten years except as permitted by insurance regulations. With regulatory approval, a mortgage guaranty insurance company may make early withdrawals from the contingency reserve when incurred losses exceed 35% of premiums earned in a calendar year. For the year ended 2022, MGIC did not withdraw amounts from its contingency reserve. Changes in contingency loss reserves impact the statutory statement of operations. Contingency loss reserves are not reflected as liabilities under GAAP and changes in contingency loss reserves do not impact the GAAP statements of operations.

As a mortgage guaranty insurer, we are eligible for a tax deduction, subject to certain limitations, under Section 832(e) of the IRC for amounts required by state law or regulation to be set aside in statutory contingency reserves. The deduction is allowed only to the extent that we purchase tax and loss bonds ("T&L Bonds") in an amount equal to the tax benefit derived from deducting any portion of our statutory contingency reserves. Under statutory accounting practices, purchases of T&L Bonds are accounted for as investments. Under GAAP, purchases of T&L Bonds are accounted for as a payment of current taxes.

The OCI recognizes only statutory accounting principles prescribed, or practices permitted, by the State of Wisconsin for determining and reporting the financial condition and results of operations of an insurance company. The OCI has adopted certain prescribed accounting practices that differ from those found in other states. Specifically, Wisconsin domiciled companies record changes in the contingency loss reserves through the income

statement as a change in underwriting deduction. As a result, in periods in which MGIC is increasing contingency loss reserves, statutory net income is reduced.
The statutory net income, policyholders' surplus, and contingency reserve liability of our insurance subsidiaries, including MGIC, are shown in table 14.1.

Statutory financial information of insurance subsidiaries

Table 14.1

	As of and for the Years Ended December 31,		
(In thousands)	**2022**	2021	2020
Statutory net income	**$440,944**	$295,811	$ 65,201
Statutory policyholders' surplus	**924,977**	1,220,714	1,339,509
Contingency reserve	**4,669,724**	4,126,604	3,585,864

The decrease in statutory policyholders' surplus from December 31, 2021 to December 31, 2022 is primarily due to dividend payments to the parent company (discussed below), offset by statutory net income.

For the years ended December 31, 2022, 2021, and 2020 there were no contributions made to MGIC or distributions from other insurance subsidiaries to us. Dividends paid by MGIC are shown in table 14.2 below.

Surplus contributions and dividends of insurance subsidiaries

Table 14.2

	Years Ended December 31,		
(In thousands)	**2022**	2021	2020
Dividends paid by MGIC to the parent company [(1)]	**$800,000**	400,000	390,000

[(1)] Dividends paid in cash and/or investment securities. Also, in 2021 MGIC distributed to the holding company, as a dividend, its investment in MGIC Credit Assurance Corporation at an amount of $8.9 million. In 2020, MGIC distributed to the holding company, as a dividend, its ownership in the 9% Debentures held at an amortized cost of $139.5 million.

STATUTORY CAPITAL REQUIREMENTS

The insurance laws of 16 jurisdictions, including Wisconsin, our domiciliary state, require a mortgage insurer to maintain a minimum amount of statutory capital relative to the RIF (or a similar measure) in order for the mortgage insurer to continue to write new business. We refer to these requirements as the "State Capital Requirements" and, together with the GSE Financial Requirements, the "Financial Requirements." While they vary among jurisdictions, the most common State Capital Requirements allow for a maximum risk-to-capital ratio of 25 to 1. A risk-to-capital ratio will increase if (i) the percentage decrease in capital exceeds the percentage decrease in insured risk, or (ii) the percentage increase in capital is less than the percentage increase in insured risk. Wisconsin does not regulate capital by using a risk-to-capital measure but instead requires a minimum policyholder position ("MPP"). MGIC's "policyholder position" includes its net worth or surplus, and its contingency loss reserve.

At December 31, 2022, MGIC's risk-to-capital ratio was 10.2 to 1, below the maximum allowed by the jurisdictions with State Capital Requirements and its policyholder position was $3.5 billion above the required MPP of $2.1 billion. The calculation of our risk-to-capital ratio and MPP reflect credit for the risk ceded under our reinsurance transactions. It is possible that under the revised State Capital Requirements discussed below, MGIC will not be allowed full credit for the risk ceded to the reinsurers. If MGIC is not allowed an agreed level of credit under either the State Capital Requirements or the financial requirements of the PMIERs, MGIC may terminate the reinsurance agreements, without penalty. At this time, we expect MGIC to continue to comply with the current State Capital Requirements; however, you should read the rest of these financial statement footnotes for information about matters that could negatively affect such compliance.

The NAIC previously announced plans to revise the State Capital Requirements that are provided for in its Mortgage Guaranty Insurance Model Act. In December 2019, a working group of state regulators released an exposure draft of a revised Mortgage Guaranty Insurance Model Act and a risk-based capital framework to establish capital requirements for mortgage insurers, although certain items were not completely addressed by the framework, including the treatment of ceded risk and minimum capital floors. In October 2022, the NAIC working group released a revised exposure draft of the Mortgage Guaranty Insurance Model Act that does not include changes to the capital requirements of the existing Model Act.

DIVIDEND RESTRICTIONS

MGIC is subject to statutory regulations as to payment of dividends. The maximum amount of dividends that MGIC may pay in any twelve-month period without regulatory approval by the OCI is the lesser of adjusted statutory net income or 10% of statutory policyholders' surplus as of the preceding calendar year end. Adjusted statutory net income is defined for this purpose to be the greater of statutory net income, net of realized investment gains, for the calendar year preceding the date of the dividend or statutory net income, net of realized investment gains, for the three calendar years preceding the date of the dividend less dividends paid within the first two of the preceding three calendar years. The maximum dividend that could be paid is reduced by dividends paid in the twelve months preceding the dividend payment date. Before making any dividend payments in 2023, we will notify the OCI to ensure it does not object.

NOTE 15 Share-based Compensation Plans

We have certain share-based compensation plans. Under the fair value method, compensation cost is measured at the grant date based on the fair value of the award and is recognized over the service period which generally corresponds to the vesting period. Awards under our plans generally vest over periods ranging from one to three years, although awards to our non-employee directors vest immediately.

We have an omnibus incentive plan that was adopted on April 23, 2020. When the 2020 plan was adopted, no further awards could be made under our previous 2015 plan. The purpose of the 2020 plan is to motivate and incentivize performance by, and to retain the services of, key employees and non-employee directors through receipt of equity-based and other incentive awards under the plan. Awards issued under the plan that are subsequently forfeited will not count against the limit on the maximum number of shares that may be issued under the plan. The 2020 plan provides for the award of stock options, stock appreciation rights, restricted stock and restricted stock units, as well as cash incentive awards. No awards may be granted after April 23, 2030 under the 2020 plan. The vesting provisions of options, restricted stock and restricted stock units are determined at the time of grant. At December 31, 2022, 6.9 million shares were available for future grant under the 2020 plan.

The compensation cost that has been charged against income for share-based plans was $24.7 million, $17.1 million, and $13.8 million for the years ended December 31, 2022, 2021 and 2020, respectively. The related income tax benefit recognized for share-based plans was $2.1 million, $1.8 million, and $1.7 million for the years ended December 31, 2022, 2021, and 2020, respectively. Table 15.1 summarizes restricted stock or restricted stock unit (collectively called "restricted stock") activity during 2022.

Restricted stock

Table 15.1

		Weighted Average Grant Date Fair Market Value	Shares
Restricted stock outstanding at December 31, 2021	$	12.88	4,146,088
Granted [1]		15.45	1,273,979
Vested		12.35	(1,549,098)
Forfeited		13.00	(294,290)
Restricted stock outstanding at December 31, 2022	**$**	**14.02**	**3,576,679**

[1] Approximately 67% of the shares granted in 2022 are subject to performance conditions under which the target number of shares granted may vest up to 200%.

At December 31, 2022, the 3.6 million shares of restricted stock outstanding consisted of 2.8 million shares that are subject to performance conditions ("performance shares"), 0.7 million shares that are subject only to service conditions ("time vested shares"), and 0.1 million shares related to non-employee director shares. The weighted-average grant date fair value of restricted stock granted during 2021 and 2020 was $12.83 and $13.62, respectively. The fair value of restricted stock granted is the closing price of the common stock on the New York Stock Exchange on the date of grant or previous trading day if the Exchange is closed on the date of grant. The total fair value of restricted stock vested during 2022, 2021 and 2020 was $23.3 million, $15.1 million, and $20.4 million, respectively.

As of December 31, 2022, there was $17.0 million of total unrecognized compensation cost related to non-vested share-based compensation agreements granted under the plans. Of this total, $12.3 million of unrecognized compensation costs relate to performance shares and $4.7 million relates to time vested shares. A portion of the unrecognized costs associated with the performance shares may or may not be recognized in future periods, depending upon whether or not the performance and service conditions are met. The cost associated with the time vested shares is expected to be recognized over a weighted-average period of 1.6 years.

NOTE 16 Leases

We lease data processing equipment and autos under operating leases that expire during the next four years. Generally, rental payments are fixed.

Table 16.1 shows minimum the future operating lease payments as of December 31, 2022.

Minimum future operating lease payments

Table 16.1

(In thousands)		Amount
2023	$	**908**
2024		**831**
2025		**667**
2026		**152**
2027 and thereafter		**—**
Total	$	**2,558**

Total lease expense under operating leases was $1.2 million in 2022, $1.3 million in 2021, and $1.9 million in 2020.

NOTE 17 Litigation and Contingencies

Before paying an insurance claim, generally we review the loan and servicing files to determine the appropriateness of the claim amount. When reviewing the files, we may determine that we have the right to rescind coverage or deny a claim on the loan (both referred to herein as “rescissions”). In addition, our insurance policies generally provide that we can reduce a claim if the servicer did not comply with its obligations under our insurance policy (such reduction referred to as a "curtailment").

When the insured disputes our right to rescind coverage or curtail claims, we generally engage in discussions in an attempt to settle the dispute. If we are unable to reach a settlement, the outcome of a dispute ultimately may be determined by legal proceedings. Under ASC 450-20, until a loss associated with settlement discussions or legal proceedings becomes probable and can be reasonably estimated, we consider our claim payment or rescission resolved for financial reporting purposes and do not accrue an estimated loss. When we determine that a loss is probable and can be reasonably estimated, we record our best estimate of our probable loss. In those cases, until settlement negotiations or legal proceedings are concluded (including the receipt of any necessary GSE approvals), it is possible that we will record an additional loss.

We have been named as a third-party defendant in a lawsuit that involves refunds of mortgage insurance premiums under the Homeowners Protection Act. We are monitoring litigation addressing similar issues in which we have not been named a defendant. We are unable to assess the potential impact of any such litigation at this time. In addition, from time to time, we are involved in other disputes and legal proceedings in the ordinary course of business. In our opinion, based on the facts known at this time, the ultimate resolution of these ordinary course disputes and legal proceedings will not have a material adverse effect on our financial position or results of operations.

Directors

MGIC Investment Corporation

Analisa M. Allen
Information Technology Consultant
Gerson Lehrman Group
Former CIO of Data & Analytics
JP Morgan Chase's consumer bank

Daniel A. Arrigoni
Former President & Chief Executive Officer
U.S. Bank Home Mortgage Corp.
Home loan originator and servicer

C. Edward Chaplin
Former President & CFO
MBIA Inc.
Provider of financial guarantee insurance

Curt S. Culver
Chairman
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MGIC Investment Corporation

Jay C. Hartzell
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Timothy A. Holt
Former Senior Vice President & Chief Investment Officer
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Mark M. Zandi
Chief Economist
Moody's Analytics, Inc.
Risk measurement and management firm

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MGIC Investment Corporation

Chief Executive Officer
Timothy J. Mattke

President and Chief Operating Officer
Salvatore A. Miosi

Executive Vice Presidents
Nathaniel H. Colson
Chief Financial Officer

Paula C. Maggio
General Counsel and Secretary

Senior Vice President
Dianna L. Higgins
Investor Relations

Vice Presidents
Nathan R. Abramowski
Treasurer

Heidi A. Heyrman
Assistant Secretary

Brian M. Remington
Assistant Secretary

Leslie A. Schunk
Assistant Secretary

Julie K. Sperber
Controller & Chief Accounting Officer

Michael J. VanHoorn
Assistant Treasurer

Officers

Mortgage Guaranty Insurance Corporation

Chief Executive Officer
Timothy J. Mattke

President and Chief Operating Officer
Salvatore A. Miosi

Executive Vice Presidents
Nathaniel H. Colson
Chief Financial Officer

James J. Hughes
Sales and Business Development

Paula C. Maggio
General Counsel and Secretary

Steven M. Thompson
Chief Risk Officer

Senior Vice Presidents
Annette M. Adams
Chief Human Resources Officer

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Sean R. Valcamp
Chief Technology Officer

Kathleen E. Valenti
Chief Compliance Officer

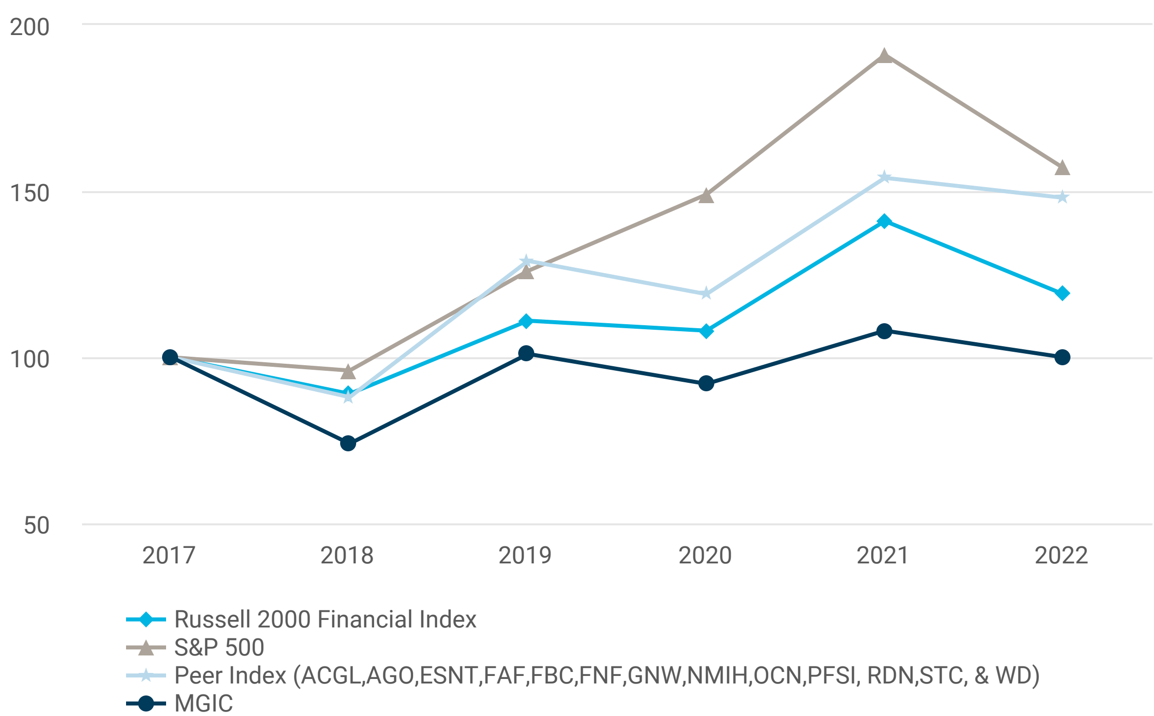
Michael J. VanHoorn
Assistant Treasurer

Jennifer A. Westphal
Chief Information Security Officer

Performance Graph

The graph below compares the cumulative total return on (a) our Common Stock, (b) a composite peer group index selected by us, (c) the Russell 2000 Financial Services Index and (d) the S&P 500.

Our peer group index consists of the peers against which we analyzed our 2022 executive compensation: Arch Capital Group Ltd., Assured Guaranty Ltd., Essent Group Ltd., Fidelity National Financial Inc., First American Financial Corp., Flagstar Bancorp Inc., Genworth Financial Inc., NMI Holdings Inc., Ocwen Financial Corp., PennyMac Financial Services Inc., Radian Group, Stewart Information Services Corp., and Walker and Dunlop, Inc. The criteria considered when selecting this peer group included whether the company: 1) is a mortgage insurer, or direct competitor; 2) has significant exposure to residential real estate; 3) is in an industry in which we compete for talent; 4) chose us as a benchmarking peer, and 5) is reasonably similar in size to us, in terms of revenues and market capitalization.



	2017	2018	2019	2020	2021	2022
Russell 2000 Financial Index	100	89	111	108	141	119
S&P 500	100	96	126	149	191	157
Peer Index (ACGL, AGO, ESNT, FAF, FBC, FNF, GNW, NMIH, OCN, PFSI, RDN,STC, & WD)	100	88	129	119	154	148
MGIC	100	74	101	92	108	100

Shareholder Information

The Annual Meeting
The Annual Meeting of Shareholders of MGIC Investment Corporation will be held on April 27, 2023, at 9:00 a.m. Central time**,** via webcast at:

www.virtualshareholdermeeting.com/MTG2023.

10-K Report
Copies of the Annual Report on Form 10-K for the year ended December 31, 2022, filed with the Securities and Exchange Commission, are available without charge to shareholders on request from:

Secretary
MGIC Investment Corporation
P. O. Box 488
Milwaukee, WI 53201

The Annual Report on Form 10-K referred to above includes as exhibits certifications from the Company's Chief Executive Officer and Chief Financial Officer under Section 302 of the Sarbanes-Oxley Act. Following the 2022 Annual Meeting of Shareholders, the Company's Chief Executive Officer submitted a Written Affirmation to the New York Stock Exchange that he was not aware of any violation by the Company of the corporate governance listing standards of the Exchange.

Transfer Agent and Registrar
American Stock Transfer & Trust Company, LLC
6201 15th Avenue
Brooklyn, NY 11219
800-937-5449

Corporate Headquarters
MGIC Plaza
270 East Kilbourn Avenue
Milwaukee, Wisconsin 53202

Mailing Address
P. O. Box 488
Milwaukee, Wisconsin 53201

Shareholder Services
(414) 347-2635

MGIC Stock
MGIC Investment Corporation Common Stock is listed on the New York Stock Exchange under the symbol MTG. At March 10, 2023, 290,084,746 shares of our common stock were entitled to vote.

The payment of dividends is subject to the discretion of our Board and will depend on many factors, including our operating results, financial condition and capital position.

The Company is a holding company and the payment of dividends from its insurance subsidiaries is restricted by insurance regulations. For a discussion of these restrictions, see Note 14 - "Statutory Information, Dividend Restrictions" to our consolidated financial statements.

As of March 10, 2023, the number of shareholders of record was 293. In addition, we estimate that there are approximately 66,419 beneficial owners of shares held by brokers and fiduciaries.

MGIC Investment Corporation

MGIC Plaza
Milwaukee, WI 53202
mtg.mgic.com

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